

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

RECEIVED  
CLERK'S OFFICE

JUL 29 2011

STATE OF ILLINOIS  
Pollution Control Board

IN THE MATTER OF: )  
)  
PROPOSED AMENDMENTS TO )  
CLEAN CONSTRUCTION OR DEMOLITION )  
DEBRIS FILL OPERATIONS )  
(35 ILL. ADM. CODE PART 1100) )  
)

R12: 9  
(Rulemaking - Land)

NOTICE OF FILING

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

Mitchell Cohen  
Chief Legal Counsel  
Illinois Dept. of Natural Resources  
One Natural Resources Way  
Springfield, Illinois 62702-1271

Matthew J. Dunn, Chief  
Environmental Enforcement/Asbestos  
Litigation Division  
Illinois Attorney General's Office  
69 West Washington St., 18<sup>th</sup> Floor  
Chicago, Illinois 60602

PLEASE TAKE NOTICE that I have today filed with the Office of the Clerk of the Illinois Pollution Control Board the Illinois Environmental Protection Agency's Motion for Acceptance, Appearances of Attorneys, Certification of Origination, List of Studies and Reports Used in Regulatory Development, Motion to Waive Filing Requirements, Statement of Reasons, and the Proposed Amendments, copies of which are herewith served upon you.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

By: Stephanie Flowers  
Stephanie Flowers  
Assistant Counsel

DATE: July 27, 2011

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BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

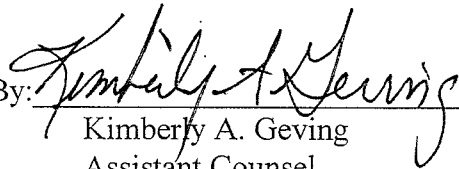
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APPEARANCE

The undersigned hereby enters her appearance as attorney in the above-titled proceeding on behalf of the Illinois Environmental Protection Agency.

By:   
Kimberly A. Geving  
Assistant Counsel  
Division of Legal Counsel

DATE: July 21, 2011

Illinois Environmental Protection Agency  
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[Kim.Geving@Illinois.gov](mailto:Kim.Geving@Illinois.gov)

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APPEARANCE

The undersigned hereby enters his appearance as attorney in the above-titled proceeding on behalf of the Illinois Environmental Protection Agency.

By: H. Mark Wight  
H. Mark Wight  
Assistant Counsel

DATE: July 27, 2011

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R12-9  
(Rulemaking - Land)

APPEARANCE

The undersigned hereby enters her appearance as attorney in the above-titled proceeding on behalf of the Illinois Environmental Protection Agency.

By: Stephanie Flowers  
Stephanie Flowers  
Assistant Counsel

DATE: July 27, 2011

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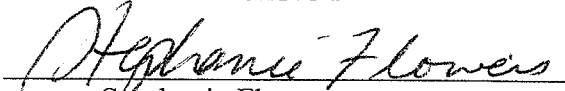
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CERTIFICATION OF ORIGINATION

NOW COMES the Illinois Environmental Protection Agency and pursuant to 35 Ill. Adm. Code 102.202(i) certifies that this proposal for amendments to 35 Ill. Adm. Code Part 1100 amends the most recent version of those rules as published on the Illinois Pollution Control Board's website.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL  
PROTECTION AGENCY

  
Stephanie Flowers  
Assistant Counsel

DATE: July 27, 2011

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MOTION FOR ACCEPTANCE

THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY ("Illinois EPA"), pursuant to 35 Ill. Adm. Code 102.200 and 102.202, moves that the Board accept for hearing the Illinois EPA's proposed amendments to rules for "Clean Construction or Demolition Debris Fill Operations" (35 Ill. Adm. Code 1100). This regulatory proposal includes: 1) The proposed amendments, 2) the Statement of Reasons including a brief synopsis of the testimony to be offered by Illinois EPA witnesses, and 3) other supporting documentation as required pursuant to 35 Ill. Adm. Code 102.202.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

By: *Lisa Bonnett*  
Lisa Bonnett, Interim Director

DATED: 7/20/11

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(217) 782-3397

THIS FILING IS SUBMITTED ON RECYCLED PAPER.

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ILLINOIS EPA'S MOTION TO WAIVE FILING REQUIREMENTS

THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY ("Illinois EPA"), pursuant to 35 Ill. Adm. Code 101.500 and 102.110, moves that the Illinois Pollution Control Board ("Board") waive certain filing requirements as set forth below for the incorporations by reference contained in the Illinois EPA's proposed amendments to 35 Ill. Adm. Code 1100. In support of its motion, the Illinois EPA states the following:

1. The Illinois EPA requests a complete waiver from the filing requirements of 35 Ill. Adm. Code 102.200 and 102.202(d) for the following documents listed at proposed Section 1100.104:

IRIS. Integrated Risk Information System, National Center for Environmental Assessment, United States Environmental Protection Agency, 26 West Martin Luther King Drive, MS-190, Cincinnati, OH 45268, (513) 569-7254:

"Reference Dose (RfD): Description and Use in Health Risk Assessments," Background Document IA (March 15, 1993).

NTIS. National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161, (800) 553-6847:

Test Methods for Evaluating Solid Waste, Physical/Chemical methods, EPA Publication SW-846 (Third Edition, 1986 as amended by Updates I, II, IIA, IIB, III, IIIA, IIIB, and IV).

2. The Board's technical staff has confirmed that the above-referenced titles for which this motion seeks relief are already in the Board's possession. Therefore, preparing and submitting additional copies of these documents would serve no purpose and would be unnecessarily costly and

burdensome.

3. The Illinois EPA requests a partial waiver from the filing requirements of 35 Ill. Adm. Code 102.200 and 102.202(d) and permission to file only single copies of the following documents listed at proposed Section 1100.104:

United States Environmental Protection Agency, Office of Solid Waste and Emergency Response (2003). "Human Health Toxicity Values in Superfund Risk Assessments," OSWER Directive 9285.7-53. (Available online at <http://www.epa.gov/oswer/riskassessment/pdf/hhmemo.pdf>).

IRIS. Integrated Risk Information System, National Center for Environmental Assessment, United States Environmental Protection Agency, 26 West Martin Luther King Drive, MS-190, Cincinnati, OH 45268, (513) 569-7254.

"Guidelines for Carcinogen Risk Assessment (2005)". U. S. Environmental Protection Agency, Washington, DC, EPA Publication No. EPA/630/P-03/001F, 2005. (Available online at [http://www.epa.gov/ttn/atw/cancer\\_guidelines\\_final\\_3-25-05.pdf](http://www.epa.gov/ttn/atw/cancer_guidelines_final_3-25-05.pdf)).

"Statistical Analysis of Groundwater Data at RCRA Facilities—Unified Guidance (2009)". U. S. Environmental Protection Agency, Washington, DC, EPA Publication No. EPA 530/R-09-007, 2009. (Available online at <http://www.epa.gov/waste/hazard/correctiveaction/resources/guidance/sitechar/gwstats/unified-guid.pdf>).

"RCRA Ground-Water Monitoring: Draft Technical Guidance (1992)". U. S. Environmental Protection Agency, Washington, DC, EPA Publication No. EPA 530-R-93-001, 1992. (Available online at [http://www.epa.gov/osw/hazard/correctiveaction/resources/guidance/sitechar/gwmonitr/rcra\\_gw.pdf](http://www.epa.gov/osw/hazard/correctiveaction/resources/guidance/sitechar/gwmonitr/rcra_gw.pdf)).

4. The Board's technical staff has confirmed that these documents are not currently in the Board's possession. However, the documents are publicly available at no cost at the Internet links provided in this document and in the proposed rule. The combined total of the documents runs to several hundred pages. Because the documents are publicly available, the preparation and submission of more than one copy of the documents would serve no purpose and would be unnecessarily costly and burdensome.

WHEREFORE, the Illinois EPA requests relief from the filing requirements for



incorporations by reference as set forth above in paragraphs 1 through 4.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

By: *Stephanie Flowers*  
Stephanie Flowers  
Assistant Counsel

DATED: July 27, 2011

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## List of Studies and Reports Used in Regulatory Development

Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. U.S. General Soil Map (STATSGO2). Available online at <http://soildatamart.nrcs.usda.gov>

United States Environmental Protection Agency: Hazardous Waste Test Methods: TCLP Questions, "Total Constituent Analysis Instead of TCLP Analysis." Available online at [http://www.epa.gov/osw/hazard/testmethods/faq/faq\\_tclp.htm](http://www.epa.gov/osw/hazard/testmethods/faq/faq_tclp.htm)

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STATEMENT OF REASONS

NOW COMES the Illinois Environmental Protection Agency ("Illinois EPA") and submits its Statement of Reasons for the above-captioned proceeding to the Illinois Pollution Control Board ("Board") pursuant to 35 Ill. Adm. Code 102.202(b).

**I. FACTS IN SUPPORT, PURPOSE AND EFFECT**

**A. Background**

The Illinois EPA submits this proposal pursuant to Public Act 96-1416, ("P.A. 96-1416") which requires the Illinois EPA to propose to the Board by July 30, 2011 rules specifying (1) the use of clean construction or demolition debris ("CCDD") and uncontaminated soil as fill material at CCDD fill operations [415 ILCS 5/22.51(f)(1)]; (2) the use of uncontaminated soil as fill material at uncontaminated soil fill operations [415 ILCS 5/22.51a(d)(1)]; and (3) the maximum concentrations of contaminants that may be present in the uncontaminated soil component of construction or demolition debris [415 ILCS 5/3.160(c)]. The rules must include standards and procedures necessary to protect groundwater. P.A. 96-1416 requires the Board to adopt rules no later than one year after receipt of the Illinois EPA's proposal.

Additionally, on July 14, 2011, the Governor signed HB 3371 into law as P.A. 97-0137, effective July 14, 2011. This legislative amendment makes two changes to the language of P.A. 96-1416. The first amendment removes the benzo(a)pyrene restriction at Section 3.160(c)(1) of the Illinois Environmental Protection Act (“Act”). This change allows the Board to consider TACO background levels for all carcinogens and not just for the one carcinogen, benzo(a)pyrene. P.A. 96-1416 did not restrict the Board’s consideration of TACO background levels for non-carcinogens. The second amendment was made to Sections 22.51(f)(2)(B) and 22.51a(d)(2)(B) of the Act and allows Professional Geologists, as well as Professional Engineers to provide certifications under the interim soil certification requirements.

## **B. History**

The Illinois EPA has addressed the regulatory requirement of P.A. 96-1416 by proposing amendments to 35 Ill. Adm. Code 1100 (“Part 1100”). Part 1100 was adopted by the Board in its final order for R06-19, issued on August 17, 2006, establishing a permit program for the use of CCDD as fill material in current or former quarries, mines, or other excavations. Currently, there are 60 CCDD fill operations in 18 counties permitted by the Illinois EPA.

On July 30, 2010, P.A. 96-1416 became law and, in addition to the regulatory requirement already stated, established the following interim standards for CCDD fill operations and uncontaminated soil fill operations: (1) Owners and operators of uncontaminated soil fill operations are required to register with the Illinois EPA. Currently, there are 20 uncontaminated soil fill operations in 10 counties registered with the Illinois EPA; (2) Owners and operators of uncontaminated soil fill operations must document information for each load of uncontaminated soil accepted at the fill operation and must screen each load of soil with a device such as a photo ionization detector, flame ionization detector, or another device approved by the Illinois EPA

that detects volatile organic compounds. This documentation and screening is already required of permitted CCDD fill operations under the existing Part 1100 rules; (3) Owners and operators of CCDD and uncontaminated soil fill operations must confirm that the CCDD or uncontaminated soil accepted at the fill operation was not removed from a site as part of a cleanup or removal and must obtain for all soil (i) a certification from the owner or operator of the site of origin that the site has never been used for commercial or industrial purposes and is presumed to be uncontaminated soil or (2) a certification from a licensed professional engineer (“LPE”) or licensed professional geologist (“LPG”) that the soil is uncontaminated. The interim standards apply until the effective date of the more comprehensive rules the Board is required to adopt under P.A. 96-1416.

### **C. Regulatory Development**

The amendments to Part 1100 were developed with input from the regulated community. An Illinois EPA workgroup originally drafted the proposed language and then circulated the draft to members of the regulated community and State and local government entities for comment. The Illinois EPA workgroup then made changes to the proposed language based on comments received and circulated the draft for a second round of comments. This second round of comments produced changes to the proposed language as well. Comments on the proposed language were received from representatives of the following entities: American Institute of Professional Geologists, American Public Works Association – Chicago Metro Chapter, Association of Environmental and Engineering Geologists, Carlson Environmental, CenterPoint Properties Trust, Chicago Public Building Commission, Chicago Street CCDD, City of Chicago, First Environmental Laboratories, Forest Preserve District of Will County, Illinois Association of Aggregate Producers, Illinois Association of County Engineers, Illinois Association of

Groundwater Professionals, Illinois Attorney General's Office, Illinois Department of Transportation, Illinois Groundwater Association, Illinois Landscape Contractors Association, Illinois Road and Transportation Builders Association, Illinois Society of Professional Engineers, JAS Environmental, Inc., Land Reclamation and Recycling Association, Mott Excavating, National Solid Wastes Management Association, Naval Facilities Engineering Command Midwest, Professional Geologists of Indiana, Inc., Soil Science Society of America, Suburban Public Works Directors Association, U.S. Army Corp of Engineers, Vulcan Materials Company, Waste Management of Illinois, Inc., Weaver Boos Consultants, Will County, Wills Burke Kelsey Associates, Inc. A number of individuals speaking on their own behalf also provided comments.

As a result of the Illinois EPA's outreach efforts significant concerns of the interested parties have been resolved. However, with the universe of interested parties being large and diverse disagreements with the Illinois EPA's proposal as well as with each other's positions remain. The following are identified as main areas of disagreement between the Illinois EPA and the interested parties regarding this rulemaking:

1. Groundwater monitoring. Several parties oppose the groundwater monitoring requirements of proposed Subpart G of Part 1100. In their comments to Illinois EPA they assert that the load checking requirements of Subpart B including the soil certification requirement are sufficiently protective of groundwater and that the Illinois EPA's proposed groundwater monitoring program will force many fill operations to shut down due to the high cost of installing and sampling monitoring wells.

2. pH- sensitive values. Several parties oppose the Illinois EPA's use of the most conservative pH-sensitive value to determine the maximum allowable concentration for certain chemicals. In their comments to Illinois EPA they assert that a narrower pH range is typical for

most Illinois soils and that this narrower range should be allowed in calculations to determine the maximum allowable concentration for certain chemicals.

3. Soil sampling. As proposed, the soil certification requirements for professional engineers and professional geologists do not stipulate the sampling parameters, location, or frequency because the Illinois EPA believes these decisions to be job-specific and best left to the professional judgment of the engineer or geologist. However, several parties have asserted that a soil sampling protocol should be established in the regulations.

#### **D. Affected Sources and Facilities and Economic Impact**

Persons directly affected by this rulemaking include any and all persons operating a clean construction or demolition debris fill operation or an uncontaminated soil fill operation.

Since much of the proposed amendments are a continuation of the interim standards required by P.A. 96-1416 that have been in place since July 30, 2010, the Illinois EPA believes the economic impact of most of the amendments proposed in this rulemaking will not be detrimental to the regulated community. However, source site owners and operators will continue to incur the costs to obtain soil certifications from a professional engineer or professional geologist for soil removed from certain sites. Also, soil only fill operations will continue to incur the costs of load checking and will incur new costs of a regulated program such as documentation. In addition, the groundwater monitoring requirements of Subpart G will place new costs on the fill operations to install a groundwater monitoring system and a sampling program.

#### **E. Environmental, Technical and Economic Justification**

The Illinois EPA believes that the proposed amendments will assist in keeping contaminated material from being disposed of in CCDD fill operations and uncontaminated soil

fill operations. However, since the Illinois EPA cannot be sure that the front-end screening process will keep 100% of contamination out of the fill operations, the groundwater monitoring requirement is necessary to detect any contamination of groundwater and provide timely corrective action and remediation. This will allow continued use of groundwater resources by the communities surrounding the fill operations without concerns for the costs to health from drinking contaminated groundwater and the costs to provide alternative sources of drinking water. A map of the current permitted CCDD fill operations shows that both public and private wells are found in close proximity to CCDD fill operations due to the fact that the same geologic material that is good to be quarried is also appropriate material in which to sink a groundwater well.

As noted above, source site owners and operators, including governmental entities, will continue to incur costs to obtain the soil certifications from professional engineers and professional geologists for soil removed from certain sites. However, the Illinois EPA has tried to lessen the costs by reducing the interim requirement of P.A. 96-1416 for soil certifications from all commercial and industrial properties to only those properties that are “potentially impacted properties”, which the Illinois EPA believes still follows the intent of the legislation.

The Illinois EPA also believes the amendments will increase the costs associated with operating a CCDD fill operation or an uncontaminated soil fill operation, including obtaining the services of a professional engineer to help with the technical aspects of the groundwater monitoring requirements, installing a groundwater monitoring system, and sampling and analysis. However, the extent of the cost increase is unknown and may vary significantly between fill operations. The Illinois EPA has tried to mitigate costs to the regulated community



by requiring only annual sampling of the groundwater and allowing site specific variation based upon the judgment of the site's professional engineer.

## **II. SYNOPSIS OF TESTIMONY**

Currently, the Illinois EPA plans to call the following witnesses at the hearing: Doug Clay, Manager of the Division of Land Pollution Control, Steve Nightingale, Manager of the Permit Section, Paul Purselove, Field Operations Manager, Chris Liebman, Manager of the Solid Waste Unit of the Permit Section, Les Morrow, Environmental Toxicologist, and Thomas Hubbard, Permit Writer in the Solid Waste Unit of the Permit Section. These witnesses will testify about the amendments in general and will assist in answering questions. Written testimony will be submitted prior to hearing in accordance with the Board's procedural rules. Additionally, the Illinois EPA plans to have additional staff available to answer questions at hearing who participated in the development of this rulemaking but who will not be submitting written testimony. The Illinois EPA respectfully requests that the Board allow Illinois EPA witnesses to present their oral testimony in panel form rather than calling each individually. A panel format should streamline the hearing process, and has proven beneficial in past rulemakings.

## **III. SUPPORTING DOCUMENTS**

Attachment A: Draft Table of "Maximum Allowable Concentrations of Chemical Constituents in Uncontaminated Soil"

## **IV. DESCRIPTION OF PROPOSED AMENDMENTS**

### **SUBPART A – GENERAL**

Section 1100.101 - Scope and Applicability. Amendments to this Section include adding "uncontaminated soil" and "uncontaminated soil fill operations" to the applicability and

removing the statutory designated italics and references to Section 22.51 of the Act since both Section 22.51 and 22.51a of the Act are applicable.

Section 1100.103 – Definitions. Amendments to this Section include revising existing definitions and inserting new definitions that reflect amendments to the regulations regarding painted CCDD and soil certifications under Subpart B, uncontaminated soil fill operations under Subpart E, sampling and analysis of uncontaminated soil under Subpart F and the groundwater monitoring program under Subpart G. New definitions include “aquifer”, “background groundwater quality”, “carcinogen”, “compliance boundary”, “compliance point” “cone of depression”, “dewatering”, “fill operation”, “potentially impacted property”, “professional geologist”, “representative groundwater conditions”, “site of origin”, “source site owner”, “source site operator”, “uncontaminated soil”, “uncontaminated soil fill operation”, and “uppermost aquifer”. In addition, the term “other excavation” has been copied out of the larger definition for “CCDD fill operation” and placed on its own for ease of use and understanding. Because this term has been historically problematic, it has been expanded to provide better clarification on the meaning of “other excavation”. Amendments also include the deletion of a portion of the statutory definition of “CCDD” that was not relevant to this Part, and the deletion of the term “malodor”, which is related to air pollution and has been replaced in these rules with the use of the term “foul odor”.

Section 1100.104 - Incorporations by Reference. Amendments to this Section include updating the existing incorporation by reference and adding four additional incorporations by reference relating to the new requirements of sampling and analysis of uncontaminated soil under Subpart F and the groundwater monitoring program under Subpart G.

## SUBPART B – OPERATING STANDARDS FOR CCDD FILL OPERATIONS

Section 1100.201 – Prohibitions. Amendments to this Section include adding new statutory prohibitions to the lists of prohibited activities and adding a prohibition on the use of painted CCDD in a CCDD fill operation unless used in accordance with Section 1100.212.

Section 1100.203 - Annual Facility Map. The amendment to this Section requires that the annual facility map to be submitted with the annual report required under Section 1100.211.

Section 1100.204 - Operating Standards. The amendment to this Section requires that the fill operation control odors and other nuisances as part of its daily operations.

Section 1100.205 - Load Checking. A new subsection (a) has been added to this Section to require a certification by the source site owner or source site operator, or a professional engineer or professional geologist that soil taken to the fill operation is uncontaminated. This requirement codifies the interim standard established by P.A. 96-1416 described above and which has been in place since July 30, 2010. The language in subsection (a) differs from the language in P.A. 96-1416 in two ways. First, in subsection (a)(1)(A), the term “commercial/industrial” has been replaced with the term “potentially impacted property” because the term “industrial/commercial” is closely identified with zoning designations and, as a result, has caused confusion among the regulated community. The intention of the certification requirement of P.A. 96-1416 was to identify soil that is more likely to be contaminated and in need of professional evaluation and certification before placement within a fill operation. Therefore, to better align with the purpose of the certification requirement, to provide clarity on when a certification is required, and to give more flexibility to source site owners and operators, receiving facilities, contractors, and environmental professionals, Illinois EPA has created a new term, “potentially impacted property”. Secondly, in subsection (a)(1)(B) the signature authority

of the uncontaminated soil certification form has been extended to professional geologists in accordance with the passage of P.A. 97-0137 from the legislature.

Most of the changes to the language in the new subsections (b) and (c) are related to the interim documentation requirements in Sections 22.51(f)(2)(A) and (f)(3), and 22.51a(d)(2)(A) and (d)(3), of the Act. However, the Illinois EPA did make two changes to the new subsection (b). First, at subsection (b)(4)(A)(ii), in response to comments from interested parties the Illinois EPA has changed the management of rejected loads and no longer requires that the rejected load be taken to a landfill. Second, at subsection (b)(5) the Illinois EPA has added language to encourage communications between the source site owners and source site operators and the fill operations regarding the acceptance of future loads from a suspect source.

Subsection (d) has been added to provide load checking standards for the acceptance of painted CCDD at a CCDD fill operation. The use of painted CCDD as fill material at a CCDD fill operation is discussed further in Section 1100.212 below.

Section 1100.206 – Salvaging. The amendment to this Section is related to the deletion of the term “malodor”, which is related to air pollution, and replacing it with standard terminology of “foul odors”.

Section 1100.207 – Boundary Control. The amendment to this Section is related to the addition of uncontaminated soil fill operations to the applicability of this Part.

Section 1100.208 – Closure. The amendments to this Section are related to the addition of uncontaminated soil fill operations to the applicability of this Part.

Section 1100.209 - Postclosure Maintenance. The amendments to this Section are related to the addition of uncontaminated soil fill operations to the applicability of this Part. Since

permits are not required for uncontaminated soil fill operations, changes to the post closure maintenance requirements will need to be through other written Illinois EPA approval.

Section 1100.211 - Annual Reports. Amendments to this Section include a requirement to provide the amount of uncontaminated soil expected in the coming year and a requirement to include the annual facility map with the annual report submittal.

Section 1100.212 - Use of Painted CCDD as Fill Material. This Section is an entirely new Section that proposes allowing painted concrete, asphalt, etc., to be considered clean construction or demolition debris (“painted CCDD”) and therefore eligible to be used as fill material at CCDD fill operations regulated pursuant to Part 1100. The introductory language to Section 1100.212 provides that CCDD -- broken concrete without protruding metal bars, bricks, rock, stone, or reclaimed or other asphalt pavement – with paint on it is considered CCDD for purposes of Part 1100 and may be used as fill material at a CCDD fill operation if evaluated analytically under the supervision of a licensed professional engineer and if all requirements of Section 1100.212 are satisfied. The painted CCDD must also meet all other requirements of Part 1100, such as visual inspections and instrument screening during load checking. The definition of CCDD at Section 1100.103 has been modified to incorporate the acceptance of painted CCDD at fill sites. A Board Note following the introductory language has been proposed to clarify that painted CCDD managed in any other context must be handled in accordance with applicable law and may require permits or other authorization. In particular, processing of painted concrete for other uses would be of concern to the Illinois EPA because of the potential for leaching of contaminants from the paint during storage and processing and the creation of airborne particles.

This proposal is somewhat of a departure for the Illinois EPA, which traditionally has maintained that paint on construction or demolition debris is a contaminant that requires

management controls for painted debris and disposal at landfills. The Illinois EPA believes this proposed change is justifiable from both legal and policy perspectives. It is limited to painted materials otherwise defined as CCDD at Section 3.160 of the Act. Significant quantities of painted CCDD are produced and sent to landfills for disposal. Allowing its use as fill material at CCDD fill operations would conserve landfill space, and may reduce uncontrolled accumulations of such materials. The concerns about airborne particles are minimized with placement of the painted CCDD in CCDD fill operations because the material will not be further processed. The concerns about leachate and potential contamination of groundwater can be minimized with the screening procedures proposed in Section 1100.212.

Sections 1100.212(a) through (c) set forth the Illinois EPA's proposed screening procedures. Subsection (a) provides that licensed professional engineers must determine the number and location of paint samples that will provide a representative analysis of the paint from the CCDD to be used as fill material. The Illinois EPA believes these determinations must be made on a site-specific basis because a single protocol for numbers and locations of samples is impractical given the wide variety of circumstances in which painted CCDD may be generated. Subsection (b) requires the professional engineer to obtain paint samples consisting of representative paint chips or scrapings that include all layers of paint and that minimize the amount of substrate in the sample. Subsection (c) requires analysis for six contaminants of concern: arsenic, cadmium, chromium (total), lead, mercury and zinc. Analysis must be performed using the Toxicity Characteristic Leaching Procedure ("TCLP") or Synthetic Precipitation Leaching Procedure ("SPLP") extraction tests in accordance with Methods 1311 and 1312 respectively in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods," USEPA Publication No. SW-846. Subsection (c) further provides that analytical

results from samples must not be averaged, quantitative analyses of samples must be performed by certified laboratories, documentation of chain of custody and laboratory results and procedures must be provided, and documentation must be certified by an authorized agent of the laboratory.

Subsection (d) provides the analytical standard for painted CCDD used as fill material at CCDD fill operations. Results for each sample must not exceed the chemical-specific Class I groundwater quality standard at 35 Ill. Adm. Code 620.410 for any contaminant of concern. The Illinois EPA proposes that the standard be based on Part 620 rather than 35 Ill. Adm. Code 742. Appendix B, Table E because the Part 620 standards will be updated more frequently than the Part 742 tables and the Part 742 tables themselves are based upon the Part 620 standards. The Illinois EPA did not propose including the numeric standards in Part 1100 because of the additional resources required to amend the rules each time such standards change.

A few revisions are proposed at other sections of Part 1100 to support the painted CCDD provisions at Section 1100.212. Section 1100.205 is amended by adding subsection (d). As part of certification and load checking at CCDD fill operations, facility owner/operators must obtain a professional engineer's certification that the painted CCDD satisfies the requirements of Section 1100.212. The Illinois EPA is preparing a form for this certification. The laboratory documentation will be a required attachment. The owner/operators also must comply with the load checking requirements of Section 1100.205(b) and the document retention requirements of Section 1100.205(c). Section 1100.201 is added to reinforce the idea that the use of painted CCDD is allowed only at CCDD fill operations and only if the requirements of Section 1100.212 are satisfied.

## SUBPART C – PERMIT APPLICATION INFORMATION FOR CCDD FILL OPERATIONS

Section 1100.304 - Site Location Map. The amendment to this Section is to correct the title of the Safe Drinking Water Act.

Section 1100.306 - Narrative Description of the Facility. Amendments to this Section require specification of the use of uncontaminated soil as fill material.

Section 1100.307 - Proof of Property Ownership and Certification. The amendment to this Section is to delete the requirement of a certification by the applicant to notify the Illinois EPA of a change in ownership and instead require that a change in ownership be provided to the Illinois EPA in written format.

Section 1100.309 - Closure Plans. Amendments to this Section replace the term “CCDD filling” with the term “the fill operation” to reflect use of uncontaminated soil as fill material as well as CCDD.

## SUBPART D – PROCEDURAL REQUIREMENTS FOR PERMITTING CCDD FILL OPERATIONS

Section 1100.412 - Amendments to this Section include reworking the language of subsection (a) to reference Section 1100.208 and to incorporate the groundwater monitoring program into the postclosure maintenance requirements of subsection (c)(1)(D). Existing facilities will have one year to decide whether to install a groundwater monitoring system or terminate the permit. Facilities remaining in operation one year after the effective date of the amendments establishing Subpart G must have installed a groundwater monitoring system. Facilities that enter postclosure maintenance before the one year anniversary of the effective date of Subpart G are exempt from its requirements.



## SUBPART E – UNCONTAMINATED SOIL FILL OPERATIONS

At this point, the Illinois EPA wishes to call the Board's attention to the section numbering in the proposal. The existing Part 1100, consisting of Subparts A through D, is numbered consecutively with no intervals between section numbers. The proposed new Subparts E through G are numbered in increments of five to provide opportunities for subsequent amendments with less disruption to existing sections. The Illinois EPA considered renumbering existing sections to create increments of five, but this would require a recodification with additional procedural steps to comply with 1 Ill. Adm. Code 100 and the Secretary of State's "Style Manual." See 1 Ill. Adm. Code 100.1100 – 100.1120; Style Manual at 39. Rather than present the Board with this complication, the Illinois EPA decided on the approach explained here.

Section 1100.500 – Prohibitions. This Section lists prohibited activities including the statutory prohibition against accepting material other than uncontaminated soil for fill at the facility. The remaining prohibitions are modeled after Section 1100.201.

Section 1100.505 - Operating Standards. This Section sets forth the operating standards for uncontaminated soil fill operations which are substantially similar to CCDD fill operations including load checking activities and certifications, placement of fill, fill elevation, size and slope of working face, control of mud tracking, dust control, noise control, maintenance, odor and nuisance control, standards for equipment and utilities, surface water drainage, salvaging, boundary control, and closure and postclosure maintenance.

Section 1100.510 - Recordkeeping Requirements. This Section lists records to be kept for the life of the uncontaminated soil fill operation and is based on the recordkeeping requirements for CCDD fill operations in Sections 1100.210, and 1100.304 through 1100.310.

Section 1100.515 – Registration. This Section requires uncontaminated soil fill operations to register with the Illinois EPA on forms and in a format prescribed by the Illinois EPA. Facilities that were registered with the Illinois EPA under the interim standards required by the Act must re-register under Subpart E of Part 1100 if they intend to keep operating. Since there is currently no requirement for uncontaminated soil fill operations to notify the Illinois EPA if they cease operations, this re-registration is necessary for the Illinois EPA to identify those still in operation. The 60 day window provides a reasonable time for registration and allows any uncontaminated soil fill operations who intend to cease operations to do so within the 60 days without being subject to the requirements of Subpart E.

Section 1100.520 - Required Signatures. This Section lists required signatures on registration applications and is modeled after Section 1100.303.

Section 1100.525 - Procedures for Closure. This Section states the requirements for closure of the uncontaminated soil fill operation, including the requirements of PE certification for closure, and is modeled after Section 1100.412(a) and (b)(1) regarding closure of CCDD fill operations.

Section 1100.530 - Termination of Postclosure Maintenance. This Section states the requirements for termination of postclosure maintenance for the uncontaminated soil fill operation and is modeled after Section 1100.412(c)(1) regarding the postclosure maintenance period of CCDD fill operations.

SUBPART F: STANDARDS FOR UNCONTAMINATED SOIL USED AS FILL MATERIAL  
AT FILL OPERATIONS REGULATED BY THIS PART

Subpart F of the Illinois EPA's proposal establishes standards for "uncontaminated soil" that is generated during construction or demolition activities and used as fill material at fill operations regulated pursuant to Sections 22.51 and 22.51a of the Act and the amended Part 1100. 415 ILCS 5/22.51, 22.51a; 35 Ill. Adm. Code 1100. The statutory basis for Subpart F is found at Section 3.160(c) of the Act. 415 ILCS 5/3.160(c). Section 3.160(c) defines "uncontaminated soil" as "soil that does not contain contaminants in concentrations that pose a threat to human health and safety and the environment." This definition also is referenced in Sections 22.51(e)(4) and 22.51a(a)(1) of the Act.

Section 3.160(c)(1) of the Act directs the Illinois EPA to propose and the Board to adopt "rules specifying the maximum concentrations of contaminants that may be present in uncontaminated soil for purposes of this Section." Subsection (c)(1) then provides additional guidance for establishing maximum allowable concentrations ("MAC") for chemical constituents that are carcinogens:

For carcinogens, the maximum concentrations shall not allow exposure to exceed an excess upper-bound lifetime risk of 1 in 1,000,000; provided that if the most stringent remediation objective or applicable background concentration for a contaminant set forth in 35 Ill. Adm. Code 742 is greater than the concentration that would allow exposure at an excess upper-bound lifetime risk of 1 in 1,000,000, the Board may consider allowing that contaminant in concentrations up to its most stringent remediation objective or applicable background concentration set forth in 35 Ill. Adm. Code 742 in soil used as fill material in a current of former quarry, mine, or other excavation in accordance with Section 22.51 or 22.51a of this Act and rules adopted under those Sections. Any background concentration set forth in 35 Ill. Adm. Code 742 that is adopted as a maximum allowable concentration must be based upon the location of the quarry, mine, or other excavation where the soil is used as fill material.

415 ILCS 5/3.160(c)(1) (as amended by P.A. 97-0137).

Based on the summary of statutory language from Section 3.160 provided here, the Illinois EPA has taken three guiding principles as the starting place for its proposed Subpart F: (1) The MACs should be based on the Tier 1 soil remediation objectives from the rules for Tiered Approach to Corrective Action Objectives (“TACO”) (35 Ill. Adm. Code 742); (2) the MACs in soil must be based on concentrations of chemical constituents in the soil itself and not on external controls and circumstances; and (3) the MACs apply only in the context of soil generated during construction or demolition activities as defined in Section 3.160 of the Act and placed at CCDD or uncontaminated soil fill operations.

The first principle is that Tier 1 soil remediation objectives from the TACO rules generally should provide the basis for the MACs. *See* 35 Ill. Adm. Code 742.Appendix B, Tables A, B. While this is not expressly stated in the statute, it is implied in Section 3.160(c) as originally adopted in P.A. 96-1416 by references to Appendix A, Table H of TACO and to risk levels for carcinogens. Section 3.160(c) as amended by P.A. 97-0137 is even more direct in its references to TACO remediation objectives. As a practical matter, the Illinois EPA has no basis other than the TACO remediation objectives for proposing human health- and safety-based standards for contaminant concentrations in soil as required by the Act.

However, there is a clear distinction between the purposes for which the TACO rules were developed and the fill operations. The TACO rules provide a risk-based methodology for determining remediation objectives at sites where there has been a release of uncontrolled contamination. The purpose is to return contaminated properties to safe and productive uses as efficiently as possible considering their already degraded conditions. On the other hand, fill operations will be receiving soil containing contaminants that did not previously exist at the fill site locations. This distinction – that contamination is being brought to the location and not

removed from it -- justifies a conservative approach when using the TACO objectives as maximum allowable concentrations for soil deposited at fill sites.

The second guiding principle is that the maximum allowable concentrations of chemical constituents in soil must be based on the soil itself and not on external controls and circumstances such as institutional controls, engineered barriers, pathway exclusions, and the like, as developed for the TACO rules. The definition of “uncontaminated soil” at Section 3.160(c) of the Act specifically states that the concentrations in the soil itself must not pose a threat to human health, safety or the environment. In the remediation context of the TACO rules, only soils with residual contamination that poses a threat to human health and safety require additional control devices. Moreover, soil with contaminants above the Tier I residential values is considered waste that must be properly disposed of if excavated. Fill operations are prohibited from accepting waste. Using external controls to allow elevated levels of contaminants is not consistent with the definition or the concept of “uncontaminated soil.” In addition, Section 3.160(c)(1) of the Act requires the Illinois EPA to propose and the Board to adopt rules “specifying the maximum concentrations of contaminants that may be present in uncontaminated soil . . .” (Emphasis added) If the presence of external controls becomes a basis for determining whether or not soil is “uncontaminated,” there is no need to set maximum allowable concentrations for the soil itself. Finally, deciding if soil is “uncontaminated” based on site-specific factors such as the presence or absence of external controls necessarily implies different standards for uncontaminated soil at each facility. The Illinois EPA believes that proper use and administration of the MACs depends on uniformity. Site-specific standards based on conditions at each fill operation would require additional rules for site investigation, reporting, review and

approval of site-specific MACs and would substantially complicate matters for soil generators, reviewing LPEs and LPGs, and State and local inspectors.

The third guiding principle is that the standards for uncontaminated soil apply only in the context of soil generated during construction or demolition activities as defined in Section 3.160 of the Act and placed at CCDD or uncontaminated soil fill operations. The legislative directive to the Illinois EPA and the Board is to propose and adopt contaminant concentration standards for purposes of Section 3.160, which limits the effort to soil generated during “construction, remodeling, repair and demolition of utilities, structures and roads” and the uses authorized by Section 3.160.

The Illinois EPA does not propose or support the use of soils satisfying the proposed MACs outside the regulated fill operation context authorized in Section 3.160(b) and Sections 22.51 and 22.51a of the Act. This is because the TACO Tier 1 remediation objectives on which the MACs are based address only the ingestion, outdoor inhalation, soil migration to groundwater, and construction worker exposure routes for human receptors. MACs based on the most stringent Tier 1 objectives among these exposure routes are acceptable for the controlled conditions at fill operations, but they do not address concerns that might arise if uncontrolled use is allowed for soil meeting the proposed MACs. For example, there would be no equivalent screening procedures (e.g., load-checking, certification, document retention) such as those required at the gates of fill operations. While undoubtedly imperfect, these screening procedures are the only checks on soils for compliance with the MACs that do not otherwise require professional engineer or geologist review.

In addition, the TACO Tier 1 remediation objectives on which the MACs are based do not take into account all potential exposure routes. One human exposure route that might be of

concern if uncontrolled use is allowed would be the indoor inhalation exposure route. The TACO rules currently are before the Board in a proposal that would amend Part 742 to address the indoor inhalation exposure route.<sup>1</sup> However, the Illinois EPA has not evaluated what effect, if any, the proposed indoor inhalation standards might have on soil used as fill material outside the remediation context. Moreover, ecological receptors are not considered. The Illinois EPA acknowledges that Section 3.160(c) provides, in addition to human health and safety, that concentrations of contaminants in “uncontaminated soil” must not threaten the environment.<sup>2</sup> Several years ago, the Illinois EPA expended considerable resources to develop a TACO equivalent for environmental receptors, but the effort was set aside indefinitely because of stakeholder disagreements on an acceptable approach. Nonetheless, based on USEPA guidance for ecological soil screening levels (“EcoSSLs”), there is good reason to conclude that remediation objectives for ecological receptors would in some cases be more stringent than those for human receptors. If such remediation objectives were part of the MAC determination process as the statute directs, they could become the controlling values for MAC selection. For example, the MAC for pH-sensitive copper is 330 mg/kg. The EcoSSL for copper is 28 mg/kg for avian receptors and 49 mg/kg for mammals. The MAC for DDT is 2 mg/kg. The EcoSSL for DDT is 0.093 mg/kg for avian receptors and 0.021 for mammals.<sup>3</sup> Because the TACO Tier 1 objectives and the MACs based on them do not address additional potential human exposure routes or ecological receptors, the Illinois EPA’s Subpart F proposal restricts the use of the

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<sup>1</sup> See “In the Matter of: Proposed Amendments to Tiered Approach to Corrective Action Objectives (TACO) (35 Ill. Adm. Code 742),” PCB R2011-009.

<sup>2</sup> Like Section 3.160(c), the statutory authority underlying the TACO rules also provides for remediation objectives that are protective of environmental receptors. 415 ILCS 5/58.5(c)(1), 5/58.5(d)(4)(A)(ii), 5/58.6(b)(1). However, to date, TACO addresses only the health and safety of human receptors.

<sup>3</sup> See USEPA, February, 2007. Ecological Soil Screening Levels for Copper. Office of Solid Waste and Emergency Response. OSWER Directive 9285.7-68. AND USEPA, April, 2007. Ecological Soil Screening Levels for DDT and Metabolites. Office of Solid Waste and Emergency Response. OSWER Directive 9285.7-57.

standards for identification of “uncontaminated soil” to soil managed in the limited and controlled environment of the regulated fill operations.

The three guidelines just summarized provide context for the section-by-section discussion of Subpart F that follows:

Section 1100.600 - Purpose and Applicability. This section sets forth the purpose of the Subpart, its applicability, and certain restrictions and exclusions. Subsection (b) states that the Subpart applies only to soil generated as part of the construction or demolition activities listed in Section 3.160 of the Act and used as fill material at CCDD and uncontaminated soil fill operations regulated pursuant to Sections 22.51 and 22.51a of the Act and the amended Part 1100. Subsection (c) implements Sections 22.51(g)(1) and 22.51a(b) of the Act. It clarifies that uncontaminated soil commingled with other fractions of CCDD, must meet the MACs for uncontaminated soil to be used as fill material at fill operations. This is because the fill operations do not have sufficient technical and operational controls to accept soils with higher concentrations of contaminants and because soils exceeding the MACs otherwise could evade evaluation and compliance with the MACs if commingled with CCDD.

Subsection (d) excludes from consideration as uncontaminated soil three categories of soils that inherently increase the likelihood of exceeding the MACs, thereby creating unacceptable environmental conditions at fill operations. Subsection (d)(1) excludes soil that must be managed as hazardous waste. Regulated fill operations would not be authorized to accept hazardous waste. Subsection (d)(2) excludes soil that has at any time been treated or diluted to reduce contaminant concentrations or contaminant mobility. For example, the Illinois EPA is aware that soil is sometimes treated in situ or ex situ to alter pH so that extraction test concentrations are reduced. This practice can affect the legal requirements for managing the soil



without reducing contaminant concentrations. One exception to the exclusion in subsection (d)(2) is for soil that is treated by physically separating it from commingled CCDD. The Illinois EPA views this simple form of treatment as a legitimate exception to the treatment exclusion that will allow the separated soil to be evaluated under Subpart F requirements for uncontaminated soil. However, this treatment activity may be subject to local siting and permit requirements if not performed on the site where the soil is generated.

Subsection (d)(3) carries over the statutory language that is part of the CCDD interim requirements at Sections 22.51(f)(2)(C) and 22.51a(d)(2)(C) of the Act. It excludes from consideration as uncontaminated under Subpart F any soil that is removed from a site as part of a cleanup or removal of contaminants. However, the Illinois EPA has added to the remediation exclusion a clarification for soil that has not been excavated or treated as part of a cleanup or removal of contaminants and is otherwise uncontaminated under Subpart F. This revision to the remediation exclusion clarifies that soil removed from the property for reasons other than cleanup or removal of contaminants may be evaluated under Subpart F requirements for uncontaminated soil. For example, soil could be removed from another, uncontaminated portion of the property for reasons unrelated to the cleanup or removal of contaminants. As another example, a highway authority's removal of soil from a right-of-way subject to a highway authority agreement because of an adjacent leaking underground storage tank site would not be considered soil "excavated as part of a cleanup or removal of contaminants." The purpose of the removal would be roadway construction, and the removal of contaminated soil, if any, would be incidental to the construction. However, the soil still would require evaluation under Subpart F and could not be placed in regulated fill operations unless satisfying the Subpart F requirements for uncontaminated soil.

Section 1100.605 - Maximum Allowable Concentrations for Chemical Constituents in Uncontaminated Soils. Section 1100.605 establishes a methodology for determining the maximum allowable concentrations for chemical constituents in uncontaminated soils. The Illinois EPA has chosen to use a methodology (rather than simply proposing a table of values taken from the TACO Tier 1 tables) so that MACs may be determined without amending Part 1100 tables each time the TACO tables are revised.<sup>4</sup> Nonetheless, the Illinois EPA will publish a table of MACs that have been determined using the promulgated methodology. *See* Proposed Section 1100.605(e); Attachment C. This will simplify MAC determinations for those who do not wish to calculate the MACs themselves using the methodology and TACO tables. The Illinois EPA believes publication of the table will not constitute a generally applicable rule under the Administrative Procedure Act (5 ILCS 100/) as long as the values published in the table are determined using the promulgated methodology.

Subsection 1100.605(a) sets forth the basic methodology for determining MACs. The underlying concept is simple enough. It requires that the lowest Tier 1 chemical-specific soil value from all exposure routes (e.g., soil ingestion exposure route, outdoor inhalation exposure route, soil component of the groundwater ingestion exposure route, construction worker exposure route) must be selected as the MAC for each chemical constituent investigated. The values from which the comparison and selection of the MAC are made generally are found at 35 Ill. Adm. Code 742.Appendix B, Tables A and B.

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<sup>4</sup> The TACO tables are updated by rulemaking as soon as practicable after the values in those tables are revised by new evidence or because of revisions to the Class I and Class II groundwater quality standards at 35 Ill. Adm. Code 620. Like all formal rulemakings, those undertaken to update Parts 620 and 742 are resource intensive proceedings for the Illinois EPA and the Board, not to mention interested parties. In this time of diminishing resources, the Illinois EPA believes the proposed approach will reduce the need for periodic rulemakings to maintain consistency with Parts 620 and 742.

It should be noted that, when selecting MACs, values for the soil component of the groundwater ingestion exposure route must be based on the Tier 1, Class I remediation objectives. The Illinois EPA's position is that proper use and administration of the MACs depends on uniformity among fill operations to the extent possible.<sup>5</sup> Site-specific standards based on conditions at each fill operation would require additional rules for fill operation site investigations, reporting, review, and approval of site-specific MACs and would substantially complicate matters for soil generators, reviewing professional engineers and geologists, and state and local inspectors. The conservative approach of using Tier 1, Class I values for the soil component of the groundwater ingestion exposure route provides this uniformity and an additional layer of protection for groundwater resources from facilities that are not required to have a protective liner to control contaminant migration.

In practice, the application of the MAC methodology is more complicated than the underlying concept, primarily because the TACO values themselves are not simply raw numbers. Most of the values in the TACO tables are footnoted such that additional considerations must be taken into account before using the values as remediation objectives. Most of these same considerations must be taken into account when determining the MACs. For example, if the lowest Tier 1 chemical-specific soil value from the TACO tables is lower than the location-based background concentration in Section 742. Appendix A, Tables G or H, then the background concentration may be used as the remediation objective under TACO and as the MAC under Subpart F. *See* Proposed Section 1100.605(b).

As provided in Sections 1100.605(a)(2) and (a)(3), a few other adjustments must be made as well. For both ionizing organic constituents and inorganic constituents that are pH sensitive,

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<sup>5</sup> One exception is that Section 3.160(c)(1) of the Act authorizes the limited use of location-based background values from the TACO rules in cases where the MAC methodology results in chemical-specific values that are lower than the background values at the fill operation.

the values in the TACO rules for the soil component of the Class I groundwater ingestion exposure route (Section 742.Appendix B, Tables A and B) apply only when the soil pH at the remediation site is 6.8. However, if the soil pH is other than 6.8, Section 742.Appendix B, Tables C or D must be consulted to determine the applicable remediation objective. Proposed subsections (a)(2) and (a)(3)(A) require a similar adjustment in the MAC methodology with an important exception. In the fill operation scenario, the relevant pH affecting constituent leachability is not the pH at the site where the soil was generated or the pH of the native soil in the vicinity of the fill operation. Rather, it is the pH of the soil being placed inside the fill area, which the Illinois EPA believes will be variable and unpredictable. Therefore, the Illinois EPA proposes a conservative approach to using Table C to determine the values for the soil component of the groundwater ingestion exposure route for pH-sensitive constituents listed in Section 742.Appendix B, Table C. In that case, the lowest pH-dependent values must be selected from Table C and used for the comparison with other exposure routes to determine the MACs for those constituents. This ensures that, where the constituent is pH-sensitive, the worst case scenario is covered at each facility in the event the MAC is determined to be the pH-dependent value from the soil component of the groundwater ingestion exposure route.

A second adjustment for determining MACs from the TACO tables is proposed at Section 100.605(a)(3)(B). For inorganic constituents listed in Section 742.Appendix B, Tables A and B, the values listed for the soil component of the groundwater ingestion exposure route are based on results from the Toxicity Characteristic Leaching Procedure (“TCLP”) and are therefore provided in milligrams per liter (“mg/L”) while the values for most other constituents and exposure routes are total concentrations provided in milligrams per kilogram (“mg/kg”). Because constituent values from these various exposure routes must be compared to determine

the lowest Tier 1 chemical-specific value that is the MAC, the comparison must be made using the same unit of measure (i.e., “apples to apples”). For inorganics, values in milligrams per liter must be converted to milligrams per kilogram so the direct comparison can be made with values for the other exposure routes. For pH-sensitive inorganics listed in Section 742.Appendix B, Table C, the problem is solved because Table C values are listed in milligrams per kilogram. However, there is a limited number of inorganics that must be converted in another way. The Illinois EPA proposes using a multiplication factor of 20 to convert the milligrams per liter to a conservative equivalent in milligrams per kilogram that can be used to make the comparison that determines the MAC. The multiplication factor of 20 is endorsed by the United States Environmental Protection Agency at its website:

[http://www.epa.gov/osw/hazard/testmethods/faq/faq\\_tclp.htm](http://www.epa.gov/osw/hazard/testmethods/faq/faq_tclp.htm) . It is derived from the 20:1 liquid to solid ratio used in the TCLP and is conservative because it assumes total constituent leaching from a waste that is 100% solid as defined in the TCLP method.<sup>6</sup>

Section 1100.605(a)(4) provides that the Acceptable Detection Limit (“ADL”) becomes the lowest chemical-specific exposure route value if the lowest Tier 1 chemical-specific exposure route value is less than the ADL. This approach also is used in the TACO rules when setting remediation objectives and is found at Section 742.510(a)(8). Section 1100.605(a)(5) provides that the total concentration of organic contaminants may not exceed the attenuation capacity of the soil as determined in accordance with the TACO rule at Section 742.215. Attenuation capacity is an estimation of the volume of organic contaminants that can be bound to the natural organic material in the soil. Exceedence of the attenuation capacity invalidates the models on which the soil migration to groundwater values are based. When the binding capacity is

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<sup>6</sup> A small number of inorganics have MACs that are determined using this conversion method: boron, chloride, cobalt, fluoride, nitrate as N, silver, and sulfate.

exceeded, the excess contaminants are theorized to be free product that can migrate vertically in percolating rain water. Free contaminants, either suspended or in solution, then may migrate to groundwater directly and not follow the dynamics predicted in the TACO models for migration to groundwater. Therefore, attenuation capacity is an important consideration, especially since the soil migration to groundwater values constitute the majority of the MACs.

Proposed Section 1100.605(c) provides that the Illinois EPA will, upon request, calculate exposure route values for constituents not listed in the Tier 1 tables at Section 742. Appendix B, Tables A, B, or C. This is similar to a provision in the TACO rules at 35 Ill. Adm. Code 742.510(c). Subsections 1100.605(c)(1) and (c)(2) provide instructions to the Illinois EPA for making the calculations. The Illinois EPA has been calculating such values for several years under the TACO provision. Section 1100.605(e) directs the Illinois EPA to publish the results of its calculations at its website. The exposure route values then may be plugged into the methodology in Section 1100.605(a) to determine the MAC. Under the TACO provision, the Illinois EPA currently has published exposure route values for nearly 150 additional constituents that do not appear in the TACO tables at: <http://www.epa.state.il.us/land/taco/chemicals-not-in-taco-tier-1-tables.html>. The Illinois EPA expects that requests for such calculations will continue to diminish as more constituents are added to the table.

Section 1100.605(d) expressly excludes the use of site-specific devices developed for remediation sites under TACO when determining MACs for uncontaminated soil. The reasons for this exclusion already have been explained above at the discussion of the guiding principles. Subsection 1100.605(e) is the publication requirement for tables of MACs and exposure routes for chemicals not listed in the TACO Tier 1 tables. This provision already has been discussed in those contexts.

Section 1100.610 - Compliance Evaluation; Performance and Documentation of Soil Sampling and Chemical Analysis. Proposed Section 1100.610 provides direction for evaluating compliance of any particular quantity of soil with the applicable MACs as determined pursuant to Section 1100.605. Again, the underlying concept is relatively simple. Soil to be sent to fill operations is identified, and a determination is made as to whether the soil is from “potentially impacted property.” The applicable MACs, if any, are determined. Soil samples, if any, are sent to a certified laboratory for analysis. The analytical results are compared with the MACs. If the concentrations in the soil are equal to or less than the concentrations of the MACs, then the soil is considered uncontaminated for purposes of Part 1100 and may be accepted at the fill operations. In practice, compliance evaluation is more complicated.

Not all soils are subject to evaluation and certification by licensed professional engineers and geologists, but for soils that are from potentially impacted properties, the first problem is determining what chemical constituents, if any, must be analyzed. The second problem is developing a representative sampling plan. After considerable discussion, the Illinois EPA’s position is that a one-size-fits-all protocol producing consistently reliable results is impractical considering the multitude of sites, activities and circumstances in which soil may be generated and managed prior to placement in fill operations. Therefore, proposed Section 1100.610(a) provides that licensed professional engineers and geologists must make these determinations on a site-specific basis. An additional complicating factor not addressed in the rule is that fill site owner/operators may wish to establish additional requirements for soil accepted at their facilities. In addition to exercising their professional judgment, it is recommended that professional engineers and geologists communicate with fill site owner/operators to determine what is acceptable at particular fill operations.

If the professional engineer or geologist determines that soil sampling and analysis are required for a particular quantity of soil, Section 1100.610(b) provides that compliance must be determined by comparing analytical results with the applicable MACs. Total concentrations in milligrams per kilogram generally will be the unit of measurement for comparisons under the methodology established in Section 1100.605. Sections 1100.610(b)(1) through (b)(3) set forth additional procedures for comparisons involving ionizing organic constituents and inorganic constituents to ensure that the comparisons are consistent with the determination of the MACs for those constituents under Section 1100.605. However, comparisons with applicable concentrations in the published MAC table will simplify this step. Under Section 1100.610(b)(3)(C), compliance for inorganic constituents for which the MAC is derived from the soil component of the groundwater ingestion exposure route also may be determined by comparing TCLP and SPLP extraction test results with the applicable concentrations in Section 742.Appendix B, Table A that are listed in milligrams per liter. This testing is likely to be more expensive than testing for total concentrations, but there may be some advantages, and the option is available for those who wish to use it. For example, this approach could be used when the chemical-specific MAC has been determined based on the multiplication factor of 20 discussed above under Section 1100.605. Instead of relying solely on a comparison of total concentrations in the samples with the conservative MAC that is based on the multiplication factor, this provision also allows compliance with the MAC to be demonstrated by comparing extraction test results with the chemical-specific migration to groundwater value (mg/L) listed in Section 742.Appendix B, Table A.

Section 1100.610(c) requires that chemical analysis of soil samples must be conducted in accordance with "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods,"



USEPA Publication No. SW-846. Section 1100.610(d) prohibits the averaging of analytical results when making comparisons to determine compliance with applicable MACs. Section 1100.610(e) requires that all quantitative analyses of samples must be completed by an accredited laboratory in accordance with 35 Ill. Adm. Code 186. Documentation of chemical analyses must include chain of custody control, a copy of the laboratory analyses, the accreditation status of the laboratory, and certification by an authorized agent of the laboratory that analyses have been performed in accordance with the rules for accreditation and the scope of the accreditation.

Section 1100.615 - Waste and Materials Other Than Chemical Constituents in Soils.

Section 1100.615 sets forth miscellaneous provisions that also may affect whether soils may be considered uncontaminated for purposes of Subpart F and Part 1100. Subsection (a) provides that uncontaminated soil may contain incidental amounts of naturally occurring materials that might be expected in soil found anywhere -- stone, clay, rock, sand, gravel, roots and other vegetation. While new at this location, the language simply repeats language that was adopted in the original Part 1100 in the definition of “clean construction or demolition debris” at Section 1100.103. Some stakeholders have noted that the use of the word “incidental” is too vague to provide a meaningful standard while others have proposed adding additional materials to the list. Because this formulation was the subject of some debate at the original Part 1100 hearings, the Illinois EPA is not inclined to reopen that debate by proposing revisions.

As a general reminder, Section 1100.615(b) merely repeats what the Illinois EPA considers to be well-settled law of waste management by including in subsections (b)(1) and (b)(2) provisions from Sections 3.160(a) and (b) of the Act concerning commingled soil and construction or demolition debris.

## SUBPART G – GROUNDWATER MONITORING

Subpart G requires groundwater monitoring at CCDD fill operations and uncontaminated soil fill operations. P.A. 96-1416 specifically called for the regulatory amendments to address groundwater protection at fill operations. Although the load checking and certification requirements of Section 1100.205 are designed to help keep contaminants out of the fill material, Illinois EPA has proposed a groundwater monitoring system requirement as an additional protection against groundwater contamination. The Illinois EPA believes a groundwater monitoring program is important at fill operations because the facilities are not required to have a protective liner to control contaminant migration and because they are consolidating a large volume of offsite materials into one area with that material often placed directly into the groundwater flow.

The groundwater monitoring requirements are self-implementing. This means that for CCDD fill operations the groundwater monitoring is not part of the facility permit, and that for both types of fill operations no documentation is required to be submitted to Illinois EPA unless groundwater contamination is detected. However, the proposed language requires that fill operations employ a professional engineer to supervise both the design of the groundwater monitoring system and the preparation of related programs, notifications, plans and reports. Self-implementing requirements such as these are already in use for on-site non-hazardous waste landfills under 35 Ill. Adm. Code Part 815.

Groundwater monitoring is required for facilities in operation one year after the effective date of the amendments establishing Subpart G. Any facilities that have entered postclosure maintenance before the one year anniversary of the effective date of Subpart G are exempt from its requirements.

Subpart G requires groundwater monitoring for the life of the fill operation, including closure, postclosure maintenance, and any corrective action periods. The fill operation must test annually for all constituents that have a Class I groundwater quality standard listed in 35 Ill. Adm. Code 620.410. If fill operations detect groundwater contamination above the Class I groundwater quality standards or the background groundwater quality, whichever is higher, corrective action must be performed. Illinois EPA is proposing that on-site corrective action achieve the numerical Class I groundwater quality standards or the background groundwater quality, whichever is higher, as referenced above. Off-site corrective action must achieve compliance with the applicable groundwater quality standards as well as the rest of 35 Ill. Adm. Code 620, which includes the non-degradation provisions.

The entire Subpart G is modeled after 35 Ill. Adm. Code 615 Subpart B which is the groundwater monitoring requirements of Part 615 Existing Activities in a Setback Zone or Regulated Recharge Area.

Section 1100.700 – Purpose and Applicability. This Section requires groundwater monitoring at CCDD fill operations and uncontaminated soil fill operations.

Section 1100.705 - Recordkeeping. This Section requires recordkeeping for the life of the fill operation.

Section 1100.710 – Professional Engineer Supervision. This Section requires that fill operations employ a professional engineer to supervise both the design of the groundwater monitoring system and the preparation of related programs, notifications, plans and reports.

Section 1100.715 – Compliance Period. This Section requires groundwater monitoring for the life of the fill operation, including closure, postclosure maintenance, and any corrective action periods.

Section 1100.720 – Compliance with Groundwater Quality Standards. This Section requires compliance with the groundwater quality standards of 35 Ill. Adm. Code 620.410 by the installation of a groundwater monitoring system and sampling program.

Section 1100.725 – Groundwater Monitoring System. This Section sets forth the requirements of the groundwater monitoring system.

Section 1100.730 – Groundwater Monitoring Program. This Section sets forth the requirements for the sampling program.

Section 1100.735 – Monitoring Parameters. This Section requires sampling to be for all groundwater quality standards listed in 35 Ill. Adm. Code 620.410.

Section 1100.740 – Sampling Frequency. This Section requires sampling to take place annually.

Section 1100.745 – Non-Compliance Response Program. This Section describes procedures to be followed if the groundwater quality standards listed in 35 Ill. Adm. Code 620.410 are exceeded.

Section 1100.750 – Alternate Non-Compliance Response Program. This Section describes procedures to be followed if the groundwater quality standards listed in 35 Ill. Adm. Code 620.410 are exceeded but there is justification for the exceedance.

Section 1100.755 – Corrective Action Program. This Section describes steps necessary to provide corrective action and remediation when the groundwater quality standards listed in 35 Ill. Adm. Code 620.410 are exceeded.

Section 1100.760 – Dewatering Fill Operations. This Section allows fill operations that are actively dewatering and therefore not impacting the groundwater to delay compliance with portions of Subpart G until dewatering ceases.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL  
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**Summary of  
Maximum Allowable Concentrations of Chemical Constituents  
In Uncontaminated Soil Used as Fill Material  
At Regulated Fill Operations  
(35 Ill. Adm. Code 1100.Subpart F (Proposed))**

Chemical Name	Maximum Allowable Concentration <sup>a</sup>
Acenaphthene	570 <sup>b</sup> mg/kg
Acetone	25 <sup>b</sup> mg/kg
Alachlor	0.04 <sup>b</sup> mg/kg
Aldicarb	0.013 <sup>b,1</sup> mg/kg
Aldrin	0.94 <sup>c</sup> mg/kg
Anthracene	12,000 <sup>b</sup> mg/kg
Antimony	5 <sup>d</sup> mg/kg
Arsenic:	
within a MSA county	13.0 <sup>e</sup> mg/kg
within a non-MSA county	11.3 <sup>e</sup> mg/kg
Atrazine	0.066 <sup>b</sup> mg/kg
Barium	260 <sup>d</sup> mg/kg
Benzene	0.03 <sup>b</sup> mg/kg
Benzo(a)anthracene:	
within Chicago corporate limits	1.1 <sup>f</sup> mg/kg
within a populated area in a MSA excluding Chicago	1.8 <sup>f</sup> mg/kg
within a populated area in a non-MSA county or outside a populated area	0.9 <sup>g</sup> mg/kg
Benzo(b)fluoranthene:	
within Chicago corporate limits	1.5 <sup>f</sup> mg/kg
within a populated area in a MSA excluding Chicago	2.1 <sup>f</sup> mg/kg
within a populated area in a non-MSA county or outside a populated area	0.9 <sup>g</sup> mg/kg
Benzo(k)fluoranthene	9 <sup>g</sup> mg/kg

Chemical Name	Maximum Allowable Concentration <sup>a</sup>
Benzoic Acid	400 <sup>d</sup> mg/kg
Benzo(a)pyrene:	
within Chicago corporate limits	1.3 <sup>f</sup> mg/kg
within a populated area in a MSA excluding Chicago	2.1 <sup>f</sup> mg/kg
within a populated area in a non-MSA county	0.98 <sup>f</sup> mg/kg
outside a populated area	0.09 <sup>e</sup> mg/kg
Beryllium	1.1 <sup>d</sup> mg/kg
Bis(2-chloroethyl)ether	0.66 <sup>c</sup> mg/kg
Bis(2-ethylhexyl)phthalate	46 <sup>e</sup> mg/kg
Boron	40 <sup>h</sup> mg/kg
Bromodichloromethane (Dichlorobromomethane)	0.6 <sup>b</sup> mg/kg
Bromoform	0.8 <sup>b</sup> mg/kg
Butanol	17 <sup>b</sup> mg/kg
Butyl benzyl phthalate	930 <sup>i</sup> mg/kg
Cadmium	1.0 <sup>d</sup> mg/kg
Calcium	---
Carbazole	0.6 <sup>b</sup> mg/kg
Carbofuran	0.22 <sup>b,i</sup> mg/kg
Carbon disulfide	9 <sup>e</sup> mg/kg
Carbon tetrachloride	0.07 <sup>b</sup> mg/kg
Chlordane	1.8 <sup>e</sup> mg/kg
Chloride	4,000 <sup>h</sup> mg/kg
4-Chloroaniline ( <i>p</i> -Chloroaniline)	0.7 <sup>b</sup> mg/kg
Chlorobenzene (Monochlorobenzene)	1 <sup>b</sup> mg/kg
Chlorodibromomethane (Dibromochloromethane)	0.4 <sup>b</sup> mg/kg
Chloroform	0.3 <sup>e</sup> mg/kg
2-Chlorophenol	1.5 <sup>d</sup> mg/kg
Chromium, total	21 <sup>d</sup> mg/kg
Chrysene	88 <sup>e</sup> mg/kg
Cobalt	20 <sup>h</sup> mg/kg
Copper	330 <sup>d</sup> mg/kg



Chemical Name	Maximum Allowable Concentration <sup>a</sup>
Cyanide	40 <sup>d</sup> mg/kg
2,4-D	1.5 <sup>b</sup> mg/kg
Dalapon	0.85 <sup>b</sup> mg/kg
DDD	3 <sup>e</sup> mg/kg
DDE	2 <sup>e</sup> mg/kg
DDT	2 <sup>e</sup> mg/kg
Dibenzo( <i>a,h</i> )anthracene:	
within Chicago corporate limits	0.20 <sup>f</sup> mg/kg
within a populated area in a MSA excluding Chicago	0.42 <sup>f</sup> mg/kg
within a populated area in a non-MSA county	0.15 <sup>f</sup> mg/kg
outside a populated area	0.09 <sup>e</sup> mg/kg
1,2-Dibromo-3-chloropropane	0.002 <sup>b</sup> mg/kg
1,2-Dibromoethane (Ethylene dibromide)	0.005 <sup>c</sup> mg/kg
Di- <i>n</i> -butyl phthalate	2,300 mg/kg
1,2-Dichlorobenzene ( <i>o</i> -Dichlorobenzene)	17 <sup>b</sup> mg/kg
1,4-Dichlorobenzene ( <i>p</i> -Dichlorobenzene)	2 <sup>b</sup> mg/kg
3,3'-Dichlorobenzidine	1.3 <sup>c</sup> mg/kg
1,1-Dichloroethane	23 <sup>b</sup> mg/kg
1,2-Dichloroethane (Ethylene dichloride)	0.02 <sup>b</sup> mg/kg
1,1-Dichloroethylene	0.06 <sup>b</sup> mg/kg
<i>cis</i> -1,2-Dichloroethylene	0.4 <sup>b</sup> mg/kg
<i>trans</i> -1,2-Dichloroethylene	0.7 <sup>b</sup> mg/kg
2,4-Dichlorophenol	0.48 <sup>d</sup> mg/kg
1,2-Dichloropropane	0.03 <sup>b</sup> mg/kg
1,3-Dichloropropene (1,3-Dichloropropylene, <i>cis</i> + <i>trans</i> )	0.005 <sup>c</sup> mg/kg
Dieldrin	0.603 <sup>c</sup> mg/kg
Diethyl phthalate	470 <sup>b</sup> mg/kg
2,4-Dimethylphenol	9 <sup>b</sup> mg/kg
2,4-Dinitrophenol	3.3 <sup>c</sup> mg/kg
2,4-Dinitrotoluene	0.25 <sup>c</sup> mg/kg
2,6-Dinitrotoluene	0.26 <sup>c</sup> mg/kg

Chemical Name	Maximum Allowable Concentration <sup>a</sup>
Dinoseb	0.25 <sup>d</sup> mg/kg
Di- <i>n</i> -octyl phthalate	1,600 <sup>e</sup> mg/kg
Endosulfan	18 <sup>b</sup> mg/kg
Endothall	0.4 <sup>b,l</sup> mg/kg
Endrin	1 <sup>b</sup> mg/kg
Ethylbenzene	13 <sup>b</sup> mg/kg
Fluoranthene	3,100 <sup>e</sup> mg/kg
Fluorene	560 <sup>b</sup> mg/kg
Fluoride	80 <sup>h</sup> mg/kg
Heptachlor	0.871 <sup>c</sup> mg/kg
Heptachlor epoxide	1.005 <sup>c</sup> mg/kg
Hexachlorobenzene	0.4 <sup>e</sup> mg/kg
<i>Alpha</i> -HCH ( <i>alpha</i> -BHC)	0.0074 <sup>c</sup> mg/kg
<i>Gamma</i> -HCH (Lindane)	0.009 <sup>b</sup> mg/kg
Hexachlorocyclopentadiene	1.1 <sup>e</sup> mg/kg
Hexachloroethane	0.5 <sup>b</sup> mg/kg
Indeno(1,2,3- <i>c,d</i> )pyrene:	
within a populated area in a MSA excluding Chicago	1.6 <sup>f</sup> mg/kg
within Chicago corporate limits or within a populated area in a non-MSA county or outside a populated area	0.9 <sup>e</sup> mg/kg
Iron:	
within a MSA county	15,900 <sup>e</sup> mg/kg
within a non-MSA county	15,000 <sup>e</sup> mg/kg
Isophorone	8 <sup>b</sup> mg/kg
Lead:	
within a MSA county	36 <sup>e</sup> mg/kg
within a non-MSA county	23 <sup>d</sup> mg/kg
Magnesium	325,000 <sup>e</sup> mg/kg
Manganese:	
within a MSA county	636 <sup>e</sup> mg/kg
within a non-MSA county	630 <sup>e</sup> mg/kg

Chemical Name	Maximum Allowable Concentration <sup>a</sup>
Mercury:	
within a MSA county	0.06 <sup>e</sup> mg/kg
within a non-MSA county	0.05 <sup>e</sup> mg/kg
Methoxychlor	160 <sup>b</sup> mg/kg
Methyl bromide (Bromomethane)	0.2 <sup>b</sup> mg/kg
Methyl tertiary-butyl ether	0.32 <sup>b</sup> mg/kg
Methylene chloride (Dichloromethane)	0.02 <sup>b</sup> mg/kg
2-Methylphenol ( <i>o</i> -Cresol)	15 <sup>b</sup> mg/kg
Naphthalene	1.8 <sup>g</sup> mg/kg
Nickel	20 <sup>d</sup> mg/kg
Nitrate as N	200 <sup>h</sup> mg/kg
Nitrobenzene	0.26 <sup>c</sup> mg/kg
<i>N</i> -Nitrosodiphenylamine	1 <sup>p</sup> mg/kg
<i>N</i> -Nitrosodi- <i>n</i> -propylamine	0.0018 <sup>c</sup> mg/kg
Pentachlorophenol	0.02 <sup>d</sup> mg/kg
Phenol	100 <sup>b</sup> mg/kg
Phosphorus	---
Picloram	2 <sup>b</sup> mg/kg
Polychlorinated biphenyls (PCBs)	1 <sup>k</sup> mg/kg
Potassium	---
Pyrene	2,300 <sup>g</sup> mg/kg
Selenium	1.3 <sup>d</sup> mg/kg
Silver	1 <sup>h</sup> mg/kg
Sodium	---
Simazine	0.04 <sup>b</sup> mg/kg
Sulfate	8,000 <sup>h</sup> mg/kg
Styrene	4 <sup>b</sup> mg/kg
Tetrachloroethylene (Perchloroethylene)	0.06 <sup>b</sup> mg/kg
Thallium	1.6 <sup>d</sup> mg/kg
Toluene	12 <sup>b</sup> mg/kg
Toxaphene	0.6 <sup>g</sup> mg/kg

Chemical Name	Maximum Allowable Concentration <sup>a</sup>
2,4,5-TP (Silvex)	11 <sup>d</sup> mg/kg
1,2,4-Trichlorobenzene	5 <sup>b</sup> mg/kg
1,1,1-Trichloroethane	2 <sup>b</sup> mg/kg
1,1,2-Trichloroethane	0.02 <sup>b</sup> mg/kg
Trichloroethylene	0.06 <sup>b</sup> mg/kg
2,4,5-Trichlorophenol	26 <sup>d</sup> mg/kg
2,4,6-Trichlorophenol	0.66 <sup>c</sup> mg/kg
Vanadium	550 <sup>b</sup> mg/kg
Vinyl acetate	10 <sup>b</sup> mg/kg
Vinyl chloride	0.01 <sup>b</sup> mg/kg
m-Xylene	6.4 <sup>b</sup> mg/kg
o-Xylene	6.5 <sup>b</sup> mg/kg
p-Xylene	5.9 <sup>b</sup> mg/kg
Xylenes (total)	5.6 <sup>b</sup> mg/kg
Zinc	1,000 <sup>d</sup> mg/kg

<sup>a</sup> = Concentrations are the results after using methods described in 35 IAC 1100.Subpart F for determining the Maximum Allowable Concentrations of chemical constituents in uncontaminated soils used as fill material at regulated fill operations.

<sup>b</sup> = Value is the TACO Class I Soil Component of the Groundwater Ingestion Exposure Route concentration (35 IAC 742.Appendix B, Tables A and B).

<sup>c</sup> = Value is the TACO-defined Acceptable Detection Limit (ADL) for the chemical in soil.

<sup>d</sup> = Value is the lowest TACO Class I concentration from the pH-Specific Soil Remediation Objectives table for Inorganic and Ionizing Organic Chemicals for the Soil Component of the Groundwater Ingestion Route (35 IAC 742.Appendix B, Table C).

<sup>e</sup> = Value is the location-specific allowable concentration based upon TACO-defined background values for inorganic chemicals (35 IAC 742.Appendix A, Table G). The location of the fill site determines the allowable concentration. Two background locations are defined; one for counties that are designated as Metropolitan Statistical Areas (MSA) (see Board Note, 35 IAC 742.Appendix A, Table G), the other for counties designated as a non-MSA.

<sup>f</sup> = Value is the location-specific allowable concentration based upon TACO-defined background values for polynuclear aromatic hydrocarbon chemicals (35 IAC 742.Appendix A, Table H). The location of the fill site determines the allowable concentration. Three background locations are defined; one for areas within the corporate limits of the City of Chicago, another for populated areas (defined at 35 IAC

742.200) in counties that are designated as Metropolitan Statistical Areas (MSA) (see Board Note, 35 IAC 742.Appendix A, Table G) excluding the City of Chicago, and the third for populated areas within non-MSA counties. No background concentrations have been defined for locations outside of populated areas; therefore, the maximum allowable concentrations in these locations are determined using 35 IAC 1100.Subpart F.

<sup>g</sup> = Value is the lowest TACO Soil Remediation Objective by the ingestion or inhalation routes of exposure for the Residential and Construction Worker receptors (35 IAC 742.Appendix B, Tables A and B). Definitions for "MSA" and "populated area" are presented in 35 IAC 742.Appendix B, Table H and 35 IAC 742.200, respectively.

<sup>h</sup> = Value is the TACO Class I Soil Component of the Groundwater Ingestion Exposure Route value multiplied by 20.

<sup>i</sup> = Soil saturation concentration (C<sub>sat</sub>).

<sup>j</sup> = No value could be determined.

<sup>k</sup> = Value for PCBs is the highest allowable concentration requiring no controls based on USEPA TSCA (40 CFR 761) policy.

<sup>l</sup> = SW-846 methods may not support analytical detection at the concentration specified. Modified or alternative methods may be required to achieve the lowest practical detection level possible.

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TITLE 35: ENVIRONMENTAL PROTECTION  
SUBTITLE J: CLEAN CONSTRUCTION OR DEMOLITION DEBRIS  
CHAPTER I: POLLUTION CONTROL BOARD

PART 1100

CLEAN CONSTRUCTION OR DEMOLITION DEBRIS FILL OPERATIONS AND  
UNCONTAMINATED SOIL FILL OPERATIONS

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SUBPART E: UNCONTAMINATED SOIL FILL OPERATIONS

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<u>1100.500</u>	<u>Prohibitions</u>
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<u>1100.515</u>	<u>Registration</u>
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<u>1100.530</u>	<u>Termination of Postclosure Maintenance</u>

SUBPART F: STANDARDS FOR UNCONTAMINATED SOIL USED AS FILL MATERIAL  
AT FILL OPERATIONS REGULATED BY THIS PART

Section

<u>1100.600</u>	<u>Purpose and Applicability</u>
<u>1100.605</u>	<u>Maximum Allowable Concentrations for Chemical Constituents in Uncontaminated Soils</u>
<u>1100.610</u>	<u>Compliance Evaluation: Performance and Documentation of Soil Sampling and Chemical Analysis</u>
<u>1100.615</u>	<u>Waste and Materials Other Than Chemical Constituents in Soils</u>

SUBPART G: GROUNDWATER MONITORING

Section

<u>1100.700</u>	<u>Purpose and Applicability</u>
<u>1100.705</u>	<u>Recordkeeping</u>
<u>1100.710</u>	<u>Professional Engineer Supervision</u>



<u>1100.715</u>	<u>Compliance Period</u>
<u>1100.720</u>	<u>Compliance with Groundwater Quality Standards</u>
<u>1100.725</u>	<u>Groundwater Monitoring System</u>
<u>1100.730</u>	<u>Groundwater Monitoring Program</u>
<u>1100.735</u>	<u>Monitoring Parameters</u>
<u>1100.740</u>	<u>Sampling Frequency</u>
<u>1100.745</u>	<u>Non-Compliance Response Program</u>
<u>1100.750</u>	<u>Alternate Non-Compliance Response Program</u>
<u>1100.755</u>	<u>Corrective Action Program</u>
<u>1100.760</u>	<u>Dewatering Fill Operations</u>

AUTHORITY: Implementing Sections ~~5 and 22.51~~, 22.51 and 22.51a and authorized by Sections 22.51, 22.51a and 27 of the Environmental Protection Act [415 ILCS 5/5, 22.51, 22.51a, and 27].

SOURCE: Adopted in R06-19 at 30 Ill. Reg.14534, effective August 24, 2006, amended at Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.

#### SUBPART A: GENERAL

##### Section 1100.101 Scope and Applicability

- a) This Part applies to all clean construction or demolition debris (CCDD) fill operations that are required to be permitted pursuant to Section 22.51 of the Act, other than CCDD fill operations permitted pursuant to 35 Ill. Adm. Code 807 or 811 through 814, and to all uncontaminated soil fill operations that are required to be registered pursuant to Section 22.51a of the Act.
- b) This Part does not apply to:
  - 1) ~~CCDD or uncontaminated soil that is not other than CCDD~~-used as fill material in a current or former quarry, mine, or other excavation;
  - 2) The use of CCDD or uncontaminated soil as fill material in a current or former quarry, mine, or other excavation located on the site where the CCDD or uncontaminated soil was generated~~The use of CCDD as fill material in a current or former quarry, mine, or other excavation located on the site where the CCDD was generated~~ [415 ILCS 5/22.51(b)(4)(A)];
  - 3) The use of CCDD or uncontaminated soil as fill material in an excavation other than a current or former quarry or mine if the use complies with Illinois Department of Transportation specifications~~The use of CCDD as fill material in an excavation other than a current or former quarry or mine if the use complies with Illinois Department of Transportation specifications~~ [415 ILCS 5/22.51(b)(4)(B)];

BOARD NOTE: The Illinois Department of Transportation (IDOT) specifications applicable to the use of CCDD as fill can be found at Articles 107.22 and 202.03 of IDOT's "Standard Specifications for Road and Bridge Construction." According to IDOT specifications, this exemption applies to IDOT, a county, a municipality, or a township.

- 4) Current or former quarries, mines, and other excavations that do not use CCDD or uncontaminated soil as fill material~~*Current or former quarries, mines, and other excavations that do not use clean construction or demolition debris as fill material*~~ [415 ILCS 5/22.51(b)(4)(C)];
- 5) The use of the following types of material as fill material:
  - A) CCDD or soil that is considered "waste" under the Act or rules adopted pursuant to the Act; or
  - B) Any material other than CCDD or uncontaminated soil, including, but not limited to, material generated on site as part of a mining process; and
- 6) The portions of a site not used for a CCDD fill operation or an uncontaminated soil fill operation.

(Source: Amended at Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### Section 1100.102 Severability

If any provision of this Part or its application to any person or under any circumstances is adjudged invalid, such adjudication must not affect the validity of this Part as a whole or of any portion not adjudged invalid.

#### Section 1100.103 Definitions

Except as stated in this Section, or unless a different meaning of a word or term is clear from the context, the definition of words or terms in this Part will be the same as that applied to the same words or terms in the Environmental Protection Act [415 ILCS 5]:

"10-year, 24-hour precipitation event" means a precipitation event of 24-hour duration with a probable recurrence interval of once in 10 years.

"100-year, 24-hour precipitation event" means a precipitation event of 24-hour duration with a probable recurrence interval of once in 100 years.

"Act" means the Environmental Protection Act [415 ILCS 5].

“Acceptable Detection Limit (ADL)” means the detectable concentration of a substance that is equal to the lowest appropriate Practical Quantitation Limit (PQL) as defined in this Section.

*“Agency” is the Illinois Environmental Protection Agency established by the Act. [415 ILCS 5/3.105]*

“Applicant” means the person submitting an application to the Agency for a permit for a CCDD fill operation.

“Aquifer” means saturated (with groundwater) soils and geologic materials which are sufficiently permeable to readily yield economically useful quantities of water to wells, springs, or streams under ordinary hydraulic gradients and whose boundaries can be identified and mapped from hydrogeologic data. (Section 3 of the Illinois Groundwater Protection Act [415 ILCS 55/3]).

“Background groundwater quality” means groundwater unaffected by fill site activities as measured by the analytical results of groundwater samples collected from areas of the site or adjacent to the site.

*“Board” is the Pollution Control Board established by the Act. [415 ILCS 5/3.105]*

“CCDD” means clean construction or demolition debris.

“CCDD fill operation” means a current or former quarry, mine, or other excavation where clean construction or demolition debris is used as fill material [415 ILCS 5/22.51(e)(3)] ~~the use of CCDD as fill material in a current or former quarry, mine, or other excavation. For purposes of this Part, the term “other excavation” does not include holes, trenches, or similar earth removal created as part of normal construction, removal, or maintenance of a structure, utility, or transportation infrastructure.~~

“Clean construction or demolition debris” means uncontaminated broken concrete without protruding metal bars, bricks, rock, stone, reclaimed or other asphalt pavement, or soil generated from construction or demolition activities. For purposes of this Part, CCDD may include uncontaminated broken concrete without protruding metal bars, bricks, rock, stone, or reclaimed or other asphalt pavement that has been painted (“painted CCDD”) if the painted CCDD is used as fill material at a CCDD fill operation in accordance with Section 1100.212 of this Part.

*Clean construction or demolition debris does not include uncontaminated soil generated during construction, remodeling, repair, and demolition of utilities, structures, and roads provided the uncontaminated soil is not commingled with any clean construction or demolition debris or other waste. For purposes of this*

Part, uncontaminated soil may include incidental amounts of stone, clay, rock, sand, gravel, roots, and other vegetation. [415 ILCS 5/3.160(b)]

~~To the extent allowed by federal law, clean construction or demolition debris shall not be considered "waste" if it is:~~

~~used as fill material outside of a setback zone if the fill is placed no higher than the highest point of elevation existing prior to the filling immediately adjacent to the fill area, and if covered by sufficient uncontaminated soil to support vegetation within 30 days of the completion of filling or if covered by a road or structure; or~~

~~separated or processed and returned to the economic mainstream in the form of raw materials or products, if it is not speculatively accumulated and, if used as a fill material, it is used in accordance with the first identical paragraph immediately above within 30 days of its generation; or~~

~~solely broken concrete without protruding metal bars used for erosion control; or~~

~~generated from the construction or demolition of a building, road, or other structure and used to construct, on the site where the construction or demolition has taken place, a manmade functional structure not to exceed 20 feet above the highest point of elevation of the property immediately adjacent to the new manmade functional structure as that elevation existed prior to the creation of that new structure, provided that the structure shall be covered with sufficient soil materials to sustain vegetation or by a road or structure, and further provided that no such structure shall be constructed within a home rule municipality with a population over 500,000 without the consent of the municipality. [415 ILCS 5/3.160(b)]~~

"Compliance boundary" means a line at the land's surface that surrounds a CCDD fill operation or uncontaminated soil fill operation and that extends vertically from the ground surface to the bottom of the uppermost aquifer. The distance between the compliance boundary and the edge of the fill operation can be no more than 100 feet or the distance between the property boundary and the edge of the fill operation, whichever is less.

"Compliance point" means a point on or within the compliance boundary at which the concentration of constituents from the fill operation may not cause the groundwater to exceed the Class I groundwater quality standards at 35 Ill. Adm. Code 620.410.

"Cone of depression" means the drawdown of the water table or potentiometric surface at a fill operation or unit where well pumping alters the groundwater flow such that representative groundwater conditions do not exist.

“Dewatering” means removing water from a fill operation or unit such that a cone of depression is created.

“Documentation” means items, in any tangible form, whether directly legible or legible with the aid of any machine or device, including but not limited to affidavits, certificates, deeds, leases, contracts or other binding agreements, licenses, permits, photographs, audio or video recordings, maps, geographic surveys, chemical and mathematical formulas or equations, mathematical and statistical calculations and assumptions, research papers, technical reports, technical designs and design drawings, stocks, bonds, and financial records, that are used to support facts or hypotheses.

“Facility” means the areas of a site and all equipment and fixtures on a site used for a CCDD fill operation or uncontaminated soil fill operation. A facility consists of an entire ~~CCDD~~-fill operation. All structures used in connection with or to facilitate the ~~CCDD~~-fill operation will be considered a part of the facility.

“Filled area” means areas within a unit where CCDD or uncontaminated soil has been placed as fill material.

“Fill operation” means a CCDD fill operation or an uncontaminated soil fill operation, as the context requires.

~~“Malodor” means an odor caused by one or more contaminant emissions into the atmosphere from a facility that is in sufficient quantities and of such characteristics and duration as to be described as malodorous and which may be injurious to human, plant, or animal life, to health, or to property, or may unreasonably interfere with the enjoyment of life or property. [415 ILCS 5/3.115]~~

“National Pollutant Discharge Elimination System” or “NPDES” means the program for issuing, modifying, revoking and reissuing, terminating, monitoring, and enforcing permits and imposing and enforcing pretreatment requirements under the Clean Water Act (33 USC 1251 et seq.), Section 12(f) of the Act, Subpart A of 35 Ill. Adm. Code 309, and 35 Ill. Adm. Code 310.

“NPDES permit” means a permit issued under the NPDES program.

*“Operator” means a person responsible for the operation and maintenance of a ~~CCDD~~-fill operation. [415 ILCS 5/22.51(e)(1)]*

“Other excavation” means a pit created primarily for the purpose of extracting resources (e.g. soil, sand, gravel, clay) and does not include holes, trenches, or similar earth removal created as part of normal construction, removal, or maintenance of a structure, utility, or transportation infrastructure.

*“Owner” means a person who has any direct or indirect interest in a CCDD-fill operation or in land on which a person operates and maintains a CCDD-fill operation. A “direct or indirect interest” does not include the ownership of publicly traded stock. The “owner” is the “operator” if there is no other person who is operating and maintaining a CCDD-fill operation. [415 ILCS 5/22.51(e)(2)]*

*“Person” is any individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, political subdivision, State agency, or any other legal entity, or their legal representative, agent or assigns. [415 ILCS 5/3.115]*

“Potentially impacted property” means property on which a historical or current use, or contaminant migration from a proximate site, increases the presence or potential presence of contamination at the source site.

Board Note: “Potentially impacted property” is intended to identify soil that is more likely to be contaminated and in need of professional evaluation and certification before placement in a fill site. The following should be considered when determining whether property is “potentially impacted property”: the current use of the property, prior uses of the property, and the uses of adjoining property. For example, for transportation rights of way or utility easements, the current use of the property as a right of way or easement, the uses of the property prior to its use as a right of way or easement, and the uses of adjoining property should be considered. Source site owners are encouraged to coordinate with the receiving facility on soil certifications.

“Practical Quantitation Limit (PQL)” means the lowest concentration that can be reliably measured within specified limits of precision and accuracy for a specific laboratory analytical method during routine laboratory operating conditions in accordance with “Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods,” EPA Publication No. SW-846, incorporated by reference in Section 1100.104 of this Part.

“Professional engineer (PE)” means a person who has registered and obtained a seal pursuant to the Professional Engineering Practice Act of 1989 [225 ILCS 325].

“Professional Geologist (PG)” means a person licensed to practice as a professional geologist pursuant to the Professional Geologist Licensing Act [225 ILCS 745].

“Representative groundwater conditions” means conditions under which the groundwater at a fill operation can be sampled (i) upgradient from the fill operation to obtain samples that represent background groundwater quality and

(ii) downgradient from the fill operation to obtain representative samples of groundwater that is potentially affected by the fill operation.

“Runoff” means water resulting from precipitation that flows overland before it enters a defined stream channel, any portion of such overland flow that infiltrates into the ground before it reaches the stream channel, and any precipitation that falls directly into a stream channel.

“Salvaging” means the return of CCDD to use other than use as fill at a CCDD fill operation.

*“Setback zone” means a geographic area, designated pursuant to the Act, containing a potable water supply well or a potential source or potential route, having a continuous boundary, and within which certain prohibitions or regulations are applicable in order to protect groundwaters. [415 ILCS 5/3.450]*

“Site of origin” means the site where the CCDD or uncontaminated soil was generated from construction or demolition activities.

“Source site operator” means a person responsible for the operation of the site of origin of the CCDD or uncontaminated soil.

“Source site owner” means a person having an ownership interest in the site of origin of the CCDD or uncontaminated soil.

“Uncontaminated soil” means soil generated during construction, remodeling, repair or demolition of utilities, structures and roads that does not contain contaminants in concentrations that pose a threat to human health and safety and the environment. [415 ILCS 5/3.160(c)] Subpart F of this Part establishes standards for soil that is considered uncontaminated for purposes of this Part.

“Uncontaminated soil fill operation” means a current or former quarry, mine, or other excavation where uncontaminated soil is used as fill material but does not include a clean construction or demolition debris fill operation. [415 ILCS 5/22.51a(a)(2)].

“Unit” means a contiguous area within a facility ~~that is permitted for the placement of CCDD~~ where CCDD or uncontaminated soil is placed as fill material.

“Uppermost aquifer” means the geologic formation nearest the natural ground surface that is an aquifer as well as lower aquifers that are hydraulically interconnected with this aquifer within the facility’s property boundary.

“Working face” means any part of a unit where CCDD or uncontaminated soil is being placed as fill.

(Source: Amended at Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 1100.104 Incorporations by Reference

a) The Board incorporates the following material by reference:

“Human Health Toxicity Values in Superfund Risk Assessments (2003)”. U. S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, Washington, DC, OSWER Directive 9285.7-53, 2003. (Available online at <http://www.epa.gov/oswer/riskassessment/pdf/hhmemo.pdf>).

IRIS. Integrated Risk Information System, National Center for Environmental Assessment, United States Environmental Protection Agency, 26 West Martin Luther King Drive, MS-190, Cincinnati, OH 45268, (513) 569-7254.

“Reference Dose (RfD): Description and Use in Health Risk Assessments.” Background Document IA (March 15, 1993).

“Guidelines for Carcinogen Risk Assessment (2005)”. U. S. Environmental Protection Agency, Washington, DC, EPA Publication No. EPA/630/P-03/001F, 2005. (Available online at [http://www.epa.gov/ttn/atw/cancer\\_guidelines\\_final\\_3-25-05.pdf](http://www.epa.gov/ttn/atw/cancer_guidelines_final_3-25-05.pdf)).

NTIS. National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161, (800) 553-6847 U.S. Government Printing Office, Washington, D.C. 20402, Ph: 202-783-3238:

Test Methods for Evaluating Solid Waste, Physical/Chemical methods, EPA Publication SW-846 (Third Edition, 1986 as amended by Updates I, II, IIA, IIB, III, IIIA, and IIIB, and IV).

“RCRA Ground-Water Monitoring: Draft Technical Guidance (1992)”. U. S. Environmental Protection Agency, Washington, DC, EPA Publication No. EPA 530-R-93-001, 1992. (Available online at [http://www.epa.gov/osw/hazard/correctiveaction/resources/guidance/sitechar/gwmonitr/rcra\\_gw.pdf](http://www.epa.gov/osw/hazard/correctiveaction/resources/guidance/sitechar/gwmonitr/rcra_gw.pdf)).

“Statistical Analysis of Groundwater Data at RCRA Facilities—Unified Guidance (2009)”. U. S. Environmental Protection Agency, Washington, DC, EPA Publication No. EPA 530/R-09-007, 2009. (Available online at <http://www.epa.gov/waste/hazard/correctiveaction/resources/guidance/sitechar/gwstats/unified-guid.pdf>).



b) This incorporation includes no later amendments or editions.

(Source: Amended at Ill. Reg. , effective )

SUBPART B: OPERATING STANDARDS FOR CCDD FILL OPERATIONS

Section 1100.201 Prohibitions

- a) *No person shall conduct any CCDD fill operation in violation of the Act or any regulations or standards adopted by the Board. [415 ILCS 5/22.51(a)].*
- b) CCDD fill operations must not accept waste for use as fill.
- c) CCDD fill operations must not be located inside a setback zone of a potable water supply well. (See Section 3.160(b)(i) of the Act.)
- d) No person shall use soil other than uncontaminated soil as fill material at a CCDD fill operation. [415 ILCS 5/22.51(g)(1)]
- e) No person shall use construction or demolition debris other than CCDD as fill material at a CCDD fill operation. [415 ILCS 5/22.51(g)(2)]
- f) Except as provided in Section 1100.212 of this Part, no person shall use painted clean construction or demolition debris (“painted CCDD”) as fill material at a CCDD fill operation.

(Source: Amended at Ill. Reg. , effective )

Section 1100.202 Surface Water Drainage

- a) Runoff from Filled Areas
  - 1) All discharges of runoff from filled areas to waters of the State must be permitted by the Agency to the extent required under 35 Ill. Adm. Code 309.
  - 2) All surface water control structures must be operated until the final cover is placed and the vegetative or other cover meeting the requirements of Section 1100.208 of this Part provides erosional stability.
- b) Diversion of Runoff from Unfilled Areas
  - 1) Runoff from unfilled areas must be diverted around filled areas to the greatest extent practical.

- 2) Diversion facilities must be constructed to prevent runoff from the 10-year, 24-hour precipitation event from entering filled areas.
- 3) Runoff from unfilled areas which becomes commingled with runoff from filled areas must be handled as runoff from filled areas in accordance with subsection (a) of this Section.
- 4) All diversion structures must be designed to have flow velocities that will not cause erosion and scouring of the natural or constructed lining (i.e., the bottom and sides) of the diversion channel and downstream channels.
- 5) All diversion structures must be operated until the final cover is placed and the vegetative or other cover meeting the requirements of Section 1100.208 of this Part provides erosional stability.

Section 1100.203 Annual Facility Map

The owner or operator must submit an annual facility map with the annual report required under Section 1100.211 to the Agency each calendar year by the date specified in the Agency permit. The map must have a scale no smaller than one inch equals 200 feet, show the horizontal extent of filled areas as of the date of the map, and show the same information as required for facility plan maps under Sections 1100.305(a) through (d) of this Part.

(Source: Amended at Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 1100.204 Operating Standards

- a) Placement of Fill Material  
Fill material must be placed in a safe manner that protects human health and the environment in conformance with the provisions of the Act and the regulations adopted under the Act.
- b) Size and Slope of Working Face  
The working face of the fill operation must be no larger than is necessary, based on the terrain and equipment used in material placement, to conduct operations in a safe and efficient manner in conformance with the provisions of the Act and the regulations adopted under the Act.
- c) Equipment  
Equipment must be maintained and available for use at the facility during all hours of operation, so as to achieve and maintain compliance with the requirements of this Part.
- d) Utilities  
All utilities, including but not limited to heat, lights, power, and communications

equipment, necessary for safe operation in compliance with the requirements of this Part must be available at the facility at all times.

- e) Maintenance  
The owner or operator must maintain and operate all systems and related appurtenances and structures in a manner that facilitates proper operations in compliance with this Part.
- f) Dust Control  
The owner or operator must implement methods for controlling dust so as to minimize off-site wind dispersal of particulate matter.
- g) Noise Control  
The facility must be designed, constructed, and maintained to minimize the level of equipment noise audible outside the site. The facility must not cause or contribute to a violation of the Board's noise regulations or Section 24 of the Act.
- h) Fill Elevation  
The owner or operator must not place CCDD used as fill *higher than the highest point of elevation existing prior to the filling immediately adjacent to the fill area.* [415 ILCS 5/3.160(b)]

BOARD NOTE: This does not prohibit non-CCDD materials, such as uncontaminated soil and other non-waste material, from being placed above grade in accordance with the Act and regulations adopted thereunder to increase elevations at the fill site.

- i) Mud Tracking  
The owner or operator must implement methods to minimize tracking of mud by hauling vehicles onto public roadways.
- j) Odor and Nuisance  
The fill operation must not cause foul odors or other nuisance.

(Source: Amended at Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 1100.205 Certifications and Load Checking

- a) The owner or operator must do all of the following activities and document all the activities for all CCDD and uncontaminated soil accepted for use as fill material:
  - 1) For all soil, including soil mixed with CCDD, obtain:
    - A) a certification from the source site owner or source site operator that the site is not a potentially impacted property and is presumed to be uncontaminated soil; or,

B) a certification from a licensed Professional Engineer or licensed Professional Geologist that the soil is uncontaminated soil.

Certifications required under this subsection must be on forms and in a format prescribed by the Agency.

2) Confirm and document that the CCDD or uncontaminated soil was not removed from a site as part of a cleanup or removal of contaminants, including, but not limited to, activities conducted under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended; as part of a Closure or Corrective Action under the Resource Conservation and Recovery Act, as amended, or under an Agency remediation program, such as the Leaking Underground Storage Tank Program or Site Remediation Program, but excluding sites subject to Section 58.16 of this Act where there is no presence or likely presence of a release or a substantial threat of a release of a regulated substance at, on, or from the real property.

3) For all testing conducted to determine that the soil is uncontaminated, test the soil in accordance with the requirements of Subpart F of this Part.

a)b) The owner or operator must institute and conduct a load checking program designed to detect attempts to dispose of waste at the facility. At a minimum, the load checking program must consist of the following components:

a1) Routine Inspections

1A) An inspector designated by the facility must inspect every load before its acceptance at the facility utilizing an elevated structure, a designated ground level inspection area, or another acceptable method as specified in the Agency permit. In addition to a visual inspection, the inspector must use an instrument with a photo ionization detector utilizing a lamp of 10.6 eV or greater or an instrument with a flame ionization detector, or other monitoring devices approved by the Agency, to inspect each load. All instruments shall be interpreted based on the manufacturer's margin of error. Any reading in excess of background levels using any of these instruments must result in the rejection of the inspected load. In addition, any reading in excess of background levels on any monitoring device used by the Agency during an Agency inspection must result in the rejection of the inspected load.

2B) Cameras or other devices may be used to record the visible contents of shipments. Where such devices are employed, their

use should be designated on a sign posted near the entrance to the facility.

b2) Random Inspections

1A) In addition to the inspections required under subsection ~~(a)(b)(1)~~ of this Section, an inspector designated by the facility must conduct a discharge inspection of at least one randomly selected load delivered to the facility each day. The driver of the randomly selected load must be directed to discharge the load at a separate, designated location within the facility. The inspector must conduct an inspection of the discharged material that includes, but is not limited to, additional visual inspection and additional instrument testing using the instruments required under subsection ~~(a)(1)(b)(1)(A)~~ of this Section. All instruments shall be interpreted based on the manufacturer's margin of error. Any reading in excess of background levels using any of these instruments must result in the rejection of the inspected load. In addition, any reading in excess of background levels on any monitoring device used by the Agency during an Agency inspection must result in the rejection of the inspected load.

~~2B)~~ Cameras or other devices may be used to record the visible contents of shipments. Where such devices are employed, their use should be designated on a sign posted near the entrance to the facility.

e3) Documentation of Inspection Results

The documentation for each inspection must include, at a minimum, the following:

1A) The date and time of the inspection, the date the CCDD or uncontaminated soil was received, the weight or volume of the CCDD or uncontaminated soil, the name of the hauler, the name of the hauling firm, the vehicle identification number or license plate number, the source site owner and source site operator, and the source of the CCDD location of the site of origin of the CCDD or uncontaminated soil;

2B) The results of the routine inspection required under subsection ~~(a)(b)(1)~~ of this Section, including, but not limited to, the monitoring instruments used, whether the load was accepted or rejected, and for rejected loads the reason for the rejection;

3C) The results of any random inspection required under subsection ~~(b)(2)~~ of this Section, including, but not limited to, the monitoring

instruments used, whether the load was accepted or rejected, and for rejected loads the reason for the rejection; and

- 4D) The name of the inspector.
- d4) Rejection of Loads
- 1A) If material other than CCDD or uncontaminated soil is found or suspected, the owner or operator must reject the load and present the driver of the rejected load with written notice of the following:
    - Ai) That only CCDD or uncontaminated soil is accepted for use as fill at the facility;
    - Bii) That the rejected load contains or is suspected to contain material other than CCDD or uncontaminated soil, ~~and the material is suspected to be a waste or causes foul odors,~~ that the material must not be taken to another CCDD-fill operation, and the material must be managed appropriately properly recycled or disposed of at a permitted landfill;
    - €iii) That for all inspected loads the owner or operator is required to record and make available for Agency inspection, at a minimum, the date and time of the inspection, the weight or volume of the CCDD or uncontaminated soil, the name of the hauler, the name of the hauling firm, the vehicle identification number or license plate number, the source site owner and source site operator, and the location of the site of origin of the fill ~~source of the fill and is required to make this information available to the Agency for inspection.~~
  - 2B) The owner or operator must ensure the cleanup, transportation, and proper disposal of any material other than CCDD or uncontaminated soil that remains at the facility after the rejection of a load.
- e5) The owner or operator must take special precautionary measures as specified in the Agency permit prior to accepting loads from persons or sources found or suspected to be responsible for sending or transporting material other than CCDD or uncontaminated soil to the facility. The special precautionary measures may include, but are not limited to, communication with the source site owner or source site operator of the CCDD or uncontaminated soil, communication with the PE certifying pursuant to subsection (a)(1)(B) of this Section, questioning the driver

about the load prior to its discharge and increased visual inspection and instrument testing of the load.

- ~~f~~6) If material other than CCDD or uncontaminated soil is discovered to be improperly accepted or deposited at the facility, the owner or operator must remove and properly dispose of the material.
- ~~g~~7) The owner or operator must ensure that all appropriate facility personnel are properly trained in the identification of material that is not CCDD or uncontaminated soil.
- ~~h~~8) All field measurement activities relative to equipment and instrument operation, calibration and maintenance and data handling shall be conducted in accordance with the following:
  - ~~1~~A) "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (SW-846), Vol. One, Ch. One (Quality Control), incorporated by reference at Section 1100.104 of this Part;
  - ~~2~~B) The equipment or instrument manufacturer's or vendor's published standard operating procedures; or
  - ~~3~~C) Other operating procedures specified in the Agency permit or other written Agency approval.
- i) Documentation required under this Section must be kept for a minimum of 3 years at the facility or in some alternative location specified in the Agency permit or other written Agency approval. Documentation relating to an appeal, litigation or other disputed claim must be maintained until at least 3 years after the date of the final disposition of the appeal, litigation, or other disputed claim. The documentation must be available for inspection and copying by the Agency and by units of local government upon request during normal business hours.
- d) For painted CCDD to be accepted for use as fill material in accordance with Section 1100.212 of this Part, the owner or operator of the CCDD fill operation must:
  - 1) Obtain a certification from a PE that the painted CCDD satisfies the requirements of Section 1100.212. The certification required under this subsection must be on forms and in a format prescribed by the Agency. Documentation required by subsection (c)(2) of Section 1100.212 of this Part must be attached to the certification form.
  - 2) Comply with the load checking requirements of subsection (b) of this Section.

- 3) Comply with the document retention requirements of subsection (c) of this Section for the PE certification and the attached documentation required under subsection (c)(2) of Section 1100.212 of this Part.

(Source: Amended at Ill. Reg. . effective )

Section 1100.206 Salvaging

- a) All salvaging operations must in no way interfere with the ~~CCDD~~-fill operation, result in a violation of this Part, or delay the construction of final cover.
- b) All salvaging operations must be performed in a safe manner in compliance with the requirements of this Part.
- c) Salvageable materials:
- 1) May be accumulated onsite by an owner or operator, provided they are managed so as not to create a nuisance, harbor vectors, cause foul odors ~~malodors~~, or create an unsightly appearance; and
  - 2) May not be accumulated at the facility for longer than one year unless a longer period of time is allowed under the Act or is specified in the Agency permit.

(Source: Amended at Ill. Reg. . effective )

Section 1100.207 Boundary Control

- a) Unauthorized vehicular access to the working face of all units and to all other areas within the boundaries of the facility must be restricted.
- b) A permanent sign must be posted at the entrance to the facility or each unit stating that only CCDD or uncontaminated soil is accepted for use as fill.

(Source: Amended at Ill. Reg. . effective )

Section 1100.208 Closure

- a) Completion of Filling
- 1) The owner or operator is deemed to have completed ~~CCDD~~-filling with CCDD or uncontaminated soil:
    - A) 30 days after the date on which the facility receives the final load of CCDD or uncontaminated soil for use as fill; or



- B) If the facility has remaining capacity and there is a reasonable likelihood that the facility will receive additional CCDD or uncontaminated soil for use as fill, no later than one year after the most recent receipt of CCDD or uncontaminated soil for use as fill.
- 2) The Agency must grant extensions beyond the one year deadline in subsection (a)(1)(B) of this Section if the owner or operator demonstrates that:
    - A) The facility has the capacity to receive additional CCDD or uncontaminated soil for use as fill; and
    - B) The owner or operator has taken and will continue to take all steps necessary to prevent threats to human health and the environment from the facility.
- b) Closure
- 1) Final Cover

All filled areas must be *covered by sufficient uncontaminated soil to support vegetation within 30 days of the completion of filling or must be covered by a road or structure.* [415 ILCS 5/3.160] The minimum amount of soil to support vegetation is one foot. The final surface must prevent or minimize erosion.
  - 2) Final Slope and Stabilization
    - A) The final slopes and contours must be constructed to complement and blend with the surrounding topography of the proposed final land use of the area.
    - B) All drainage ways and swales must be constructed to safely pass the runoff from the 100-year, 24-hour precipitation event without scouring or erosion.
    - C) The final configuration of the facility must be constructed in a manner that minimizes erosion.
    - D) Standards for Vegetation
      - i) Vegetation must minimize wind and water erosion;
      - ii) Vegetation must be compatible with (i.e., grow and survive under) the local climatic conditions;

- iii) Temporary erosion control measures, including, but not limited to, the application, alone or in combination, of mulch, straw, netting, or chemical soil stabilizers, must be undertaken while vegetation is being established.

(Source: Amended at Ill. Reg. , effective )

#### Section 1100.209 Postclosure Maintenance

The owner or operator must conduct postclosure maintenance in accordance with this Section and the Agency permit for a minimum of one year after the Agency issues a certificate of closure in accordance with Section 1100.412 of this Part unless a shorter period of time for postclosure maintenance is specified in the Agency permit or other written Agency approval. Reasons for which the Agency may specify a shorter period of time for postclosure maintenance include, but are not limited to, conformance with existing reclamation plan requirements, zoning requirements, local ordinances, private contracts, or development plans.

- a) The owner or operator must remove all equipment or structures not necessary for the postclosure land use, unless otherwise authorized by the Agency permit or other written Agency approval.
- b) Maintenance and Inspection of the Final Cover
  - 1) Frequency of Inspections. The owner or operator must conduct a quarterly inspection of all surfaces during closure and for a minimum of one year after closure.
  - 2) All rills, gullies, and crevices 6 inches or deeper identified in the inspection must be filled. Areas identified by the owner or operator or the Agency as particularly susceptible to erosion must be recontoured.
  - 3) All eroded and scoured drainage channels must be repaired and lining material must be replaced if necessary.
  - 4) All holes and depressions created by settling must be filled and recontoured so as to prevent standing water.
  - 5) All reworked surfaces, and areas with failed or eroded vegetation in excess of 100 square feet cumulatively, must be revegetated in accordance with the approved closure plan for the facility.
- c) The Agency must approve postclosure use of the property if the owner or operator demonstrates that the disturbance of the final cover will not increase the potential threat to human health or the environment.

(Source: Amended at Ill. Reg. , effective )

## Section 1100.210 Recordkeeping Requirements

The owner or operator must maintain an operating record at the facility or in some alternative location specified in the Agency permit. The owner or operator must make the operating record available for inspection and copying by the Agency upon request during normal business hours. Information maintained in the operating record must include, but is not limited to, the following:

- a) Any information submitted to the Agency pursuant to this Part, including, but not limited to, copies of all permits, permit applications, and annual reports;
- b) Written procedures for load checking, load rejection notifications, and training required under Section 1100.205 of this Part.

## Section 1100.211 Annual Reports

The owner or operator must submit an annual report to the Agency each calendar year by the date specified in the Agency permit. The annual report must include, at a minimum, the following information:

- a) A summary of the number of loads accepted and the number of loads rejected during the calendar year.
- b) Amount of CCDD and uncontaminated soil expected in the next year.
- c) Any modification affecting the operation of the facility.
- d) The signature of the owner or operator, or the owner or operator's duly authorized agent as specified in Section 1100.303 of this Part.
- e) Annual facility map required pursuant to Section 1100.203 of this Part.

(Source: Amended at Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

## Section 1100.212 Use of Painted CCDD as Fill Material

For purposes of this Part, CCDD may include uncontaminated broken concrete without protruding metal bars, bricks, rock, stone, or reclaimed or other asphalt pavement that has been painted ("painted CCDD") if the painted CCDD is used as fill material at a CCDD fill operation. Painted CCDD may be used as fill material at a CCDD fill operation if evaluated analytically under the supervision of a PE and if all requirements of this Section are satisfied.

BOARD NOTE: Acceptance or management of painted CCDD for any purpose other than use as fill material at a CCDD fill operation must be in accordance with applicable law and may require a permit(s) or beneficial use determination(s) from the Agency. Such other purposes include, but are not limited to, processing of painted CCDD for reuse.

- a) The PE must determine on a site-specific basis the number and location of paint samples that will provide a representative analysis of paint from the painted CCDD to be used as fill material.
- b) The PE must obtain paint samples consisting of representative paint chips or scrapings that include all layers of paint in the area sampled and that minimize the amount of substrate in the sample.
- c) Paint samples must be analyzed for arsenic, cadmium, chromium (total), lead, mercury and zinc (“contaminants of concern”) using the TCLP or SPLP extraction test analytical procedures in accordance with Methods 1311 and 1312 respectively in “Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods,” USEPA Publication No. SW-846.
  - 1) Analytical results from paint samples must not be averaged.
  - 2) All quantitative analyses of paint samples must be completed by an accredited laboratory in accordance with the requirements of 35 Ill. Adm. Code 186 and the scope of the accreditation.
  - 3) Documentation of any chemical analysis must include, but is not limited to:
    - A) Chain of custody control;
    - B) A copy of the lab analysis;
    - C) Accreditation status of the laboratory performing the analysis; and
    - D) Certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency’s rules for the accreditation of environmental laboratories and the scope of the accreditation.
- d) For painted CCDD to be used as fill material, analytical results for each paint sample must not exceed the chemical-specific Class I groundwater quality standard at 35 Ill. Adm. Code 620.410 for any contaminant of concern identified in subsection (c) of this Section.

(Source: Added at Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

## SUBPART C: PERMIT APPLICATION INFORMATION FOR CCDD FILL OPERATIONS

### Section 1100.301 Scope and Applicability

All persons seeking a permit for a CCDD fill operation must submit to the Agency an application for the permit in accordance with the Act and this Part.

#### Section 1100.302 Notification

The applicant must provide notification of the request for a permit to the State's Attorney and the Chairman of the County Board of the county in which the facility is located, each member of the General Assembly from legislative districts in which that facility is located, and the clerk of each municipality located within 3 miles of the facility. Proof of providing the notifications required under this Section must be included in the permit application.

#### Section 1100.303 Required Signatures

- a) All permit applications must contain the name, address, and telephone number of the owner and operator, and any duly authorized agents of the owner or operator to whom inquiries and correspondence should be addressed.
- b) All permit applications must be signed by the owner and operator, or by their duly authorized agents with an accompanying oath or affidavit attesting to the agent's authority to sign the application on behalf of the owner or operator. All signatures must be notarized. The following persons are considered duly authorized agents of the owner and operator:
  - 1) For corporations, a principal executive officer of at least the level of vice president;
  - 2) For a sole proprietorship, the sole proprietor;
  - 3) For a partnership, a general partner;
  - 4) For a municipality, state, federal or other public agency, by the head of the agency or a ranking elected official; and
  - 5) For a member-managed limited liability company, by a member and for a manager-managed limited liability company, by a manager or member.

#### Section 1100.304 Site Location Map

All permit applications must contain a site location map on the most recent United States Geological Survey (USGS) quadrangle of the area from the 7½ minute series (topographic) that clearly shows the following information:

- a) The site boundaries, the facility boundaries, and all adjacent property extending at least 1000 meters (3300 feet) beyond the facility boundaries;
- b) All surface waters;

- c) All potable water supply wells within 1000 meters (3300 feet) of the facility boundaries;
- d) All potable water supply well setback zones established pursuant to Section 14.2 or 14.3 of the Act;
- e) Any wellhead protection areas pursuant to Section 1428 of the Safe Drinking Water Act ~~Safe Water Drinking Act~~-(SDWA) (42 USC 300f) and any sole source aquifer designated by the United States Environmental Protection Agency pursuant to Section 1424(e) of SDWA; and
- f) All main service corridors, transportation routes, and access roads to the site and facility.

(Source: Amended at Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### Section 1100.305 Facility Plan Maps

The application must contain maps showing the details of the facility. The maps must have a scale no smaller than one inch equals 200 feet, have appropriate contour intervals as needed to delineate all physical features of the facility, and show the following:

- a) The entire facility, including, but not limited, to all permanent structures and roads within the facility;
- b) The boundaries, both above and below ground level, of the facility and all units included in the facility;
- c) All roads entering and exiting the facility; and
- d) Devices for controlling access to the facility.

#### Section 1100.306 Narrative Description of the Facility

The permit application must contain a written description of the facility with supporting documentation describing the procedures and plans that will be used at the facility to comply with the requirements of this Part. Such descriptions must include, but are not limited to, the following information:

- a) A description of the CCDD and the uncontaminated soil being used as fill and a load checking plan describing how the owner or operator will comply with Section 1100.205 of this Part;

- b) The types of CCDD and uncontaminated soil expected in each unit, an estimate of the maximum capacity of each unit, and the rate at which fill CCDD is to be placed in each unit;
- c) The estimated density of the CCDD and the uncontaminated soil;
- d) The length of time each unit will receive CCDD and uncontaminated soil;
- e) A description of all equipment to be used at the facility for complying with the facility permit, the Act, and Board regulations;
- f) A description of any salvaging to be conducted at the facility, including, but not limited to, a description of all salvage facilities and a description of how the owner or operator will comply with Section 1100.206 of this Part;
- g) A description of how the owner or operator will comply with the requirements of Section 1100.207 of this Part;
- h) A description of how the owner or operator will comply with Sections 1100.204(c) and (e) of this Part;
- i) A description of the methods to be used for controlling dust in compliance with Section 1100.204(f) of this Part;
- j) A description of how the owner or operator will control noise in compliance with Section 1100.204(g) of this Part; and
- k) A description of all existing and planned roads in the facility that will be used during the operation of the facility, the size and type of such roads, and the frequency with which they will be used.

(Source: Amended at Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 1100.307 Proof of Property Ownership and Certifications

The permit application must contain a certificate of ownership of the facility property and certifications regarding the provisions of Sections 39(i) and 39(i-5) of the Act. The owner and operator must provide written notification to the Agency ~~certify that the Agency will be notified~~ within 7 days after any changes in ownership.

(Source: Amended at Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 1100.308 Surface Water Control

The permit application must contain a plan for controlling surface water that demonstrates compliance with Section 1100.202 of this Part, and that includes at least the following:

- a) A copy of any approved National Pollutant Discharge Elimination System (NPDES) permit issued pursuant to 35 Ill. Adm. Code 309 to discharge runoff from all filled areas of the facility, or a copy of any such NPDES permit application if an NPDES permit is pending; and
- b) A map showing the location of all surface water control structures at the facility.

Section 1100.309 Closure Plan

The permit application must contain a written closure plan that contains, at a minimum, the following:

- a) Maps showing the configuration of the facility after closure of all units, including, but not limited to, appropriate contours as needed to show the proposed final topography after placement of the final cover for all filled areas. All maps must have a scale no smaller than one inch equals 200 feet;
- b) Steps necessary for the temporary suspension of the fill operation ~~CCDD filling in~~ accordance with Sections 1100.208(a)(1)(B) or (a)(2) of this Part;
- c) Steps necessary for closure of the facility at the end of its intended operating life;
- d) An estimate of the expected year of closure;
- e) Schedules for temporary suspension of the fill operation ~~CCDD filling and~~ and closure, which must include, at a minimum, the total time required to close the facility and the time required for closure activities that will allow tracking of the progress of closure;
- f) A description of how the applicant will comply with Section 1100.208 of this Part; and
- g) A description of the final cover, including, but not limited to, the material to be used as the final cover, application and spreading techniques, the types of vegetation to be planted, and the types of roads or structures to be built pursuant to Section 1100.208 of this Part.

(Source: Amended at Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 1100.310 Postclosure Maintenance Plan

The permit application must contain a postclosure maintenance plan that includes a description of the planned uses of the property during the postclosure maintenance period and a description of the measures to be taken during the postclosure maintenance period in compliance with the requirements of Section 1100.209 of this Part.



SUBPART D: PROCEDURAL REQUIREMENTS FOR PERMITTING  
CCDD FILL OPERATIONS

Section 1100.401 Purpose of Subpart

This Subpart contains the procedures to be followed by all applicants and the Agency for applications for permits for CCDD fill operations.

Section 1100.402 Delivery of Permit Application

All permit applications must be submitted on forms prescribed by the Agency, and must be mailed or delivered to the address designated by the Agency on the forms. The Agency must provide a dated, signed receipt upon request. The Agency's record of the date of filing must be deemed conclusive unless a contrary date is proved by a dated, signed receipt.

Section 1100.403 Agency Decision Deadlines

- a) *If there is no final action by the Agency within 90 days after the filing of the application for permit, the applicant may deem the permit issued.* [415 ILCS 5/39]
- b) An application for permit pursuant to this Subpart must not be deemed filed until the Agency has received all information and documentation in the form and with the content required by this Part. However, if, the Agency fails to notify the applicant within 30 days after the filing of a purported application that the application is incomplete and the reason the Agency deems it incomplete, the application must be deemed to have been filed as of the date of such purported filing as calculated pursuant to Section 1100.402 of this Part. The applicant may treat the Agency's notification that an application is incomplete as a denial of the application for the purposes of review pursuant to Section 1100.406 of this Part.
- c) The applicant may waive the right to a final decision in writing prior to the applicable deadline in subsection (a) of this Section.
- d) The applicant may modify a permit application at any time prior to the Agency decision deadline date. Any modification of a permit application must constitute a new application for the purposes of calculating the Agency decision deadline date.
- e) The Agency must mail all notices of final action by registered or certified mail, postmarked with a date stamp and accompanied by a return receipt request. Final action must be deemed to have taken place on the date that such final action is signed.

Section 1100.404 Standards for Issuance of a Permit

- a) *The Agency must issue a permit upon proof that the facility, unit, or equipment will not cause a violation of the Act or of Board regulations set forth in 35 Ill. Adm. Code: Chapter I. [415 ILCS 5/39]*
- b) *In granting permits, the Agency must impose such conditions as may be necessary to accomplish the purposes of the Act, and as are not inconsistent with Board regulations set forth in 35 Ill. Adm. Code: Chapter I. [415 ILCS 5/39]*

Section 1100.405 Standards for Denial of a Permit

*If the Agency denies any permit under this Part, the Agency must transmit to the applicant within the time limitations of this Part specific, detailed statements as to the reasons the permit application was denied. Such a statement must include, but not be limited to, the following:*

- a) *the Sections of the Act which may be violated if the permit were granted;*
- b) *the provisions of the regulations, promulgated under the Act, which may be violated if the permit were granted;*
- c) *the specific type of information, if any, which the Agency deems the applicant did not provide the Agency; and*
- d) *a statement of specific reasons why the Act and the regulations might not be met if the permit were granted. [415 ILCS 5/39].*

Section 1100.406 Permit Appeals

*If the Agency refuses to grant or grants with conditions a permit under Section 39 of this Act, the applicant may, within 35 days after the date on which the Agency served its decision on the applicant, petition for a hearing before the Board to contest the decision of the Agency [415 ILCS 5/40(a)(1)]. The petition must be filed, and the proceeding conducted, pursuant to the procedures of Section 40 of the Act and Board rules at 35 Ill. Adm. Code 101 and 105.*

Section 1100.407 Permit No Defense

The issuance and possession of a permit does not constitute a defense to a violation of the Act or any Board rules, except for the use of CCDD as fill material in a current or former quarry, mine, or other excavation without a permit.

Section 1100.408 Term of Permit

- a) Permits issued under this Part must not have a term of more than 10 years.

- b) All permits are valid until postclosure maintenance is completed or until the permit expires or is revoked, as provided in this Part.
- c) The violation of any permit condition or the failure to comply with any provision of this Part is grounds for sanctions as provided in the Act, including, but not limited to, permit revocation. Such sanctions must be sought by filing a complaint with the Board pursuant to Title VIII of the Act (415 ILCS 5/Title VIII).

Section 1100.409      Transfer of Permits

No permit is transferable from one person to another except as approved by the Agency. Approval must be granted only if a new owner or operator who is seeking transfer of a permit can demonstrate the ability to comply with all applicable requirements of this Part.

Section 1100.410      Procedures for the Modification of Permits

- a)      Owner or Operator Initiated Modification.

A modification to an approved permit may be initiated at the request of an owner or operator at any time after the permit is approved. The owner or operator initiates a modification by application to the Agency.

- b)      Agency Initiated Modification.

- 1)      The Agency may modify a permit under the following conditions:

- A)      Discovery of a typographical or calculation error;
- B)      Discovery that a determination or condition was based upon false or misleading information;
- C)      An order of the Board issued in an action brought pursuant to Title VIII, IX or X of the Act; or
- D)      Promulgation of new statutes or regulations affecting the permit.

- 2)      Modifications initiated by the Agency will not become effective until 45 days after receipt by the owner or operator, unless stayed during the pendency of an appeal to the Board. All other time periods and procedures in Section 1100.403 of this Part apply. The owner or operator may request the Agency to reconsider the modification, or may file a petition with the Board pursuant to Section 1100.406 of this Part. All other time periods and procedures in Section 1100.403 of this Part apply.

Section 1100.411 Procedures for the Renewal of Permits

a) Time of Filing

An application for the renewal of a permit must be filed with the Agency at least 90 days prior to the expiration date of the existing permit.

b) Effect of Timely Filing

When a permittee has made timely and sufficient application for the renewal of a permit, the existing permit must continue in full force and effect until the final Agency decision on the application has been made and any final Board decision on any appeal pursuant to Section 40 has been made unless a later date is fixed by order of a reviewing court. (See Section 10-65 of the Illinois Administrative Procedure Act [5 ILCS 100/10-65].)

c) Information Required for Permit Renewal

The owner or operator must submit only the information required under Subpart C of this Part that has changed since the last permit review by the Agency. The application for renewal must be signed in accordance with the signature requirements of Section 1100.303 of this Part.

d) Procedures for Permit Renewal

Applications for permit renewal are subject to all requirements and time schedules in Sections 1100.402 through 1100.409 of this Part.

Section 1100.412 Procedures for Closure and Postclosure Maintenance

a) Notification of ~~Closure Receipt of Final Volume~~

The owner or operator must provide written notification of closure to the Agency within 30 days after the date the owner or operator is deemed to have completed filling under subsection (a) of Section 1100.208 of this Part. ~~Within 30 days after the date the final volume of CCDD is received, the owner or operator must notify the Agency in writing of the receipt of the final volume of CCDD.~~

b) Certification of Closure

1) When the closure of the facility is complete, the owner or operator must submit to the Agency:

A) Documentation concerning closure of the facility, including, but not limited to, plans or diagrams of the facility as closed and the date closure was completed.

- B) An affidavit by the owner or operator and the seal of a professional engineer that the facility has been closed in accordance with the closure plan and the closure requirements of this Part.
- 2) When the Agency determines, pursuant to the information received pursuant to subsection (b)(1) of this Section and any Agency site inspection, that the facility has been closed in accordance with the specifications of the closure plan and the closure requirements of this Part, the Agency must:
- A) Issue a certificate of closure; and
  - B) Specify the date the postclosure maintenance period begins, based on the date closure was completed.
- c) Termination of the Permit
- 1) At the end of the postclosure maintenance period, the owner or operator may submit to the Agency an application for termination of the permit. The application must be submitted in a format prescribed by the Agency and must include, at a minimum, the certification of a professional engineer and the affidavit of the owner or operator demonstrating that, due to compliance with the postclosure maintenance plan and the postclosure maintenance requirements of this Part, postclosure maintenance is no longer necessary because:
- A) Vegetation has been established on all nonpaved areas;
  - B) The surface has stabilized sufficiently with respect to settling and erosion so that further stabilization measures, pursuant to the postclosure maintenance plan, are no longer necessary;
  - C) The owner or operator has completed all requirements of the postclosure maintenance plan; and
  - D) Based on the groundwater monitoring program required under Subpart G of this Part, the fill operation has not contributed to an exceedance of the Class I groundwater quality standards or the background groundwater quality, whichever is higher, during the preceding three years under representative groundwater conditions. Pursuant to subsection 1100.700(b) of this Part, this subsection (D) does not apply to fill operations that (i) have closed and certified closure in accordance with subsection 1100.412(b)(1) of this Part within one year after the effective date of amendments establishing

Subpart G and (ii) do not subsequently accept CCDD or uncontaminated soil for use as fill.

- 2) Within 90 days after receiving the certification required by subsection (c)(1) of this Section, the Agency must notify the owner or operator in writing that the permit is terminated, unless the Agency determines, pursuant to the information received pursuant to subsection (c)(1) of this Section and any Agency site inspection, that continued postclosure maintenance is required pursuant to the postclosure maintenance plan and this Part.
- 3) For purposes of appeal pursuant to Section 40(d) of the Act and the appeal provisions of this Part, Agency action pursuant to subsection (c)(2) of this Section is deemed a denial or grant of permit with conditions.

(Source: Amended at Ill. Reg. , effective )

#### SUBPART E: UNCONTAMINATED SOIL FILL OPERATIONS

##### Section 1100.500 Prohibitions

- a) No person shall conduct any uncontaminated soil fill operation in violation of the Act or any regulations or standards adopted by the Board.
- b) No person shall use soil other than uncontaminated soil as fill material at an uncontaminated soil fill operation. [415 ILCS 5/22.51a(b)].
- c) Uncontaminated soil fill operations must not accept waste for use as fill.
- d) Uncontaminated soil fill operations must not accept CCDD for use as fill.
- e) Uncontaminated soil fill operations must not be located inside a setback zone of a potable water supply well.

(Source: Added at Ill. Reg. , effective )

##### Section 1100.505 Operating Standards

Uncontaminated soil fill operations are subject to all of the standards and requirements of Sections 1100.202 through 1100.209 of Subpart B of this Part, excluding Section 1100.203.

(Source: Added at Ill. Reg. , effective )

##### Section 1100.510 Recordkeeping Requirements

The owner or operator must maintain an operating record at the facility or in some alternative location approved by the Agency. The owner or operator must make the operating record available for inspection and copying by the Agency upon request during normal business hours. Information maintained in the operating record must include, but is not limited to, the following:

- a) Any information submitted to the Agency pursuant to this Part;
- b) Written procedures for load checking, load rejection notifications, and training required under Section 1100.205 of this Part;
- c) A site location map as described under Section 1100.304 of Subpart C of this Part.
- d) A facility plan map as described under Section 1100.305 of Subpart C of this Part.
- e) A narrative description of the facility as described under Section 1100.306 of Subpart C of this Part.
- f) Proof of property ownership. The owner and operator must notify the Agency within 7 days after any changes in ownership.
- g) A surface water control plan as described under Section 1100.308 of Subpart C of this Part.
- h) A closure plan and postclosure maintenance plan as described under Sections 1100.309 and 1100.310 of Subpart C of this Part.

(Source: Added at Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### Section 1100.515 Registration

- a) Owners and operators of uncontaminated soil fill operations must register the fill operation with the Agency.
  - 1) Uncontaminated soil fill operations must be registered with the Agency within 60 days after the effective date of this Section. Uncontaminated soil fill operations already registered with the Agency pursuant to subsection (c) of Section 22.51a of the Act must be re-registered in accordance with this subsection (a)(1).
  - 2) Uncontaminated soil fill operations that first receive uncontaminated soil on or after the effective date of this Section must be registered with the Agency prior to the receipt of any uncontaminated soil.
- b) Registrations must be submitted on forms and in a format prescribed by the Agency.

(Source: Added at Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 1100.520 Required Signatures

- a) All registrations must contain the name, address, and telephone number of the owner and operator, and any duly authorized agents of the owner or operator to whom inquiries and correspondence should be addressed.
- b) All registration applications must be signed by the owner and operator or by their duly authorized agents with an accompanying oath or affidavit attesting to the agent's authority to sign the application on behalf of the owner or operator. The following persons are considered duly authorized agents of the owner and operator:
- 1) For corporations, a principal executive officer of at least the level of vice president;
  - 2) For a sole proprietorship, the sole proprietor;
  - 3) For a partnership, a general partner;
  - 4) For a municipality, state, federal or other public agency, by the head of the agency or a ranking elected official; and
  - 5) For a member-managed limited liability company, by a member and for a manager-managed limited liability company, by a manager or member.

(Source: Added at Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 1100.525 Procedures for Closure

a) Notification of Closure

The owner or operator must provide written notification to the Agency within 30 days after the owner or operator begins closure in accordance with the closure plan required pursuant to Section 1100.510(h) and the closure requirements of Section 1100.208 required pursuant to Section 1100.505 of this Part.

b) Certification of Closure

When the closure of the facility is complete, the owner or operator must submit to the Agency:

- 1) Documentation concerning closure of the facility, including, but not limited to, plans or diagrams of the facility as closed and the date closure was completed.



- 2) An affidavit by the owner or operator and the seal of a professional engineer that the facility has been closed in accordance with the closure plan required pursuant to Section 1100.510(h) and the closure requirements of Section 1100.208 required pursuant to Section 1100.505 of this Part.

(Source: Added at Ill. Reg. , effective )

#### Section 1100.530 Termination of Postclosure Maintenance

At the end of the postclosure maintenance period, the owner or operator must submit a certification by a professional engineer and an affidavit by the owner or operator demonstrating that, due to compliance with the postclosure maintenance plan and the postclosure maintenance requirements of this Part, postclosure maintenance is no longer necessary because:

- a) Vegetation has been established on all nonpaved areas;
- b) The surface has stabilized sufficiently with respect to settling and erosion so that further stabilization measures, pursuant to the postclosure maintenance plan, are no longer necessary;
- c) The owner or operator has completed all requirements of the postclosure maintenance plan; and
- d) Based on the groundwater monitoring program required under Subpart G of this Part, the fill operation has not contributed to an exceedance of the Class I groundwater quality standards or the background groundwater quality, whichever is higher, during the preceding three years under representative groundwater conditions. Pursuant to subsection 1100.700(b) of this Part, this subsection (d) does not apply to fill operations that (i) have closed and certified closure in accordance with subsection 1100.525(b) of this Part within one year after the effective date of amendments establishing Subpart G and (ii) do not subsequently accept uncontaminated soil for use as fill.

(Source: Added at Ill. Reg. , effective )

#### SUBPART F: STANDARDS FOR UNCONTAMINATED SOIL USED AS FILL MATERIAL AT FILL OPERATIONS REGULATED BY THIS PART

#### Section 1100.600 Purpose and Applicability

- a) The purpose of this Subpart F is to establish standards for soils that are considered uncontaminated for purposes of this Part.
- b) This Subpart F applies only to soil that is:

- 1) Generated during construction, remodeling, repair, or demolition of utilities, structures and roads as provided in Section 3.160 of the Act (415 ILCS 5/3.160); and
  - 2) Used as fill material at Clean Construction or Demolition Debris Fill Operations or Uncontaminated Soil Fill Operations as provided at Sections 22.51 and 22.51a of the Act (415 ILCS 5/22.51, 5/22.51a) and in this Part 1100.
- c) Soil that is generated during construction, remodeling, repair, or demolition of utilities, structures and roads and commingled with CCDD must satisfy the standards for maximum allowable concentrations of chemical constituents in uncontaminated soil as set forth in this Subpart F if used as fill material at CCDD Fill Operations pursuant to Section 22.51 of the Act.
- d) Soil or materials to which this Subpart F does not apply include, but are not limited to:
- 1) Soil that must be managed as hazardous waste;
  - 2) Soil that has at any time been treated or diluted to reduce contaminant concentrations or contaminant mobility (e.g., treatment to reduce extraction test contaminant concentrations) except for soil that has been treated to reduce contaminants by physical separation from construction or demolition debris at the site where the soil was generated or at a site authorized by applicable law to perform such separation; and
  - 3) Soil that has been removed from a site as part of cleanup or removal of contaminants, including, but not limited to, activities conducted under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended; as part of a closure of corrective action under the Resource Conservation and Recovery Act, as amended; or under an Agency remediation program, such as the leaking Underground Storage Tank Program or Site Remediation Program, but excluding sites subject to Section 58.16 of [the] Act (415 ILCS 5/58.16) where there is no presence or likely presence of a release or a substantial threat of a release of a regulated substance at, on or from the real property and excluding soil that is uncontaminated and has not been excavated or treated as part of the cleanup or removal of contaminants. [415 ILCS 5/22.51(f)(2)(C), 5/22.51(d)(2)(C).]

(Source: Added at Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 1100.605 Maximum Allowable Concentrations for Chemical Constituents in  
Uncontaminated Soils

- a) Except as provided for background concentrations in subsection (b) of this Section, the maximum allowable concentrations for chemical constituents in uncontaminated soil must be determined pursuant to subsections (a)(1) through (a)(5) of this Section.
- 1) The maximum allowable concentration for a chemical constituent in uncontaminated soil will be the lowest Tier 1 chemical-specific soil value of the exposure routes for residential and construction worker receptors set forth in 35 Ill. Adm. Code 742. Appendix B, Tables A and B (e.g., soil ingestion exposure route, outdoor inhalation exposure route, soil component of the groundwater ingestion exposure route, construction worker exposure route). Class I values must be used when determining the lowest Tier 1 chemical-specific value for the soil component of the groundwater ingestion exposure route. Before making the comparison among exposure routes to determine the lowest value for ionizing organic chemical constituents and inorganic chemical constituents, the requirements of subsections (a)(2) and (a)(3) of this Section must be satisfied, as applicable.
  - 2) 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.
  - 3) 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
    - B) For inorganic constituents that are listed in Appendix B, Table A but not in Appendix B, Table C, the extraction test values for the soil component of the groundwater ingestion exposure route in

Appendix B, Table A may be multiplied by twenty (i.e., 20 liters/kilogram, the liquid to solid ratio in the extraction test assuming complete constituent leaching) to enable direct comparison with the ingestion and inhalation exposure route values. The resulting value must be substituted for the extraction test value before determining the lowest Tier 1 chemical-specific soil value pursuant to subsection (a)(1) of this Section.

- 4) If the lowest Tier 1 soil value for a chemical is less than the Acceptable Detection Limit (ADL), the ADL will serve as the lowest soil value.
  - 5) The total concentration of organic contaminants may not exceed the attenuation capacity of the soil as determined in accordance with 35 Ill. Adm. Code 742.215.
- b) Background concentrations from 35 Ill. Adm. Code 742. Appendix A, Tables G and H may be used as the maximum allowable concentrations at locations specified by the tables if the most stringent exposure route value for the chemical constituent as determined pursuant to subsection (a) of this Section is lower than the chemical's applicable background value listed in Tables G or H. The chemical's applicable background value in Table G or H must be established based on the location of the fill operation where the soil is placed.
- c) For chemicals not listed in 35 Ill. Adm. Code 742. Appendix B, Tables A, B, or C, the values may be obtained from the Agency by making a request for chemical-specific values.
- 1) The Agency will develop these objectives based upon the United States Environmental Protection Agency's (USEPA) toxicity value hierarchy as specified in OSWER Directive 9285.7-53, incorporated by reference at Section 1105.115 of this Part. USEPA's Integrated Risk Management System (IRIS), incorporated by reference at Section 1100.104 of this Part, is the first tier of this hierarchy.
  - 2) Calculation of the maximum allowable concentrations must use the applicable risk-based soil screening level equations from 35 Ill. Adm. Code 742. Appendix C, Table A. Default exposure durations and contact rates from 35 Ill. Adm. Code 742. Appendix C, Table B must be used in making these calculations.
- d) Other provisions of 35 Ill. Adm. Code 742 (e.g., institutional controls, engineered barriers, exposure route exclusions, site-specific evaluations, local area background calculations) may not be used to exclude or otherwise alter exposure routes or exposure route values for the purpose of determining the maximum allowable concentrations under this Part.

- e) For purposes of this Part, the Agency shall publish at its website a list of chemical-specific values for maximum allowable concentrations of chemical constituents in uncontaminated soils based on the methodology for determining those values set forth in this Section. In addition, the Agency shall publish at its website a list of chemical-specific values for chemicals not listed in 35 Ill. Adm. Code 742.Appendix B, Tables A, B or C when values are calculated by the Agency in accordance with subsection (c) of this Section or subsection (c ) of 35 Ill. Adm. Code 742.510.

(Source: Added at Ill. Reg. , effective )

Section 1100.610 Compliance Evaluation; Performance and Documentation of Soil Sampling and Chemical Analysis

- a) For purposes of this Subpart F, the chemical constituents to be evaluated, if any, and the soil sample points must be determined on a site-specific basis by the professional engineer or professional geologist.
- b) If soil sampling and analysis are used to evaluate compliance with the maximum allowable concentrations for chemical constituents in uncontaminated soils, compliance generally must be determined by comparing total soil concentrations from the laboratory reports with the maximum allowable concentrations as determined pursuant to Section 1100.605 of this Part. The following procedures will be required, as applicable, when making the comparisons for ionizing organic constituents and inorganic constituents:
- 1) If the background value from 35 Ill. Adm. Code 742.Appendix A, Tables G or H was determined to be the maximum allowable concentration for an ionizing organic constituent or an inorganic constituent, a direct comparison of that value with the total soil concentration from the laboratory report must be used to evaluate compliance.
  - 2) For ionizing organic constituents, if, as determined pursuant to Section 1100.605 of this Part, the lowest Tier 1 chemical-specific soil value is for the soil component of the Class I groundwater ingestion exposure route, the total soil concentration from the laboratory report must be compared with the lowest corresponding pH-dependent value in 35 Ill. Adm. Code 742.Appendix B, Table C.
  - 3) For inorganic constituents, if, as determined pursuant to Section 1100.605 of this Part, the lowest Tier 1 chemical-specific soil value is for the soil component of the Class I groundwater ingestion exposure route, compliance must be evaluated by comparing the total soil concentration from the laboratory report using the following methods:

- A) Total soil concentrations from the laboratory report must be compared with the lowest chemical-specific, pH-dependent value for the soil component of the Class I groundwater ingestion exposure route in Appendix B, Table C; or
- B) For inorganic chemical constituents that are listed in Appendix B, Table A but not in Appendix B, Table C, the total soil concentrations from the laboratory report must be compared with the product of the extraction test values for the soil component of the Class I groundwater ingestion exposure route in Appendix B, Table A multiplied by twenty (20) to convert to total soil concentration values; or
- C) As an alternative to subsections (a)(3)(A) and (a)(3)(B) of this Section, concentrations in the extract from the Toxicity Characteristic Leaching Procedure (TCLP) or Synthetic Precipitation Leaching Procedure (SPLP) analytical extraction test in accordance with Methods 1311 and 1312, respectively, in SW-846 may be compared with the chemical-specific extraction test values for the Class I soil component of the groundwater ingestion exposure route in Appendix B, Table A.
- c) Chemical analysis of soil samples conducted under this Subpart F must be conducted in accordance with the requirements of 35 Ill. Adm. Code 742 . . . and "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods," USEPA Publication No. SW-846. [415 ILCS 5/22.51(f)(3)] If SW-846 methods do not support detection at the concentration specified for a particular chemical constituent (e.g., aldicarb, carbofuran, endothall), the laboratory may use modified or alternative methods available to the laboratory to achieve the lowest practical detection level possible.
- d) Analytical results from samples must not be averaged.
- e) All quantitative analyses of samples must be completed by an accredited laboratory in accordance with the requirements of 35 Ill. Adm. Code 186 and the scope of the accreditation. Documentation of any chemical analysis must include, but is not limited to:
- 1) Chain of custody control;
  - 2) A copy of the lab analysis;
  - 3) Accreditation status of the laboratory performing the analysis; and
  - 4) Certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the

accreditation of environmental laboratories and the scope of the accreditation. [415 ILCS 5/22.51(f)(2)(D)]

(Source: Added at Ill. Reg. , effective )

Section 1100.615 Waste and Materials Other Than Chemical Constituents in Soils

For purposes of this Part:

- a) Uncontaminated soil may include incidental amounts of stone, clay, rock, sand, gravel, roots, and other vegetation.
- b) Except as provided in subsection (a) of this Section, soil containing waste or other materials or exceeding the standards for chemical constituents in uncontaminated soil is not uncontaminated soil and must be managed in accordance with applicable provisions of the Act and implementing rules.
  - 1) Soil satisfying the standards for chemical constituents in uncontaminated soil but that is commingled with general construction or demolition debris is general construction or demolition debris and must be managed as such in accordance with applicable provisions of the Act and implementing rules. [415 ILCS 5/3.160(a)]
  - 2) Soil satisfying the standards for chemical constituents in uncontaminated soil but that is commingled with clean construction or demolition debris is clean construction or demolition debris and must be managed as such in accordance with applicable provisions of the Act and implementing rules. [415 ILCS 5/3.160(b)]

(Source: Added at Ill. Reg. , effective )

SUBPART G: GROUNDWATER MONITORING

Section 1100.700 Purpose and Applicability

- a) This Subpart contains the procedures of groundwater monitoring to be followed by all owners and operators of CCDD fill operations required to be permitted by Section 22.51 of the Act and by all owners and operators of uncontaminated soil fill operations required to be registered by Section 22.51a of the Act.
- b) This Subpart G does not apply to fill operations that have closed and certified closure in accordance with subsection 1100.412(b)(1) or 1100.525(b) of this Part within one year after the effective date of amendments establishing this Subpart G; provided that Subpart G shall apply to closed fill operations that subsequently accept CCDD or uncontaminated soil for use as fill

(Source: Added at Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 1100.705 Recordkeeping

Documentation required by this Subpart must be kept at the facility or in some alternative location approved by the Agency until postclosure maintenance is terminated in accordance with Section 1100.412 or Section 1100.530 of this Part. Documentation relating to an appeal, litigation or other disputed claim must be maintained until at least 3 years after the date of the final disposition of the appeal, litigation, or other disputed claim. The owner or operator must make the documents available for inspection and copying by the Agency and by units of local government upon request during normal business hours.

(Source: Added at Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 1100.710 Professional Engineer Supervision

All systems, programs, plans, notifications and reports designed or prepared to comply with this Subpart must be designed or prepared under the supervision of a professional engineer. The professional engineer must affix to all designs, plans, notifications and reports the name of the engineer, date of preparation, registration number, professional seal, and a statement attesting to the accuracy of the information.

(Source: Added at Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 1100.715 Compliance Period

For purposes of this Subpart G, the compliance period is the active life of the fill operation, including the closure and postclosure maintenance periods specified in Subpart B and Subpart E of this Part.

- a) The active life begins when the fill operation first begins operation or one year after the effective date of this Subpart, whichever occurs later.
- b) The active life ends when the postclosure maintenance period ends.

(Source: Added at Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 1100.720 Compliance with Groundwater Quality Standards

The owner or operator must ensure that the fill operation does not cause an exceedence of the Class I groundwater quality standards at 35 Ill. Adm. Code 620.410. For purposes of the groundwater monitoring required under this Part, the Class I groundwater quality standards shall apply to all fill sites.

- a) The owner or operator must install a groundwater monitoring system in accordance with Section 1100.725 of this Part.



- b) Except as provided in subsection (d), throughout the compliance period as defined in Section 1100.715, the owner or operator must measure compliance with the Class I groundwater quality standards at the compliance point, or compliance points if more than one such point exists.
- c) The compliance point(s) for each fill operation must be situated on or within the compliance boundary, must be representative of groundwater conditions at the fill operation, and must be determined as part of the design and development of the groundwater monitoring system required pursuant to this Part.

(Source: Added at Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### Section 1100.725 Groundwater Monitoring System

- a) A groundwater monitoring system must be installed in order to monitor groundwater conditions at the fill operation. The groundwater monitoring system must consist of a sufficient number of wells, installed at appropriate locations and depths, to yield:
  - 1) Samples that represent the background groundwater quality; and
  - 2) Samples that represent the quality of groundwater that is downgradient from the fill operation or unit with respect to groundwater flow, including both horizontal and vertical directions, and that may be affected by constituents from the fill operation or unit.
- b) If the fill operation contains more than one unit, separate groundwater monitoring systems are not required for each unit, provided that provisions for sampling the groundwater will enable detection and measurement of constituents that have entered the groundwater from each unit.
- c) At a minimum, all monitoring well construction must satisfy the following requirements:
  - 1) Construction must be done in a manner that will enable the collection of groundwater samples;
  - 2) Casings and screens must be made from durable material that is resistant to expected chemical or physical degradation and that does not interfere with the quality of groundwater samples being collected; and
  - 3) The annular space opposite the screened section of the well (i.e., the space between the bore hole and well screen) must be filled with gravel or sand if necessary to collect groundwater samples. The annular space above and

below the well screen must be sealed to prevent migration of water from overlying adjacent formations and the surface to the sampled depth.

- d) Monitoring wells designed and constructed as part of the monitoring program shall be maintained along with records that include, but are not limited to, exact well location, well size, type of well, the design and construction practice used in its installation and well and screen depths. Monitoring well construction diagrams must be completed and maintained for each monitoring well on forms prescribed and provided by the Agency.
- e) Monitoring wells that are no longer necessary to the operation of the site must be sealed in accordance with 77 Ill. Adm. Code 920.120.

(Source: Added at Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 1100.730 Groundwater Monitoring Program

The owner or operator must develop a groundwater monitoring program that consists of:

- a) Sampling and analysis procedures to ensure monitoring results that provide a reliable indication of groundwater quality at the site. At a minimum the program must include procedures and techniques for:
  - 1) Sample collection;
  - 2) Sample preservation and shipment;
  - 3) Analytical procedures; and
  - 4) Chain of custody control.
- b) Sampling and analytical methods that are appropriate for groundwater monitoring and that allow for detection and quantification of monitoring parameters specified in Section 1100.735, and that are consistent with the sampling and analytical methods specified in 35 Ill. Adm. Code 620.
- c) A determination of the groundwater head elevation each time groundwater is sampled.
- d) A determination at least annually of the groundwater flow rate and direction.
- e) If the owner or operator determines that the groundwater monitoring program no longer satisfies the requirements of this Section, the owner or operator must, within 90 days, make appropriate changes to the program. Conditions under which a groundwater monitoring program no longer satisfies the requirements of this Section include, but are not limited to, a determination that groundwater flow

conditions, conducted pursuant to subsection (d), have changed a well(s) upgradient /downgradient status.

(Source: Added at Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_ )

Section 1100.735 Monitoring Parameters

The owner or operator must monitor for all parameters for which there is a Class I groundwater quality standard at 35 Ill. Adm. Code 620.410.

(Source: Added at Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_ )

Section 1100.740 Sampling Frequency

At least annually throughout the compliance period the owner or operator must collect samples from all groundwater monitoring wells, analyze the samples for all parameters described in Section 1100.735, determine whether Class I groundwater quality standards have been exceeded, and maintain a report of the results.

(Source: Added at Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_ )

Section 1100.745 Non-Compliance Response Program

If monitoring results collected pursuant to Sections 1100.735 and 1100.740 show that a Class I groundwater quality standard has been exceeded, the owner or operator must:

- a) Within 60 days of the date the groundwater sample was collected, notify the Agency in writing of the exceedance. The notification must indicate which Class I groundwater quality standards have been exceeded, include the analytical results showing the exceedance, and identify the groundwater monitoring well where the exceedance has occurred.
- b) Within 60 days of the date the groundwater sample was collected, resample the groundwater in all monitoring wells where a Class I groundwater quality standard has been exceeded and measure the concentration of each parameter required pursuant to Section 1100.735 where a Class I groundwater quality standard has been exceeded unless the owner or operator makes a demonstration pursuant to Section 1100.750. A report of the results should be prepared and submitted to the Agency within 60 days of the date of the resampling.
- c) Prepare a corrective action program designed to achieve the requirements of Section 1100.755. This plan must be submitted to the Agency in writing within 120 days of the date on which the resampling results were submitted to the Agency pursuant to subsection (b), unless:

- 1) None of the parameters identified under subsection (b) exceed the Class I groundwater quality standards; or
  - 2) The owner or operator makes a demonstration pursuant to Section 1100.750.
- d) Begin implementation of the corrective action program specified in subsection (c) within 120 days of the date on which the resampling results were submitted to the Agency pursuant to subsection (b), unless:
- 1) None of the parameters identified under subsection (b) exceed the Class I groundwater quality standards; or
  - 2) The owner or operator makes a demonstration pursuant to Section 1100.750.

(Source: Added at Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 1100.750 Alternate Non-Compliance Response Program

If the groundwater sampling required pursuant to Section 1100.740 shows that a Class I groundwater quality standard has been exceeded, the owner or operator may demonstrate that the exceedance resulted from error in sampling, analysis, or evaluation, or that the exceedance is not statistically significant over background groundwater quality. In making such demonstration the owner or operator must:

- a) Notify the Agency in writing that the owner or operator intends to make a demonstration under this Section within 60 days of the date on which the Agency was notified in writing of the exceedance pursuant to Section 1100.745(a);
- b) Submit a report to the Agency that demonstrates that the Class I groundwater quality standard was exceeded due to an error in sampling, analysis, or evaluation, or that the exceedance is not statistically significant over background groundwater quality. The report must be submitted to the Agency in writing within 180 days of the date on which the Agency was notified in writing of the exceedance pursuant to Section 1100.745(a); and
- c) Continue to monitor in accordance with the groundwater monitoring program established pursuant to Sections 1100.730, 1100.735, and 1100.740.

(Source: Added at Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 1100.755 Corrective Action Program

Owners and operators required to conduct a corrective action program pursuant to this Subpart must:

- a) Begin corrective action pursuant to Section 1100.745(d) within 120 days of the date on which the resampling results were submitted to the Agency pursuant to Section 1100.745(b);
- b) Take corrective action that results in a demonstration at the compliance point(s) that the fill operation does not contribute to an exceedance of the Class I groundwater quality standards or the background groundwater quality, whichever is higher;
- c) Establish and implement a groundwater monitoring program to demonstrate the effectiveness of the corrective action program, including, but not limited to, quarterly groundwater sampling and analysis;
- d) Take corrective action that achieves compliance with 35 Ill. Adm. Code 620 beyond the fill operation's property boundary unless the owner or operator is unable to obtain access to the off-site property to undertake such action. The inability to obtain access to take corrective action beyond the fill operation's property boundary does not relieve the owner or operator of liability for corrective action required beyond the fill operation's property boundary to achieve compliance with 35 Ill. Adm. Code 620;
- e) Continue corrective action measures until the owner or operator can demonstrate to the Agency, based on data from the groundwater monitoring program under subsection (c), that for a period of three consecutive years the fill operation has not caused an exceedance of the Class I groundwater quality standards or the background groundwater quality, whichever is higher;
- f) Report in writing to the Agency on the effectiveness of the corrective action program. The owner or operator must submit these reports semi-annually beginning 90 days after corrective action commences pursuant to Section 1100.745(d); and
- g) If the owner or operator of the fill operation determines that the corrective action program no longer satisfies the requirements of this Section, the owner or operator must, within 90 days, make appropriate changes to the program and report the changes to the Agency.

(Source: Added at Ill. Reg. , effective )

Section 1100.760 Dewatering Fill Operations

- a) A CCDD fill operation or uncontaminated soil fill operation that is dewatering may delay compliance with Sections 1100.715 through 1100.755 provided the owner or operator:

- 1) Demonstrates in a report that a cone of depression has been established at the fill operation; and
  - 2) Sends a notification by January 30 of each year to the Illinois EPA that the cone of depression at the fill operation has been maintained for the preceding year or since the cone of depression was established, and is intended to be maintained for the next 12 months.
- b) One year after dewatering ceases, the owner or operator must be in compliance with the groundwater monitoring requirements of 1100.715 through 1100.755.

(Source: Added at Ill. Reg. , effective )

STATE OF ILLINOIS                    )  
  )  
COUNTY OF SANGAMON            )

**PROOF OF SERVICE**

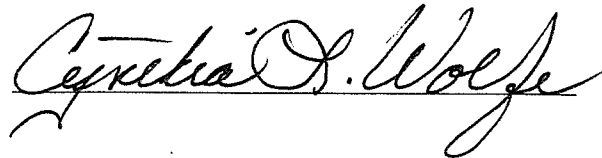
I, the undersigned, on oath state that I have served the attached Motion for Acceptance, Appearances of Attorneys, Certification of Origination, List of Studies and Reports Used in Regulatory Development, Motion to Waive Filing Requirements, Statement of Reasons, and the Proposed Amendments upon the persons to whom they are directed, by placing a copy of each in an envelope addressed to:

John T. Therriault, Clerk  
Illinois Pollution Control Board  
James R. Thompson Center  
Suite 11-500  
100 West Randolph  
Chicago, Illinois 60601  
**(UPS-Next Day)**

Mitchell Cohen  
Chief Legal Counsel  
Illinois Dept. of Natural Resources  
One Natural Resources Way  
Springfield, Illinois 62702-1271  
**(First Class Mail)**

Matthew J. Dunn, Chief  
Environmental Enforcement/Asbestos  
Litigation Division  
Illinois Attorney General's Office  
69 West Washington St., 18<sup>th</sup> Floor  
Chicago, Illinois 60602  
**(First Class Mail)**

and mailing them from Springfield, Illinois on July 28<sup>th</sup>, 2011, with sufficient postage affixed as indicated above.



SUBSCRIBED AND SWORN TO BEFORE ME

This 28<sup>th</sup> day of July, 2011.

Brenda Boehner  
Notary Public

