



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

APR 26 2011

REPLY TO THE ATTENTION OF:

LR-8J

Gerard M. Hamblin, P.E.
Area Engineer
Waste Management of Wisconsin, Inc.
W132 N10487 Grant Drive
Germantown, Wisconsin 53022

Dear Mr. Hamblin:

The U.S. Environmental Protection Agency has reviewed your request dated March 24, 2011, and submitted to the Regional Administrator for a risk-based disposal approval pursuant to 40 CFR 761.61(c). The disposal approval request is for the disposal of TSCA-regulated sediments from the Lower Fox River Remediation Project into the Waste Management Ridgeview Recycling and Disposal (Ridgeview) Facility located in Manitowoc County, Wisconsin. Your request consisted of a cover letter from Waste Management of Wisconsin, Inc. (Waste Management), a technical memorandum from Tetra Tech EC Inc. (Tetra Tech), and the Ridgeview Conditional Plan of Operation. The Ridgeview facility is a RCRA Subtitle D landfill permitted under the Wisconsin Administrative Code, Chapters NR 500-514.

Under 40 CFR 761.61(c), the EPA may approve your application if the disposal method of the TSCA-regulated sediment will not pose an unreasonable risk of injury to health or the environment. The March 24, 2011, application submitted by Waste Management does not provide sufficient information for EPA to make an unreasonable risk determination. In order for EPA to make a risk determination based upon disposal of the TSCA-regulated material in the Ridgeview landfill facility as proposed in the application, the additional information that is required includes those items found in 40 CFR 761.75. Specifically, 40 C.F.R. § 761.75(c) requires the owner or operator of the landfill, before receiving EPA's written approval, to submit to EPA an initial report containing: the location of the landfill; a detailed description of the landfill including general site plan and design drawings; an engineering report that describes the manner in which the landfill complies with the requirements outlined in § 761.75(b); available sampling and monitoring equipment; expected waste volumes of PCBs; a general description of

waste materials other than PCBs that are expected to be disposed of in the landfill; a landfill operations plan; any applicable permits or approvals; and any schedules or plans for complying with the approval requirements in § 761.75. Provided as an attachment to this letter is an outline that may be used as guidance for providing the information required to the EPA so that a determination as to the unreasonable risk of injury to health or the environment can be made.

At this time, EPA requires the information stated above to complete the review and process of your application. This required information must be provided within 30 days from the date of receipt of this letter. If you are unable to provide the required information within the allotted time, you may request an extension, listing the reasons for your request and indicating when the requested information can be provided. Failure to provide the information by the required date or failure to request and obtain an extension will result in the EPA issuing a denial of your 40 CFR § 761.61(c) application. Submittal of this information does not ensure approval nor does it preclude us from requiring additional information if continued review indicates it is needed. The information should be submitted to Karen Kirchner, of my staff, at the above address.

If you have any questions regarding this letter or any of the information requested, please contact Ms. Kirchner at (312) 353-4669.

Sincerely,



Mary Setnicar
Acting Chief, RCRA Branch
Land and Chemicals Division

Attachment: Draft Guidance Document for a 40 CFR §761.75 Landfill Application

cc: Ms. Karen Kirchner, EPA
Mr. James Hahnenberg, EPA
Ms. Jean Greensley, EPA
Mr. James A. Zeller, P.E., WDNR

ATTACHMENT

Draft Guidance Document for a 40 CFR § 761.75 Landfill ApplicationA. Geographic Information

1. Physical Geography
 - a. site location
 1. quarter, section, township and range (72' USGS Quadrangle Map)
 2. latitude and longitude
 3. legal boundaries
 4. local zoning status
 - b. site/owner/contractor information
 1. mailing address
 2. owner's address and telephone number
 3. operator's address and telephone number
 4. contractor's address and telephone number
 - c. topography
 - d. soil
 1. engineering classification
 2. agricultural classification
 - e. water
 1. closest open water body
 2. direction of surface runoff
 3. groundwater recharge areas
 4. depth to free standing water
 5. 100 year and 500 year floodplain elevation
 - f. wells
 1. closest drinking water wells
 2. closest well water drinking population
 3. injection/withdrawal wells
 - g. prevailing wind direction (wind rose)
 - h. local land use
 1. present
 - a) industrial
 - 1) pipelines
 - 2) pump stations
 - 3) meter stations
 - b) residential
 - 1) within 500'
 - 2) recreational
 - c) farms
 - d) highways
 2. future
 - a) industrial
 - b) residential
 - c) farm
2. Environmental Geography

- a. location within 100 year flood plain
- b. endangered species
 - 1. breeding grounds
 - 2. habitat
- c. sensitive areas
 - 1. wetlands
 - 2. waterways
 - 3. fishing sites
 - 4. groundwater
 - a) sole source aquifers
 - b) major aquifers
 - 5. food and feed areas

B. Geologic Information

- 1. Regional and Site-Specific Geologic History
- 2. Physiographic Province
- 3. Regional and Site-Specific Stratigraphy
- 4. Site Bedrock Lithology
 - a. geologic names
 - b. physical description
 - c. depth to top of bedrock
 - d. name and depth of next rock unit down
- 5. Material Overlying Top of Rock at Site
 - a. physical description (sand, gravel, glacial till, soil, etc.)
 - b. surface soils (engineering classification)
 - c. subsurface soils (engineering classification)

C. Site-specific Hydrogeologic Information

- 1. Water Table
 - a. current
 - b. historical high water table
 - c. hydraulic connection to surface water
- 2. Local Gradient
- 3. Nearest Groundwater Recharge Areas
- 4. Nearest Aquifer(s)
 - a. name
 - b. depth to top of aquifer
 - c. depth to top of water
 - d. horizontal distance (if applicable)
 - e. characteristics
 - 1. thickness
 - 2. gravel, sand, etc.
 - 3. confined, unconfined
 - 4. quality
 - 5. present and future usage (drinking water)

5. Nearest Aquitard
 - a. name
 - b. elevation of top
 - c. elevation of base
 - d. characteristics
 1. thickness
 2. continuity
6. Permeability of Geologic Units
 - a. soil
 - b. soil/rock interface
 - c. rock
7. Groundwater
 - a. general flow patterns - Laplace flow net
 - b. piezometric surface

D. Site Chemistry

1. PCB Mobilizing Solvents
 - a. type
 - b. distribution
2. Other Contaminants
 - a. type
 - b. distribution

E. Site Risks

1. PCB Mobility
 - a. solvents
 - b. floods
 - c. landslides
2. Environmental
 - a. endangered species
 1. breeding grounds
 2. habitat
 - b. sensitive areas
 1. wetlands
 2. waterways
 3. fishing sites
 4. groundwater
 - a) sole source aquifers
 - b) major aquifers
 5. food and feed areas

F. Maps

1. Site Map
 - a. existing plat

1. legal boundaries
2. engineering planimetry (building, roads, monitoring wells)
 - b. plat showing existing features plus proposed landfill cell and landfill support facilities
2. 72' USGS Quadrangle Map
3. Most Pertinent Geologic Map
4. Site Geology (Cross Section)
5. Site Contamination Map
 - a. PCB contamination boundaries and distribution (PCB concentration)
 1. plan view
 2. cross section
 3. rock/soil units affected
 4. aquifer(s) affected
 - b. other contaminant boundaries and distribution

G. Landfill Technical Requirements

1. General Site Plan
 - a. landfill location
 1. soil type
 2. distance from water table
 3. location relative to 100-year flood plain
 4. distance from shorelands
 5. distance from groundwater recharge areas
 6. topography
 - b. design features
 1. liners
 - a) large-area clay pan
 - 1) thickness
 - 2) extent
 - 3) properties
 - 4) liner/leachate compatibility
 - b) in-place soil
 - 1) thickness
 - 2) properties
 - 3) liner/leachate compatibility
 - c) compacted soil liner
 - 1) thickness
 - 2) properties
 - 3) liner/leachate compatibility
 - 4) installation method
 - d) synthetic membrane liner(s)
 - 1) thickness
 - (a) membrane
 - (b) soil underlining and soil cover
 - 2) integrity document
 - (a) liner/leachate compatibility
 - (b) puncture model

- (c) crack model
 - (d) tensile failure model
 - 3) installation method
 - 4) installer qualifications
- 2. slope of cell walls
- 3. capacity of cell(s)
- 4. leachate collection system
- 5. leachate treatment system
- 6. leak detection system
- 7. surface water diversion structures
- 8. cutoff wall(s)
- 9. supporting facilities
 - a) security
 - 1) fence
 - 2) guard shack
 - 3) signs
 - b) vehicle wash area(s)
 - c) roads
 - d) waste acceptance area
- c. construction planning
 - 1. blueprint of proposed landfill
 - 2. cross section of landfill related to site geology and water table
 - 3. construction timeline/flowchart
 - a) cell(s)
 - b) leachate treatment system
 - c) surface water diversion structures
 - d) cutoff walls
 - e) support facilities
 - 4. quality assurance/quality control plan
 - a) location/survey control
 - b) construction/installation monitoring
 - c) material conformance and compatibility
 - d) as-built drawing
 - e) PE review and certification statement

2. Operation Plans

a. waste handling

- 1. PCB waste
 - a) estimated volume
 - b) estimated type (soil, transformers, etc.)
- 2. other waste
 - a) estimated volume
 - b) estimated type
- 3. waste acceptance hours
- 4. waste inspection and acceptance (QA/QC)
 - a) manifests
 - b) pre-acceptance screening and sampling
 - 1) PCB compatibility

- 2) construction material compatibility
- 3) ignitability
- 4) reactivity
- 5. waste pretreatment
- 6. waste tracking system
 - a) receipt
 - b) location of PCB waste in cell
 - c) volume of PCB waste
- 7. maximum holding time before disposal in cell
- 8. excavation and backfilling
- 9. daily cover
 - a) material
 - b) thickness
- 3. Traffic
 - a. roadway usage
 - 1. main truck entrance
 - 2. guard shack
 - 3. waste acceptance area
 - 4. truck queue
 - 5. tipping point
 - 6. tipping point turn-around area
 - 7. truck wash station
 - 8. check-out station
 - 9. traffic control signs
 - b. vehicle and equipment movement
 - 1. path to tipping point and turn-around area
 - 2. path out of facility
 - c. roadway maintenance and decontamination
- 4. Spill Prevention Control and Countermeasures
 - a. prevention
 - b. spill response
 - 1. emergency
 - 2. non-emergency
 - c. clean-up
 - 1. sampling procedures
 - a) pre-clean-up
 - b) clean-up verification
 - 2. analytical procedures
 - 3. QA/QC procedures
 - 4. clean-up levels
 - d. notification
 - e. reporting
- 5. Worker Protection
 - a. health monitoring
 - b. protective clothing
 - c. emergency equipment
 - d. emergency and evacuation plan

- e. training
 - 1. PCB waste management
 - 2. environmental monitoring procedures
 - 3. equipment
 - a) use/inspection
 - b) repair/replacement
 - c) decontamination
 - 4. spills
 - a) prevention
 - b) emergency response
 - c) clean-up
 - d) notification
 - 5. emergency
 - a) emergency co-ordinator(s)
 - b) fire/explosion procedures
 - c) evacuation route
 - d) location and use of emergency equipment
 - e) location police/fire/hospital information
 - 6. frequency of training
 - a) initial
 - b) refresher
- 6. Security
 - a. vandalism
 - b. unauthorized waste
- 7. Monitoring and Sampling
 - a. surface water
 - 1. pre-operation (background) sampling sites and monitoring schedule
 - 2. active operation sampling sites and monitoring schedule
 - 3. sample method
 - a) type
 - b) sampling equipment
 - 1) description
 - 2) decontamination procedure
 - c) chain of custody
 - d) Quality Assurance/Quality Control (QA/QC)
 - 4. analysis
 - a) lab QA/QC
 - b) analysis method
 - c) analysis parameters
 - d) detection limit
 - 5. detection response
 - 6. remediation standard
 - 7. remediation plan
 - 8. reporting and notification schedule
 - b. groundwater
 - 1. chemical monitoring
 - a) current and proposed wells

- 1) design
 - (a) include diagram
 - (b) differentiate between current and proposed wells
- 2) location
 - (a) include map
 - (b) differentiate between current and proposed wells
- 3) screened interval (per well)
 - (a) depth
 - (b) formation
- b) pre-operation (background) sampling sites and monitoring schedule
- c) active operation sampling sites and monitoring schedule
- d) sample method
 - 1) type
 - 2) sampling equipment
 - (a) description
 - (b) decontamination procedure
 - 3) chain of custody
 - 4) Quality Assurance/Quality Control (QA/QC)
- e) analysis
 - 1) lab QA/QC
 - 2) analysis method
 - 3) analysis parameters
 - 4) detection limit
- f) detection response
- g) remediation standard
- h) remediation plan
- i) purge water treatment and disposal
- j) reporting and notification schedule
- 2. piezometric wells
 - a) current and proposed wells
 - 1) design
 - (a) include diagram
 - (b) differentiate between current and proposed wells
 - 2) location
 - (a) include map
 - (b) differentiate between current and proposed wells
 - 3) screened interval (per well)
 - (a) depth
 - (b) formation
 - b) pre-operation (background) sampling sites and monitoring schedule
 - c) active operation sampling sites and monitoring schedule
 - d) sample method
 - 1) sampling equipment
 - (a) description
 - (b) decontamination procedure
 - 2) Quality Assurance/Quality Control (QA/QC)
 - e) purge water treatment and disposal

- f) reporting schedule
- c. leachate
 - 1. monitoring schedule
 - 2. reporting and notification schedule
 - 3. analysis
 - a) lab QA/QC
 - b) analysis method
 - c) analysis parameters
 - d) detection limit
 - 4. detection response
 - 5. remediation standard
 - 6. remediation plan
 - 7. leachate treatment and disposal
- d. leak detection system
 - 1. monitoring schedule
 - 2. detection response
 - 3. reporting and notification schedule
- e. truck wash water
 - 1. treatment
 - 2. disposal
- f. soil
 - 1. pre-operation sampling sites and monitoring schedule
 - 2. active operation sampling sites and monitoring schedule
 - 3. analysis
 - a) lab QA/QC
 - b) analysis method
 - c) analysis parameters
 - d) detection limit
 - 4. detection response
 - 5. remediation standard
 - 6. remediation plan
 - 7. reporting and notification schedule
- g. air
 - 1. dust monitoring schedule
 - a) pre-operation
 - b) active operation
 - 2. PCB monitoring schedule
 - a) pre-operation
 - b) active operation
 - 3. detection response
 - 4. tolerance limit
 - 5. reporting and notification schedule

H. Records Maintenance and Reporting Procedures

- 1. Annual Records
 - a. waste manifests

- b. certificates of disposal
- 2. Annual Document Log
- 3. PCB Concentration in Liquid Waste
- 4. Three Dimension Burial Coordinates for PCB Waste
- 5. Record Retention Period
- 6. Annual Report
- 7. Notification of PCB Waste Activity (Form #7710-53)
- 8. Exception Reports

I. Closure/Post-Closure Procedures

- 1. Description and Schedule of Closure Activities
 - a. construction of final cover
 - 1. description
 - a) vegetated layer
 - 1) top soil source and specifications
 - 2) vegetation type
 - b) drainage layer
 - c) flexible membrane liner (fml)
 - 1) thickness
 - 2) integrity document
 - 3) installation method
 - 4) installer qualifications
 - d) low permeability layer
 - e) gas vent layer
 - f) biotic barrier layer
 - g) finished grade
 - 2. blueprint of proposed cover
 - 3. construction timeline/flowchart
 - 4. quality assurance/quality control plan
 - a) location/survey control
 - b) construction/installation monitoring
 - c) material conformance and compatibility
 - d) as-built drawing
 - e) PE review and certification statement
 - b. construction of runoff/runon control structures
 - 1. description
 - 2. construction schedule
- c. sampling and decontamination
 - 1. roadways
 - a) sample locations
 - b) analysis
 - 1) lab QA/QC
 - 2) analysis method
 - 3) analysis parameters
 - 4) detection limit
 - c) remediation standard

- 2. soil
 - a) sample locations
 - b) analysis
 - 1) lab QA/QC
 - 2) analysis method
 - 3) analysis parameters
 - 4) detection limit
 - c) remediation standard
- 3. truck wash
 - a) sample locations
 - b) analysis
 - 1) lab QA/QC
 - 2) analysis method
 - 3) analysis parameters
 - 4) detection limit
 - c) remediation standard
- d. removal
 - 1. waste
 - 2. equipment
 - 3. structures
- e. financial assurance
 - 1. cost of closure
 - 2. funding mechanism
 - 3. closure must be funded before landfill can accept waste
- f. closure certification
- 2. Description and Schedule of Post-Closure Activities
 - a. cover inspection and maintenance
 - 1. inspection schedule
 - 2. maintenance plan and schedule
 - 3. runoff/runon erosion control plan
 - 4. notification and reporting
 - b. sampling and remediation
 - 1. surface water plan
 - a) sampling sites and monitoring schedule
 - b) sample method
 - 1) type
 - 2) sampling equipment
 - (a) description
 - (b) decontamination procedure
 - 3) chain of custody
 - 4) Quality Assurance/Quality Control (QA/QC)
 - c) analysis
 - 1) lab QA/QC
 - 2) analysis method
 - 3) analysis parameters
 - 4) detection limit
 - d) detection response

- e) remediation standard
- f) remediation plan
- g) reporting and notification schedule
- 2. groundwater plan
 - a) well inspection and maintenance schedule
 - b) well location and monitoring schedule
 - 1) screened interval (per well)
 - (a) depth
 - (b) formation
 - c) sample method
 - 1) type
 - 2) sampling equipment
 - (a) description
 - (b) decontamination procedure
 - 3) chain of custody
 - 4) Quality Assurance/Quality Control (QA/QC)
 - d) analysis
 - 1) lab QA/QC
 - 2) analysis method
 - 3) analysis parameters
 - 4) detection limit
 - e) detection response
 - f) remediation standard
 - g) remediation plan
 - h) purge water treatment and disposal
 - i) reporting and notification schedule
- 3. leachate collection system
 - a) inspection and maintenance
 - b) monitoring schedule
 - c) reporting and notification schedule
 - d) analysis
 - 1) lab QA/QC
 - 2) analysis method
 - 3) analysis parameters
 - 4) detection limit
 - e) detection response
 - f) remediation standard
 - g) remediation plan
 - h) leachate treatment and disposal
- 4. leak detection system
 - a) inspection and maintenance schedule
 - b) monitoring schedule
 - c) detection response
 - d) reporting and notification schedule
- c. financial assurance
 - 1. cost of closure
 - 2. funding mechanism

- 3. post-closure must be funded before landfill can accept waste
- d. post-closure period
- e. notice of completion of post-closure

J. Application for TSCA Landfill Requirement Waiver

K. Application for Approval Modification

- 1. 60 days prior to proposed changed
- 2. 60 days after unexpected event

L. Other Information

- 1. Applicable or Relevant and Appropriate Requirements
 - a. air
 - b. water
 - 1. NPDES stormwater
 - 2. NPDES local sewer discharge
 - 3. groundwater discharge
 - c. state
 - d. local
- 2. Other Permit Applications
 - a. federal
 - b. state
 - c. local
- 3. Issued Permits
 - a. federal
 - b. state
 - c. local
- 4. Existing and Pending Consent Decrees