BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

CITY OF JOLIET,)		
Petitioner,)	PCB 10-	CLERK'S OFFICE AUG 2 4 2010
v.)		
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,)	(Permit Appeal-Water)	STATE OF ILLINOIS Pollution Control Board
Respondent)		

NOTICE OF FILING

TO: See Attached Service List

PLEASE TAKE NOTICE that on August 24, 2010, we filed with the Office of the Clerk of the Pollution Control Board the attached **JOLIET'S PETITION FOR PERMIT APPEAL**, a copy of which is served upon you.

Respectfully submitted,

THE CITY OF JOLIET

One of Its Attorneys

Dated: August 24, 2010

Roy M. Harsch, Esq. Yesenia Villasenor-Rodriguez, Esq. Drinker Biddle & Reath LLP 191 North Wacker Drive - Suite 3700 Chicago, IL 60606 (312) 569-1441 (Direct Dial) (312) 569-3441 (Facsimile)

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

CITY OF JOLIET,)		RECEIVED
Petitioner,)		CLERK'S OFFICE
V.)	PCB 10- 8	AUG 2 4 2010
ILLINOIS ENVIRONMENTAL)	(Permit Appeal-Water)	STATE OF ILLINOIS Pollution Control Board
PROTECTION AGENCY,)		
Respondent.)		

JOLIET'S PETITION FOR PERMIT APPEAL

NOW COMES, Petitioner, THE CITY OF JOLIET (hereinafter, "Joliet"), by and through its attorneys, Drinker Biddle & Reath LLP, and pursuant to Section 40(a)(1) of the Illinois Environmental Protection Act (415 ILCS 5/40(a)(1)) ("Act") and 35 Ill. Adm. Code § 105.204, petitions the Illinois Pollution Control Board ("Board") for review of the its Land Application of Sewage Sludge permit appeal.

In support thereof, Joliet states as follows:

- 1. Joliet owns and operates three wastewater treatment plants located in Joliet, Illinois identified as the East, West, and Aux Sable plants.
- 2. The Illinois Environmental Protection Agency ("Illinois EPA") issued Joliet its Sewage Sludge Permit No. 20006-SC-4784-5 dated March 2, 2010 in connection with the above wastewater treatment plants. (See Attachment A Joliet's Sludge Permit and Related Correspondence).
- 3. Joliet's Sludge Permit allows the land application of sludge if (1) the radium concentration in the sludge is less than or equal to 75 pCi/g; and (2) the soil radium concentration does not increase by greater than 0.4 pCi/g. (See Attachment A).

- 4. Based on Illinois EPA's correspondence, it appears that these limitations were granted in part based upon the Illinois Emergency Management Agency's ("IEMA's") issuance of a temporary exclusion from the licensing requirements of the Radiation Protection Act as provided in 32 Ill. Adm. Code 330. Joliet never requested such an exclusion, never spoke with anyone at IEMA regarding such an exclusion, was never provided notice by IEMA regarding its consideration of such an exclusion, and was never provided with any determination by IEMA regarding this apparent determination.
- 5. On April 21, 2010, Joliet submitted a request to the Illinois EPA requesting to modify its March 2, 2010 sludge permit to allow it to land apply sludge at a limitation of 1.0 pCi/g without a maximum radium concentration. (See Attachment B). Joliet requested this modification because it disagreed with the limitations and the manner in which such limitations were included as part of its permit terms (which apparently was promulgated as a result of IEMA's issuance of a temporary exclusion from its licensing requirements). Joliet copied IEMA on its April 21, 2010 correspondence to Illinois EPA and requested that IEMA amend or modify its exclusion based on the information provided therein. (See Attachment B).
- 6. Specifically, Joliet requested a modification of the Illinois EPA-issued sludge permit based on the following four reasons: (1) Illinois EPA and IEMA failed to provide any notice that an exemption from IEMA's licensing requirements was even under consideration; (2) Joliet was never asked to provide any information in establishing a final determination of the limits provided in its sludge permit (especially in light of the fact that correspondence between IEMA and Illinois EPA show that the 75 pCi/g was calculated arbitrarily); (3) there was no rational basis for both a maximum soil increase limitation and a radium sludge concentration limit and, thus, Joliet proposed an exclusion from IEMA's licensing requirements whereby, the

increase in radium in the soil would not exceed 1.0 pCi/g; and (4) the proposed requested exclusion of 1.0 pCi/g was protective of the environment and health based on the expected calculated dose. (See Attachment B).

- On July 30, 2010, the Illinois EPA denied Joliet's request to modify its permit. (See Attachment C). Illinois EPA indicated in its denial that it was due in part to IEMA's refusal to modify the temporary exclusion it had unilaterally issued to Joliet. However, Joliet was not provided with the technical reasons for denying its permit modification request. Indeed, Joliet not only requested the above modification, but it also provided supporting information. Despite its efforts, Joliet was never contacted by IEMA nor did it receive a response from IEMA.
- 8. Pursuant to Section 40(a)(1) of the Act (415 ILCS 5/40(a)(1)(2007)) the "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).
- 9. Accordingly, Joliet seeks to appeal the Illinois EPA's July 30, 2010 denial of its requested permit modification as set forth in its correspondence to the Illinois EPA and the Illinois Emergency Management Agency dated April 21, 2010. (See Attachment B).
- 10. Joliet seeks to appeal the Illinois EPA's decision based on the fact that the limitations provided for in the permit were issued without fair notice or an opportunity to participate in the process. Moreover, the limitations are not substantiated in the law and/or science.

WHEREFORE, for all the foregoing reasons, Joliet, respectfully requests that the Board approve its Petition for Permit Appeal.

Respectfully submitted,

THE CITY OF JOLIET,

Dated: August 24, 2010

Roy M. Harsch, Esq. Yesenia Villasenor-Rodriguez, Esq. Drinker Biddle & Reath LLP 191 North Wacker Drive - Suite 3700 Chicago, IL 60606 (312) 569-1441 (Direct Dial) (312) 569-3441 (Facsimile)

CERTIFICATE OF SERVICE

I, the undersigned, certify that I have served the attached, by certified mail, postage prepaid on August 24, 2010 as follows:

Allan Keller
Manager, Permit Section
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, IL 62794-9276

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

Yesenia Villasenor-Rodriguez

CH01/12494015.2



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 • (217) 782-2829 James R. Thompson Center, 100 West Randolph, Suite 11-300, Chicago, IL 60601 • (312) 814-6026

PAT QUINN, GOVERNOR

DOUGLAS P. SCOTT, DIRECTOR

217-782-0610

March 2, 2010

Mr. James E. Eggen, P.E., Director Department of Public Utilities City of Joliet 921 East Washington Street Joliet, Illinois 60433

Re:

City of Joliet-Land Application of Sewage Sludge

Log No. 3204-09

Dear Mr. Eggen:

The Agency has completed its review of the above referenced project and has made the following determinations:

- 1. The application of sludge containing naturally occurring radioactive material (NORM) is governed by the Radiation Protection Act of 1990 (420 ILCS 40). In order to address the questions of public health and safety the City's proposed permit modification was referred to the Illinois Emergency Management Agency for that Agency's review and approval on February 17, 2010. Based on that review, on February 25, 2010, the Illinois Emergency Management Agency has granted the enclosed temporary exemption to the licensing requirements of 32 Ill. Adm. Code 310.30(a).
- 2. The temporary exemption granted by the Illinois Emergency Management Agency is based on 1) a maximum allowable radium concentration of 75 pCi/g in the sludge and 2) an allowable increase in soil radium concentration not to exceed 0.4 pCi/g. In addition the revised analysis by the City of Joliet documented that the proposed project would not cause water pollution in violation of Section 12(a) of the Act.
- Based on the preceding Illinois EPA has issued a supplemental permit to the City of
 Joliet allowing the application of sludge, containing 75 pCi/g or less, to land provided
 such application does not result in an increase in soil radium concentration of greater than
 0.4 pCi/g.

Should you have any question regarding this letter or its contents please contact Jeff Hutton at 217-782-0610.

Sincerely,

Alan Keller, P.E.

Manager, Permit Section

Division of Water Pollution Control

SAK: JCH: Joliet cover letter.docx

CC: Des Plaines Regional Office

Records-Division File Rogina & Associates, Ltd. Drinker, Biddle & Reath, LLP

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY WATER POLLUTION CONTROL PERMIT

LOG NUMBERS:

3204-09

PERMIT NO.: 2006-SC-4784-5

DATE ISSUED: March 2, 2010

FINAL PLANS, SPECIFICATIONS, APPLICATION AND SUPPORTING DOCUMENTS

PREPARED BY: Rogina & Associates, Ltd.

SUBJECT: JOLIET-Land Application of Sewage Sludge

PERMITTEE TO OPERATE

City of Joliet
Department of Public Utilities
921 East Washington Street
Joliet, Illinois 60433



Supplemental Permit is hereby granted to the above designated permittee(s) to construct and/or operate water pollution control facilities, which were previously approved under Permit 2006-SC-4784 dated October 5, 2006. These facilities have been revised as follows:

The permittee may apply sludge to land provided 1) the radium concentration in the sludge is less than or equal to 75 pCi/g and 2) the soil radium concentration does not increase by greater than 0.4 pCi/g.

This permit expires on September 30, 2011.

All Standard and Special Conditions and provisions of the original permit are also applicable to this permit unless specifically deleted or revised in this permit.

This Permit is issued subject to the following Special Condition(s). If such Special Condition(s) require(s) additional or revised facilities, satisfactory engineering plan documents must be submitted to this Agency for review and approval for issuance of a Supplemental Permit.

THE STANDARD CONDITIONS OF ISSUANCE INDICATED ON THE REVERSE SIDE MUST BE COMPLIED WITH IN FULL. READ ALL CONDITIONS CAREFULLY.

SAK:JCH:j:\docs\permits\statecon\hutton\3204-09.docx

DIVISION OF WATER POLLUTION CONTROL

CC:

Binds

EPA-Des Plaines FOS Rogina & Associates, Ltd. Records - Municipal

Alan Keller, P.E.

Manager, Permit Section

DrinkerBiddle&Reath

Roy M. Haosch Partner 312-569-1441 Direct 312-569-3441 Fax roy.harsch@dbr.com

Law Offices

191 North Wacker Drive Suite 1700 Chicago, IL 60606-1698

312-569-1000 phone 312-569-3060 fax www.drinkerbiddle.com

ALFORNAL SALES ALFORDERS A

April 21, 2010

VIA CERTIFIED MAIL AND EMAIL:

Allen Keller
Illinois Environmental Protection Agency
Manager, Permit Section
Division of Water Pollution Control
1021 North Grand Avenue East
Springfield, Illinois 62794

Re: City of Joliet - Permit Modification Request

Log No. 3204-09

Dear Mr. Keller:

We are writing this letter on behalf of our client, the City of Joliet "Joliet", to request a modification to Joliet's Illinois Environmental Protection Agency ("Illinois EPA") Sewage Sludge Permit No. 2006-SC-4784-5 dated March 2, 2010. Specifically, Joliet requests a modification of the 0.4 picocuries per gram ("pCi/g") and the deletion of the maximum sludge concentration of 75 pCi/g that were established in this permit and issued on March 2, 2010 as a temporary exemption authorized by the Illinois Emergency Management Agency ("IEMA") under the Radiation Protection Act of 1990. Joliet requests that the permit be modified to a limitation of 1.0 pCi/g without a maximum radium concentration. Joliet disagrees with the inclusion of 0.4 pCi/g as an unnecessarily restrictive limitation and is requesting a modification based on the following reasons.

First, Joliet's interim relief was granted without providing any notice that such exemption was under consideration by the Illinois EPA and IEMA. Consequently, Joliet was unable to provide any information in establishing this final determination that negatively impacts Joliet. Second, Joliet was never asked to provide any information. Therefore, how could the Illinois EPA and IEMA make a determination that the temporary exemption would be based on a maximum allowable radium concentration of 75 pCi/g? Based on correspondence between Illinois EPA and IEMA, it appears that the maximum allowable radium concentration was determined arbitrarily without any legal or technical justification. In particular, IEMA internal correspondence from Mr. Gary McCandles, Chief of IEMA Bureau of Safety to IEMA Director Andrew Velasquez III dated February 25, 2010, indicates that IEMA took the highest sludge concentration amount of Joliet's sludge analysis (as available to the Illinois EPA) - which appeared to be 65 pCi/g and added an additional 10% to that value for a total of 75 pCi/g. There is no scientific or legal basis that validates this arbitrary method of calculation.

Established 1849



Allen Keller April 21, 2010 Page 2

Nor is there any rational basis for both a maximum soil increase limitation and a maximum sludge concentration limit.

Third, Joliet in this modification, unlike its previous request, is not proposing a dose-based limitation (as provided in its request for reconsideration to Illinois EPA dated December 1, 2009) but rather a soil increase number of 1.0 pCi/g limitation. Joliet believes that this limitation will not cause or contribute to any violations of the Illinois Environmental Protection Act as provided in the modeling included in Joliet's request for reconsideration. Based on discussions with IEMA and IEPA, Joliet believes that public health protection is provided at a reasonable cost by limiting the dose resulting from land application to 10 milli-rems per year including the dose contribution from radon. Modeling using RESRAD (with the topsoil removed from beneath the home) predicts a dose less than 10 milli-rems per year using an increase in concentration of radium in the sludge-soil matrix of 1.0 pCi/g. Furthermore, the method that Joliet will utilize to measure the radium concentration will ensure that it will not exceed the 1.0 pCi/g of the radium containing biosolids that will be land applied. Additionally, Joliet would like to incorporate the information provided in its permit record in support of this request.

Based on the above information, Joliet is proposing the following:

The incremental increase of the radium concentration in the soil shall not increase by more than 1.0 pCi/g. The incremental increase of the radium concentration in soil shall be determined by calculation. The calculation shall have multiple parts. The concentration of radium in the sludge or residual shall be determined by a laboratory analysis using an approved method. The laboratory determined concentration of radium in the residuals or sludge in pCi/g determined on a dry weight basis shall be multiplied by the estimated quantity of residual or sludge applied to the field determined on a dry weight basis in grams. The result of this calculation is the number of pCi/g applied to the field.

The second part shall multiply the number of acres receiving sludge or residuals times 1,778,293,440 which is the weight of soil receiving sludge or residuals for a depth of one foot from the surface in grams. The total weight of the soil-sludge-residual matrix in grams is the sum of the estimated quantity of residuals or sludge in grams plus the weight of soil receiving sludge or residuals in grams. The final calculation is the division of the pico-curies applied to the field by the total weight of the soil-sludge-residual matrix in grams resulting in the incremental increase in concentration of radium in pico-curies per gram.

The resulting concentration shall be recorded in the permanent records for each field for use in determining the cumulative increase to the field from multiple applications. These applications shall be reported periodically to the Illinois EPA and

Allen Keller April 21, 2010 Page 3

kept with the records of cumulative metal loadings to the field. This is the same manner by which compliance with the current limitation of 0.4 pCi/g is determined.

Finally, Joliet believes that the exclusion of a radium concentration is permissible under the circumstances based on the fact that Radium 226 has a long half-life. Consequently, the application period for a particular field represents a very small part of the half life. If a given field receives a single application at year 0 increasing the background by 1.0 pico-curie per gram, 40 years of decay only represents 2.5% of the half-life of 1600 years. At the end of the period, the dose from the single sludge application will only be 2.5% less than a single application in year 40. Multiple applications at lesser radium concentrations with a cumulative increase in background of 1.0 pico-curies per gram between year 0 and year 40 would provide doses with in this 2.5% range. 2.5% is not a significant change in dose. This similarity in dose is the reason for eliminating any restriction on the concentration of radium in sludge.

Based on the information provided herein, Joliet respectfully requests that Illinois EPA modify its March 2, 2010 permit from 0.4 pCi/g to a 1.0 pCi/g limitation. Joliet is today requesting that IEMA modify the temporary exemption it previously authorized, (A copy of which is attached). Should you have any questions, please contact me at (312) 569-1441 or roy.harsch@dbr.com. Thank you for your consideration.

Very truly yours,

Roy Marsch

Roy M. Harsch

cc: Gary McCandless, Chief IEMA Bureau of Environmental Safety Jeff Hutton, Illinois Environmental Protection Agency Dennis Duffield, Rogina & Associates Jim Eggen, City of Joliet Harold Harty, City of Joliet



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 North Grand Avenue Fast, P.O. Box 19276, Springfield, Illinois 62794-9276 • (217) 782-2829 James R. Thompson Center, 100 West Randolph, Suite 11-300, Chicago, IL 60601 • (312) 814-6026

PAT QUINN, GOVEKNOR

DOUGLAS P. SCOTT, DIRECTOR

217/782-0610

July 30, 2010

City of Jollet
Department of Public Utilities
921 East Washington Street
Jollet, Illinois 60433

Re: JOLIET-EAST, WEST & AUX SABLE STPS-Land Application of Sewage Sludge

Log No(s). 0383-10

Denial

Gentlemen:

This Agency has reviewed your Application for Permit and the supporting documents for the subject project which were received on April 22, 2010. For the following reasons, the Agency denies your request filed on April 22, 2010.

Section 11(c) of the Environmental Protection Act (Act), 415 ILCS 5/11(c), prohibits the Agency from taking any action that would "limit, affect, impair, or diminish the authority, duties and responsibilities of the Board, Agency, Department or any other governmental agency to regulate and control pollution of any kind to restore, to protect, or to enhance the quality of the environment, or to achieve all other purposes, or to enforce provisions set forth in this Act or other State law or regulation." Any authorization for the disposal of "collected screening, slurries, sludges, and other solids," is incorporated as part of the applicable NPDES Permits issued to the City of Jolict under Standard Condition 23 of NPDES Permit Numbers IL0022519, IL0033553 and IL0076414.

The following information, clarification or corrections must be provided for us to complete our review of your request and are to be considered specific reasons why the Act and the regulations adopted pursuant to the Act will not be met:

 Inasmuch as the numerical limit for the soil concentration of radium contained in the Memorandum of Agreement between the Illinois Environmental Protection Agency and the Illinois Emergency Management Agency was determined to be invalid by the Illinois Pollution Control Board, the regulation of naturally occurring radioactive material is governed by the Radiation Protection Act of 1990. Pursuant to that Act the Illinois

> Des Plaines = 11511 W Harrison St., Des Plaines, IL 60018
> Peoria = 5415 M University St., Pooria, IL 61614 = (3017010-2100-Champaign = 2125 S. furti St., Champaign, IL 61820 = (217) 278-58008
> Murjion = 2300 W. Main St., Sunte (16, Marton, IL 62050 = (618) 993-7200

Emergency Management Agency has determined that it cannot support the City of Joliet's proposal. The Illinois Environmental Protection Agency may not unilaterally modify the existing exemption to the Radiation Protection Act.

2. A copy of the City's request for a supplemental permit was submitted to the Illinois Emergency Management Agency concurrently with the request which was received by the Illinois Environmental Protection Agency on April 22, 2010. The Illinois Emergency Management Agency has determined that, "According to the Radiation Protection Act of 1990, (420 ILCS 40), these waste water treatment sludges are radioactive material subject to the licensing requirements in 32 Ill. Adm. Code 330." The Illinois Emergency Management Agency's determination to not support the City's proposal is contained in the attached letters. Technical issues stemming from this determination must be resolved between the City and the Illinois Emergency Management Agency.

Since the Illinois Environmental Protection Agency does not have authority to determine acceptable levels of radium in sludge for human health purposes, we encourage the City to resolve the technical issues involved in the City's proposed supplemental pennit directly with the Illinois Emergency Management Agency. On receipt of your written request and the necessary information and documentation to resolve the issues noted above the Agency will review the requests for proposed changes in State Operating Permit No. 2006-SC-4784-5. The revised application will be considered filed on the date that the Agency receives your written request. Please reference the above-listed log number in your transmittal letter.

You have the right to appeal this denial to the Illinois Pollution Control Board within a 35 day period following the date shown on this letter.

Should you have any questions of comments regarding the above, please contact Jeff Hutton at 217/782-0610 or at the above address.

Sincerely,

Manager, Permit Section

Division of Water Pollution Control

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W/ attachments

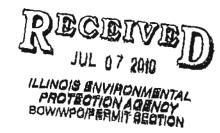
cc: EPA-Des Plaines FOS
Illinois Emergency Management Agency
Roy M. Harsch
Records - Municipal
Binds



Pat Quinn, Governor Joseph Klinger, Interim Director

July 6, 2010

Al Keller, P.E.
Manager, Permit Section
Division of Water Pollution Control
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 19276
Springfield, IL 62794-9276



Dear Mr. Keller:

Per your request, the Illinois Emergency Management Agency (IEMA) has reviewed the City of Joliet's application to modify its State Operating Permit provided in a letter to IEPA dated April 21, 2010. IEMA does not support the City of Joliet's request to modify the limits in their existing permit. The current limits were established in an IEMA temporary exemption to the requirements in 32 Ill. Adm. Code 330 granted February 25, 2010.

Any questions may be directed to me at 217-782-1329.

Sincerely,

Gary W. McCandless, P.E., Chief Bureau of Environmental Safety

GWM:rev



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Pet Quinn, Governor

Andrew Valasquaz III, Director

Joseph G. Klinger, Assistant Director

February 25, 2010

Al Keller, P.E.
Manager, Permit Section
Division of Water Pollution Control
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 19276
Springfield, IL 62794-9276

Dear Mr. Keller:

The Illinois Emergency Management Agency has reviewed the City of Joliet's application to modify its State Operating Permit provided in your February 17, 2010 correspondence. In addition, IEMA has reviewed the recent testing results from the City of Joliet showling that the total radium concentration in sewage sludge from the Aux Sable waste water treatment plant is 62.1 pCi/g and 67.3 pCi/g from the Westside treatment plant.

According to the Radiation Protection Act of 1990, (420 ILCS 40), these waste water treatment sludges are radioactive material subject to the licensing requirements in 32 III. Adm. Code 330. Pursuant to 32 III. Adm. Code 310.30(a), the Agency may grant exemptions from the requirements of 32 III. Adm. Code: Chapter II, Subchapters b and d as it determines are authorized by law and will not result in undue hazard to public health and safety of property.

IEMA denies Joliet's request "that rather than a limitation of 1.0 pCi/g that IEPA include a limitation that the application of sludge can not result in an increased radiation dose greater than 10 millirem using the highest sludge concentration measured by Joliet". IEMA grants the City of Joliet a temporary exemption allowing the City to land apply sewage sludges with total radium concentrations of 75 pCi/g or less such that the application of these sludges will not result in the total accumulative increase in total radium concentration in the soil to exceed 0.4 pCi/g. Land application of sludges exceeding these limits is prohibited unless authorized by a radioactive materials license. These limits are an interim measure to provide Joliet temporary relief until the





Mr. Al Keller February 25, 2010

Page 2

rulemaking is finalized. Once the proposed amendment is adopted, the final provision of the rule would be implemented.

Any questions may be directed to me at 217-782-1329.

Sincerely,

Gâry W. McCandless, P.E., Chief

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Bureau of Environmental Safety