

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

ATKINSON LANDFILL COMPANY )  
 )  
 Petitioner )  
 )  
 v. ) PCB 13-8  
 ) (Permit Appeal)  
 ILLINOIS ENVIRONMENTAL )  
 PROTECTION AGENCY, )  
 )  
 Respondent. )

NOTICE OF FILING

TO:

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

Division of Legal Counsel  
Illinois Environmental Protection Agency  
1021 North Grand Avenue East  
P.O. Box 19276  
Springfield, IL 62794-9276

PLEASE TAKE NOTICE that I have today electronically filed with the Office of the Clerk of the Pollution Control Board, **Petition for Review of Landfill Development Permit Denial**, copies of which are herewith served upon you.

ATKINSON LANDFILL COMPANY,

By: Amy Antonioli  
Amy Antonioli

Dated: August 22, 2012  
Joshua More  
Amy Antonioli  
SCHIFF HARDIN LLP  
233 South Wacker Drive  
Suite 6600  
Chicago, Illinois 60606  
Tel: 312-258-5500

**CERTIFICATE OF SERVICE**

I, the undersigned, certify that on this 22nd day of August, 2012, I have served electronically the attached, **Petition for Review of Landfill Development Permit Denial**, upon the following persons:

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

and electronically and by first class mail, postage affixed, upon:

Division of Legal Counsel  
Illinois Environmental Protection Agency  
1021 North Grand Avenue East  
P.O. Box 19276  
Springfield, IL 62794-9276

By:  \_\_\_\_\_  
Amy Antonioli

Dated: August 22, 2012

Joshua More  
Amy Antonioli  
SCHIFF HARDIN LLP  
233 South Wacker Drive  
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Chicago, Illinois 60606  
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**BEFORE THE ILLINOIS POLLUTION CONTROL BOARD**

<b>ATKINSON LANDFILL COMPANY</b>	)	
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<b>Petitioner</b>	)	
	)	
<b>v.</b>	)	<b>PCB 13-8</b>
	)	<b>(Permit Appeal)</b>
<b>ILLINOIS ENVIRONMENTAL</b>	)	
<b>PROTECTION AGENCY,</b>	)	
	)	
<b>Respondent.</b>	)	

**PETITION FOR REVIEW OF  
LANDFILL DEVELOPMENT PERMIT DENIAL**

NOW COMES Petitioner, Atkinson Landfill Company (“Petitioner”), pursuant to Section 40 of the Illinois Environmental Protection Act (“Act”) (415 ILCS 5/40) and 35 Ill. Adm. Code § 105.200 *et seq.*, to contest the Illinois Environmental Protection Agency’s (“IEPA”) July 6, 2012 denial of a landfill development permit application submitted on September 2, 2011 (“Permit Denial”). This petition does not encompass a review of the entire Permit Denial, but rather only a review of IEPA’s determination that it is barred from issuing a development permit unless proof of new local siting approval is provided to IEPA. An appeal must be filed within 35 days after the date of service of IEPA’s final decision. Petitioner received the IEPA’s Permit Denial on or about July 6, 2012. Pursuant to Section 40(a)(1) of the Act and 35 Ill. Adm. Code § 105.206(a), this Petition is timely filed with the Illinois Pollution Control Board (“Board”).

In support of its Petition, Petitioner states as follows:

**I. BACKGROUND**

1. Petitioner owns and operates a landfill in Atkinson Illinois. The facility was originally permitted as Henry County Landfill #2 on September 22, 1980, permit 1980-33-DE.

*Electronic Filing - Received, Clerk's Office, 08/22/2012*

On January 16, 2004, IEPA issued a permit authorizing the expansion of the landfill to include a 125.8-acre area.

2. On March 6, 2006, the Atkinson Landfill Company submitted an application to the Village of Atkinson seeking authorization to expand the existing landfill both horizontally and vertically.

3. On August 28, 2006, the Village of Atkinson passed and approved a resolution granting with conditions the siting approval request to increase the permitted landfill area.

3. On September 28, 2006, the Atkinson Landfill Company filed a petition with the Illinois Pollution Control Board (PCB 2007-020) challenging certain conditions imposed by the Village of Atkinson in the local siting approval. The local siting approval appeal process was concluded on September 4, 2008.

4. On September 2, 2011, Petitioner submitted an application to IEPA for a development permit to expand the existing permitted landfill area consistent with the local siting approval.

5. On July 6, 2012 the IEPA issued a denial of permit finding, among other things, that the local siting approval for the proposed landfill extension expired on September 4, 2011. Due to the expiration of the local siting approval, IEPA stated it would be barred from granting a development permit to expand the landfill unless proof of new local siting approval is provided.

**II. STANDARD OF REVIEW**

5. Petitioner appeals IEPA's decision only on the validity of the local siting approval. In an appeal of a permit denial, the standard of review the Board must apply is whether granting the permit would not violate the Illinois Environmental Protection Act ("Act") or Board regulations. 415 ILCS 5/39(a). For this specific appeal, the Board must determine whether, barring any other omission, IEPA could grant the permit under the existing local siting approval without violating the Act or Board regulations. 415 ILCS 5/40(a)(1).

**III. ISSUE ON APPEAL**

6. One of the justifications for the permit denial is the IEPA's determination that since the application was incomplete, the application for purposes of meeting Section 39.2(f) of the Illinois Environmental Protection Act has not been made and as such the local siting approval expired. See attached denial of permit.

7. The IEPA's conclusion the local siting expired is erroneous and must be reversed because:

A. The only manner provided by statute by which local siting could expire, would be for Petitioner to fail to apply to IEPA for a permit to develop the landfill within three years of the date the Village of Atkinson granted local siting or the conclusion of an appeal. 415 ILCS 5/39.2(f). On September 2, 2011, within the three years allowed by 415 ILCS 5/39.2(f), Petitioner timely made application to the IEPA for a permit to expand the landfill.

B. The IEPA admitted in the Permit Denial that local siting was set to expire on September 4, 2011 and that Petitioner made application to IEPA on September 2, 2011. The local siting, therefore, has not expired.

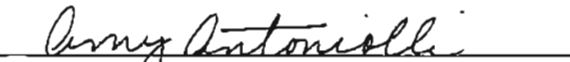
8. IEPA's determination that an incomplete permit application is as if no application had ever been made for purposes of satisfying Section 39.2(f) of the Act is unjustified, arbitrary, capricious, and unlawful.

WHEREFORE, for the reasons set forth above, Petitioner requests that the Board find that Petitioner's September 2, 2011 application to develop a landfill tolls the expiration of the Village of Atkinson's siting approval in accordance with 415 ILCS 39.2(f). The Petitioner also requests such other and further relief as the Illinois Pollution Control Board deems fair, just and equitable, within the powers of the Board enumerated in 415 ILCS 5/5 and 5/40.

Respectfully submitted,

ATKINSON LANDFILL COMPANY

by:

  
\_\_\_\_\_  
One of Their Attorneys

Dated: August 22, 2012

Joshua R. More  
Amy Antonioli  
SCHIFF HARDIN, LLP  
233 South Wacker Drive  
Chicago, Illinois 60606  
(312) 258-5500



Electronic Filing - Received, Clerk's Office, 08/22/2012  
**ILLINOIS ENVIRONMENTAL PROTECTION AGENCY**

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

PAT QUINN, GOVERNOR

JOHN J. KIM, INTERIM DIRECTOR

217/524-3300

July 6, 2012

Certified Mail

7010 2780 0002 1163 1412

Atkinson Landfill Company  
Mr. Branko Vardijan  
221 North Washtenaw  
Chicago, Illinois 60612

Re: 0730200003 -- Henry County  
Atkinson Landfill  
Permit No. 2001-021-LFM  
Log No. 2011-406  
Permit Landfill 810-817 File  
Permit Denial

Dear Mr. Vardijan:

This will acknowledge receipt of your application requesting a development permit for a vertical and horizontal expansion of the above referenced landfill. The original application, dated September 2, 2011, was received by the Illinois EPA on September 2, 2011. The Illinois EPA issued a letter on September 30, 2011 deeming the application to be administratively incomplete. An addendum to the application, dated November 3, 2011, was received by the Illinois EPA on November 4, 2011. The Illinois EPA determined the application, as amended by the first addendum, to be administratively incomplete in a letter dated December 2, 2011 and revised on December 8, 2011. A second addendum, dated January 5, 2012, was received by the Illinois EPA on January 9, 2012. The Illinois EPA issued a letter on February 8, 2012 stating that the application, as amended by its two addenda, was administratively complete. Thus, the application was filed on January 9, 2012, the date that the addendum making it administratively complete was received by the Illinois EPA.

Your permit application for significant modification requesting a development permit for a vertical and horizontal expansion is denied.

You have failed to provide proof that granting this permit would not result in violations of the Illinois Environmental Protection Act (Act). Section 39(a) of the Act [415 ILCS 5/39(a)] requires the Illinois EPA to provide the applicant with specific reasons for the denial of permit. The following reasons are given:

- 1) The application provides proof that local siting approval for the proposed expansion was granted on August 28, 2006. However, this local siting approval seems to have expired no later than September 4, 2011 (i.e. three years after September 4, 2008, the date that the docket was closed on Illinois Pollution Control Board Case No. PCB 2007-020 in which

the applicant appealed some of the conditions placed on local siting approval). The permit application (Log No. 2011-406) was filed on January 9, 2012. Therefore, the Illinois EPA appears to be barred by Section 39(c) of Environmental Protection Act, 415 ILCS (the Act) from approving this application for a development permit due to the lack of proof that the applicant has obtained local siting approval for this project, which has not expired pursuant to Section 39.2(f) of the Act.

- 2) The Site Location Map does not show all state and federal parks and recreational areas as required in IAC 812.303(a)(5).
- 3) Documentation showing compliance with the airport notification as required by IAC 811.302(f) was not provided.
- 4) Verification was not provided that the foundation shall be constructed and graded to provide a smooth, workable surface on which to construct the liner as required by IAC 811.305(e) if in-situ soils are unacceptable.
- 5) Verification was not provided that the construction and compaction of the liner shall be carried out so as to reduce void spaces and allow the liner to support the loadings imposed by the waste disposal operation without settling that causes or contributes to the failure of the leachate collection system as required by IAC 811.306(d)(3).
- 6) Verification was not provided that the geomembrane in conjunction with the compacted earth liner shall perform as well as or better than a compacted liner meeting the requirements of 35 IAC 811.306(d)(1-4) and the equivalent performance shall be evaluated at maximum annual leachate flow conditions as required by IAC 811.306(d)(5)(B).
- 7) Verification was not provided that the geomembrane shall have sufficient strength and durability to function at the site for the design period under the maximum expected loadings imposed by the waste and equipment, and stresses imposed by settlement, temperature, construction, and operation as required by IAC 811.306(e)(4).
- 8) Verification was not provided that seams shall be made in the field according to the manufacturer's specifications and all sections shall be arranged so that the use of field seams is minimized and seams are oriented in the direction subject to the least amount of stress as required by IAC 811.306(e)(5).
- 9) Verification was not provided that the leachate collection system shall be designed to avoid loss of leachate through openings through the geomembrane as required by IAC 811.306(e)(6).



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- 10) A plan showing the locations of all openings through the 60-mil geomembrane in the bottom liner was not provided as required by IAC 812.306(b)(4).
- 11) A cross section and description of how openings in the membrane will be constructed to minimize leaks was not provided as required by IAC 812.306(b)(5).
- 12) A plan view of the leachate collection system as required by IAC 812.307(a) and (c) was not provided.
- 13) Verification was not provided that leachate shall be able to drain freely from the collection pipes and pump requirements were not demonstrated as required in IAC 811.308(h).
- 14) A map showing the components of the leachate collection system as required by IAC 812.308(a)(3) was not provided.
- 15) The leachate monitoring system is inadequate. The network of leachate monitoring locations should include, at a minimum, all discharge sump locations. A guideline for acceptable leachate characterization is at least four leachate monitoring points and at least one leachate monitoring point for every 25 acres of the waste boundary.
- 16) Verification was not provided that leachate monitoring will comply with IAC 811.309(g) and after the initial monitoring schedule, the leachate monitoring shall be performed at least once every six months and each established leachate monitoring point shall be monitored at least once every two years.
- 17) A demonstration that the proposed gas monitoring program will detect any gas buildup and/or migration as required by IAC 812.309(a) and 811.310(b)(1 through 3) was not provided.
- 18) Verification was not provided that the gas collection system and all associated equipment including compressors, flares, monitoring installations, and manholes shall be considered part of the facility as required by IAC 811.311(d)(7).
- 19) Verification was not provided that under no circumstances shall the gas collection system compromise the integrity of the liner, leachate collection, or cover systems as required by IAC 811.311(d)(9).
- 20) A map showing the location of the gas processing facility was not provided as required by IAC 812.311(b).

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- 21) The Construction Quality Assurance Plan proposes disregarding failed test if they qualify as "outliers" as defined in the CQA Plan. Failed tests cannot be disregarded pursuant to IAC Part 811.
- 22) The Construction Quality Assurance Plan did not state that geomembrane seaming shall be made in accordance with GRI test method GM19 where four of the five replicate test specimens must pass given values and the fifth must meet or exceed 80% of the given values. In addition, the peel separation (or incursion) should not exceed the values given in Tables 1(a) and 1(b) of GM19.
- 23) The Construction Quality Assurance Plan did not include the CQA Officer responsibilities required by IAC 811.506(a) and (b).
- 24) A minimum number of samples taken from the sidewalls of the compacted earth liner for the CQA Officer to verify achievement of liner strength on sidewalls as required by IAC 811.507(c)(6) was not provided.
- 25) The Construction Quality Assurance Plan did not include the CQA Officer responsibilities required by IAC 811.507(c)(9) and (10).
- 26) Assurance that the CQA Officer shall certify that the placement plan has been followed as required by IAC 811.508(b) was not included.
- 27) An estimate of the expected year of closure as required by IAC 812.114(f) was not provided.
- 28) Verification was not provided that vegetation shall be tolerant of the landfill gas expected to be generated as required by IAC 811.322(c)(5).
- 29) Identification of the source of final cover and a demonstration that the proposed source contains an adequate volume of suitable soil as required by IAC 812.313(d) and 811.704(f) was not provided.
- 30) Assurance that the final protective layer shall be installed soon enough after the low permeability layer is constructed to prevent desiccation, cracking, freezing, or other damage to the low permeability layer as required by IAC 811.314(c)(4) was not provided.
- 31) Verification that the permeability of the low permeability layer of the final cover system is less than or equal to the permeability of the bottom liner system as required by IAC 811.314(b)(4) was not provided.

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- 32) Assurance that all holes and depressions created by settling shall be filled and recontoured so as to prevent standing water as required by IAC 811.111(c)(4) was not provided.
- 33) The estimate of 10 acres being the largest area of the MSWLF unit ever requiring a final cover as required by IAC 811.111(d)(3) is not justified.
- 34) The cost for final cover includes 9.9 acres, but the premature closure area is stated as 37.5 acres. The premature closure area should be used in the cost estimate.
- 35) No costs were provided for equipment decontamination (work stated as manual cleaning).
- 36) Assurance that waste shall not be placed over areas that are subject to freezing conditions until the liner has been inspected, tested, and reconstructed as required by IAC 811.321(b)(4) was not provided.
- 37) The liquid restrictions for MSWLF units (as required by IAC 811.107(m)) were not provided.
- 38) The recordkeeping requirements for MSWLF units (as required by IAC 811.112) were not provided.
- 39) The Load Checking Program did not include the requirement in IAC 811.323(d)(3) for subsequent shipments by those previously responsible for shipping regulated hazardous waste.
- 40) The application does not meet the requirements of 35 IAC 811.315(d), 811.315(e) & 811.315(f). Sheet No. 17 depicts cross section A to A' with the landfill invert to closely overlay the "under clay" which the applicant claims is an aquitard. But no hydraulic conductivities are provided to demonstrate this claim. Additionally, the applicant has not demonstrated whether or not the shale in the upper regions of the Spoon Formation which underlies the "under clay" is a water bearing unit. The hydraulic relationship between the mine spoils/till to the under clay to the Spoon Formation should be thoroughly addressed (hydraulic conductivities for each) for potential migration pathways.
- 41) The application does not meet the requirements of Part 620, 35 IAC 811.315(b), 811.315(c), 811.315(d) & 811.315(e) in regards to groundwater classification and defining the Uppermost Aquifer. The lower limit of the upper most aquifer has not been adequately demonstrated. The hydraulic relationship between the mine spoils/till to the under clay to the Spoon Formation should be thoroughly addressed (hydraulic conductivities for each) for potential migration pathways.

- 42) The application does not meet the requirements of 35 IAC 812.314(h), 811.315(d)(1)(F) & 811.315(e)(1)(H). Four recent consecutive quarters of potentiometric data for the site as a whole (existing and expansion area) are not provided. Once four recent quarters of data is obtained, the horizontal gradient and seepage velocity should be revised accordingly.
- 43) The application does not meet the requirements of 35 IAC 812.314(h), 812.317(1) and 811.315(e)(1)(H) for updated interwell AGQS/MAPC values have not been proposed for dissolved magnesium and dissolved chromium. Condition VIII.26 of Modification No. 5, Permit No. 2001-021-LFM is out of compliance for a significant modification permit application has not been submitted proposing AGQS/MAPC values for dissolved magnesium and dissolved chromium.
- 44) The application does not meet the requirements of 35 IAC 811.315(d)(2)(D): groundwater monitoring wells shall be established to determine the direction and flow characteristics of the groundwater in all strata and extending down to the bottom of the uppermost aquifer. The lower limit of the upper most aquifer has not been adequately demonstrated. The hydraulic relationship between the mine spoils/till to the under clay to the Spoon Formation and each should be thoroughly assessed (hydraulic conductivities for each) for potential migration pathways.
- 45) The application does not meet the requirements of 35 IAC 812.314(f) and 811.315(a): no direct site specific hydrogeologic information is provided for the "underclay" and the upper regions of the Spoon Formation.
- 46) The application does not meet the requirements of 35 IAC 812.315 & 811.316(d): adequate documentation has not been provided demonstrating all exploratory borings were sealed (not converted to groundwater monitoring wells). All excess drilling mud, oil, drill cuttings, and any other contaminated materials uncovered during or created by drilling shall be disposed of in accordance with the requirements of 35 Ill Adm. Code 700 through 749, 807, and 809 through 815.
- 47) The application does not meet the requirements of 35 IAC 812.317(a): a site plan showing all zones of attenuation. The applicant shall provide a site map (similar to Sheet No. 2) depicting the entire groundwater monitoring network, waste boundary and the zone of attenuation.
- 48) The application does not meet the requirements of 35 IAC 812.317(c): location and depth of all monitoring points. Specifically, the location (northing and easting), depths and strata for monitoring wells G216, G217, G218, G219, G220 and G221 are not provided. Additionally, it has not been adequately demonstrated that the upper regions of the Spoon Formation do not require nested monitoring wells in order to monitor all potential migration pathways.

- 49) The application does not meet the requirements of 35 IAC 811.318(b). The monitoring well phasing schedule is not proposed, detailing the changes in the groundwater monitoring network during each of the sites Cell developmental stages. A clear and concise table should be provided detailing the groundwater monitoring network during each of the cells developmental stages (Cell A through DD) in order of development. Note: the groundwater monitoring network shall at all times during the well phasing and cell construction program must have installed and monitor at least one Zone of Attenuation Well.
- 50) The application does not meet the requirements of 35 IAC 811.318(b)(1): a network of monitoring points shall be established at sufficient locations downgradient with respect to groundwater flow to detect any discharge of contaminants from any part of a potential source of discharge. The distance perpendicular to groundwater flow between G216 (expansion well) and G210 (existing well) appears to be approximately 400 feet, which is greater than the modeled and proposed 250 foot well spacing. One additional groundwater monitoring well should be proposed between G210 and G216.
- 51) The application does not meet the requirements of 35 IAC 812.317(g), 811.318(e)(1) and 811.318(e)(2). The applicant's proposal to purge three well volumes is not acceptable for Agency approval. The applicant should explain how groundwater levels will not fall below the top of the well screen during groundwater purging and sampling. Groundwater levels that drop within the well screen cause "cascading" of the water, which promotes volatilization of organic parameters. The operator shall propose to monitor groundwater elevations during purging to ensure groundwater elevations do not fall below the top of the well screen.
- 52) The application does not meet the requirements of 35 IAC 812.317(g), 811.318(e)(1) and 811.318(e)(2). The application does not contain the procedures and disposition of purged groundwater produced from groundwater sampling events.
- 53) The application does not meet the requirements of 35 IAC 811.319(a)(4), confirmation procedures of monitored increase in the groundwater. Section VIII of Permit No. 2001-021-LFM, Modification No. 5 has been updated to meet the Illinois Administrative Code 811 amendments adopted by the Illinois Pollution Control Board in the R07-8 rulemaking. The proposed procedures outlined in C-5.5.3 appear to predate the latest rule making and the current procedures outlined in the facilities Permit, Mod No. 5. The operator should withdraw Section C-5.5.3 (Confirmation of an Increase) and propose to follow the confirmation procedures outlined in Conditions VIII.13 through 17 of Permit No. 2001-021-LFM, Modification No. 5.

- 54) The application does not meet the requirements of 35 IAC 811.319(b)&(c), assessment monitoring and assessment of potential groundwater impacts. The facility's permit, Permit No. 2001-021-LFM, Modification No. 5 has been updated to meet the Illinois Administrative Code 811 amendments adopted by the Illinois Pollution Control Board in the R07-8 rulemaking. The proposed procedures outlined in C-5.5.4 appear to predate the latest rule making and the current procedures outlined in the facilities Permit, Mod No. 5. The operator should withdraw Section C-5.5.4 (Assessment Monitoring) and update Section C-5.5.4 or the applicant can propose, via a statement to follow the facilities permit (Permit No. 2001-021-LFM, Mod No. 5) and the requirements of 35 IAC 811.319(b)&(c).
- 55) A Remedial Action Contingency Plan has not been proposed to satisfy the requirements of 35 IAC 811.319(d).
- 56) In accordance with 35 IAC 811.317 a) 3); The application did not provide adequate information concerning the creation of the surrogate groups and the criteria for differentiating the parameters for each group (Groups #1 through #6). The applicant should provided additional justification why there were different grouping and this information should be provided to determine the validity of the surrogates groups.
- 57) In accordance with 35 IAC 811.317; Surrogate modeling should be kept to revisions to 1 parameter to address site specific conditions. The applicant has applied retardation and revisions to diffusion coefficient to multiple surrogate runs. In order to adequately assess changes in the model, the applicant should separate these model input changes and provide additional revisions in sensitivity analysis of the surrogate model run. These separate model runs should be clearly identified for review.
- 58) In accordance with 35 IAC 811.317 In model runs for Group #5 and #6, the applicant applied both retardation and half-life to layer 1 of the model, the synthetic HDPE liner material. This is in appropriate and should be revised.
- 59) In accordance with 35 IAC 811.317 c) 3); The applicant failed to provide adequate justification for the time series seepage rates through the base liner for the proposed expansion. The Illinois EPA accepts a conservative value for landfill seepage rates through the liner. Seepage calculations should be revised. The use of the Giroud equation from the MIGRATE model is adequate and should be used with acceptable input parameters.
- 60) In accordance with 35 IAC 811.317 b); The modeled seepage rate for years 0-10 (0.001326 m/a) and years 10-20 (0.000643 m/a) are considered to be conservative and reasonable MIGRATE input values for seepage. The value for years 20-120 (0.00001428 m/a) is considered to be an order of magnitude to low, and thus is not a conservative input value and should be revised based upon the Giroud equation and upon final leachate head levels,

derived from the HELP model. At a minimum, should leachate heads remain at or below 12 inches (1 foot) leakage from years 20-120 should be no lower than  $2.6 \times 10^{-4}$  m/a.

- 61) In accordance with 35 IAC 811.317 c); The applicant has adequately used previously approved diffusion values for the recompacted liner and for the unsaturated mine spoil. However, the value for the uppermost aquifer is not acceptable. The applicant used a 20 percent value is from the LPC-PA2 guidance document which has been superseded by the revised LPC-PA19 (revised 11/9/2010). The Illinois EPA recommends that dispersivity be calculated by Gelhar (1992) for all distances or Xu and Eckstein (1995) for distance greater than 100 meters. These values should be revised.
- 62) In accordance with 35 IAC 811.317 c); For the distribution coefficient used in surrogate Group #3, the application used a  $K_d$  value taken directly from Appendix C to LPC-PA2. This is not acceptable, the LPC-PA2 document is no longer considered valid for use. The applicant should calculate  $K_d$  for surrogate Group #3 using the same method as for Groups 4-6 (with the exception of the 95% lower confidence listed below).
- 63) In accordance with 35 IAC 811.317 c); The  $K_d$  value for surrogate Group #5 and #6 was based upon a low, but arbitrary  $K_{oc}$  value and was used with the lower 95% confidence limit for  $F_{oc}$  (site specific data). This is not adequate; the lowest  $K_{oc}$  value should be used to generate the  $K_d$  input value.
- 64) In accordance with 35 IAC 811.317 a) 2); The applicant failed to adequately characterize leachate at the facility and for use in this GIA. The use of only two leachate data point from the original portion of the facility does not take into account data from the existing expansion and the current waste stream going to the facility. The facility should perform a review of all leachate data from the life of the facility and use the maximum leachate concentrations or the 95% UCL values for the data, and use this value for assessment of the contaminant transport model.
- 65) In accordance with 35 IAC 811.317 c); The applications use of the vertical Darcy velocity (leakage rate) through the composite liner to calculate the vertical diffusion coefficient for the mine spoil aquifer is unacceptable. For recompacted clay and mine spoil, a value of 0.016 through 0.02  $m^2/y$  would be considered appropriate.
- 66) In accordance with 35 IAC 811.317; The HELP model included a value of 86.29 for the SCS Runoff Curve which is acceptable, showing a good stand of grass (>75%). However, in the post closure care model (years 70) it is not reasonable in its assumption that the final cover will maintain area runoff at 100.00%. The final cover will be subject to vegetative and animal activities, and will also be subject to frost-heave situations over this 70 year period. These conditions will result in less than perfect runoff situation. Therefore, this input parameter should be revised to reflect these conditions and the HELP model rerun.

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- 67) In accordance with 35 IAC 811.317 c); With regards to the 5 surrogate model run, the applicant inappropriately applied a lesser diffusion coefficient to the base liner (HDPE) than was used in the baseline model without adequate explanation as to the appropriateness of the use of this value. Additional information addressing the revised values (HDPE diffusion coefficient) and a characterization of the specific leachate parameters is required for evaluation.
- 68) In accordance with 35 IAC 811.318 c)The applicants proposal for MAPC values is not acceptable. Illinois EPA guidance documents LPC-PA19 requires that MAPC values be based upon revisions to the baseline model (and surrogate models) where the approved model will calculate predicted concentrations at the 50 foot distance. This method allows for calculated values instead of an arbitrary ½ value from these locations.

The applicant may appeal this final decision to the Illinois Pollution Control Board pursuant to Section 40 of the Act by filing a petition for a hearing within 35 days after the date of issuance of the final decision. However, the 35-day period may be extended for a period of time not to exceed 90 days by written notice from the applicant and the Illinois EPA within the initial 35-day appeal period. If the owner or operator wishes to receive a 90-day extension, a written request that includes a statement of the date the final decision was received, along with a copy of this decision, must be sent to the Illinois EPA as soon as possible.

For information regarding the request for an extension, please contact:

Illinois Environmental Protection Agency  
Division of Legal Counsel  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, IL 62794-9276  
217/782-5544

For information regarding the filing of an appeal, please contact:

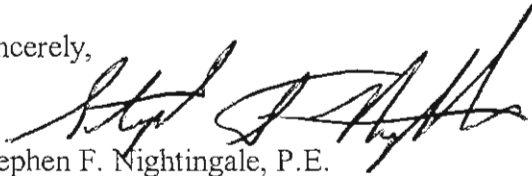
Illinois Pollution Control Board, Clerk  
State of Illinois Center  
100 West Randolph, Suite 11-500  
Chicago, IL 60601  
312/814-3620



Page 11

Should you wish to reapply or have any questions regarding this application, please contact Greg Morris at 217-782-5174.

Sincerely,



Stephen F. Nightingale, P.E.  
Manager, Permit Section  
Bureau of Land

MEM @BBMS  
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cc: Brian Horvath, P.E., Weaver Boos Consultants