

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

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FEB 20 2009

STATE OF ILLINOIS  
Pollution Control Board

CITY OF JOLIET, )  
)  
Petitioner, )  
)  
v. )  
)  
ILLINOIS ENVIRONMENTAL )  
PROTECTION AGENCY, )  
)  
Respondent. )

PCB 09-025  
(Permit Appeal-Water)

NOTICE OF FILING

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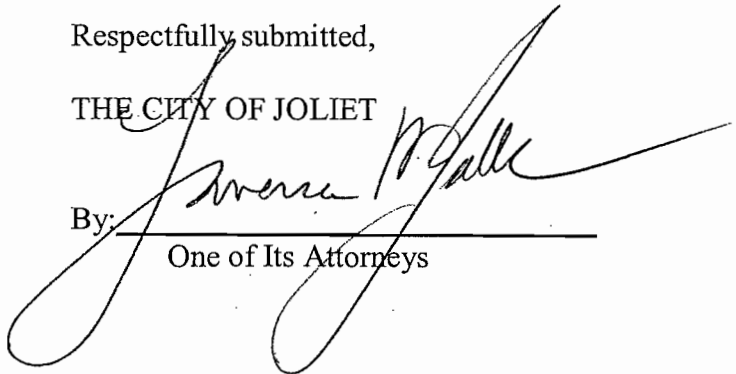
**PLEASE TAKE NOTICE** that on **February 20, 2009**, we filed with the Office of the Clerk of the Pollution Control Board – **Petitioner's Post Hearing Memorandum**, a copy of which is served upon you.

Respectfully submitted,

THE CITY OF JOLIET

By: \_\_\_\_\_

One of Its Attorneys



Dated: February 20, 2009

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	)	
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**PETITIONER'S POST-HEARING MEMORANDUM**

Petitioner, City of Joliet ("Joliet"), hereby submits its post-hearing memorandum in the above-captioned matter.

**I. QUESTION PRESENTED**

The issue presented in this permit appeal is whether the Illinois Environmental Protection Agency ("IEPA" or the "Agency") improperly denied Joliet's request to modify its Land Application of Sewage Sludge Permit (the "Permit") in connection with Joliet's environmentally-beneficial land application of bio-solids as fertilizer on farm fields, which it uses as an alternative to disposal of this material in landfills. In 2007, Joliet requested modification of Special Condition 2 of the Permit, which limits the total accumulative amount of radium 226 and 228 in soil<sup>1</sup> to only 0.4 picoCuries per gram (pCi/g) above background levels, to a higher limit of 1.0 pCi/g. The reason for this modification request was because the lower limit of 0.4 pCi/g restricted the number of land applications of bio-solids to so few total applications

<sup>1</sup> Radium is a radioactive element that is found naturally in soil and groundwater, and also in the bio-solids that are produced by Joliet in the process of treating its wastewater. Each application of bio-solids to a farm field is assumed to add a tiny incremental amount of radium to the soil and, therefore, Special Condition 2 has the effect of limiting the total number of applications of bio-solids that are allowed on any one farm field.

that farmers were reluctant to disrupt their standard fertilization programs for such a limited benefit.

Prior to final denial of the requested modification, IEPA and Joliet had engaged in extensive negotiations concerning the appropriate radium limit. At the end of the day, the only actual point of disagreement between Joliet and IEPA (which caused IEPA to deny the modification request) was whether the standard and required building practice of removing topsoil is a factor that may be considered in determining the allowable increase of radium levels in the soils from Joliet's bio-solids program. Thus, the specific question to be decided in this appeal is simply whether the record shows that Joliet proved that its bio-solids program with the requested permit modification would not cause a violation of the Illinois Environmental Protection Act (the "Act"), 415 ILCS 5/1 *et seq.*, or applicable regulations, or otherwise would cause harm or undue risk to human health or the environment, if Special Condition 2 had been modified as Joliet had requested.

## II. STATEMENT OF THE CASE

This permit appeal is somewhat unusual in that the only issue that is in dispute between IEPA and Joliet is one small facet of Special Condition 2 (which itself is one small part of the Permit); specifically, whether the legally-mandated building practice of removing topsoil before constructing a residence is a factor that may be considered in determining the theoretical allowable increase of radium levels in the soils from Joliet's bio-solids program. Thus, this case is not about whether the land disposal of bio-solids that can add small amounts of radium to farm soil is permitted at all—it is allowed, consistent with the conditions of the Permit. This case is also not about challenging IEPA's authority to regulate radium levels under the Permit—for the purposes of this appeal, Joliet does not contest IEPA's authority to limit the total amount of

radium incident in soils in conjunction with the land application of bio-solids. Nor is this case about the actual dosage of radiation that is considered protective—10 millirems—as each party agrees that the 10 millirem exposure level is the appropriate maximum level from which the land application limit (e.g., 0.4 pCi/g in the Permit, compared to 1.0 pCi/g as requested by Joliet) is derived.

Rather, the real issue is whether Joliet or IEPA is correct as to the proper exposure model input to use when calculating the radium dosage based on the assumptions that are made concerning whether topsoil is usually removed as part of residential construction. As set forth herein, the record, including evidence and testimony submitted by Joliet's experts, shows that applicable building codes in the Joliet area mandate that topsoil must be removed for structural reasons before beginning construction of slab-on-grade residential structures.<sup>2</sup> Thus, by scraping/removing such topsoil before constructing a house, the risk of radiation exposure resulting from the elevated levels caused by previous bio-solid application on the land is greatly reduced, and the exposure model should take this into consideration in calculating the total land application limits for bio-solids based on a 10 millirem safe radiation exposure level.

Also unusual is the fact that the record clearly shows that IEPA's technical staff in large part agrees with Joliet, as evidenced by discussions with IEPA's personnel and internal IEPA memos that are contained in the record. Interestingly, it appears from the record that the contention over the building code issue is being driven by the Illinois Emergency Management Agency ("IEMA"), which also participated in the Permit modification negotiations (although it is not a party to this appeal). Despite the agreement of IEPA personnel with Joliet on these issues,

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<sup>2</sup> For residential structures with below-grade features, e.g., a basement, this is not even an issue, since the topsoil obviously must be removed in order to construct such features at all.

in the final decision on the Permit modification request, it appears that IEPA improperly gave deference to the position of IEMA, rather than acknowledge the evidence presented by Joliet and even the opinions of its own agency personnel.

The only justification IEPA provided for denying Joliet's appeal request in connection with Special Condition 2 was a 1984 Memorandum of Agreement ("MOA") between IEPA and IEMA.<sup>3</sup> As explained herein, not only does the specific limitation in the MOA (0.1 pCi/g) constitute an impermissible rulemaking without following proper rulemaking procedures under the Administrative Procedure Act ("APA"), 5 ILCS 100/5-40, or any specific authority to implement such a rule under the Act, IEPA's reliance on the MOA as justification for denial of the requested Permit modification is misplaced, simply because IEPA has already disregarded the MOA by issuing the Permit with a limit of 0.4 pCi/g in Special Condition 2—a limit that is clearly in excess of what it is allowed under the same MOA.<sup>4</sup>

Thus, as is evidenced in the record, IEPA did not follow the applicable rulemaking procedures set forth in the APA. IEMA and IEPA entered into this agreement without giving the public and those affected by this rule notice or an opportunity to comment on such rule, thereby violating the rulemaking requirements to which both agencies are subject. Consequently, the MOA constitutes an impermissible, and unenforceable, rulemaking. Furthermore, given that Special Condition 2 allowed for a higher radium limit than what was dictated in the plain

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<sup>3</sup> Interestingly, Joliet commenced its bio-solids program in 1982; however, it was not until October 2006, when IEPA issued Joliet's renewal permit number 2006-SC-4784 ("October 2006 Permit") that IEPA imposed such a limitation on the allowable increase in soil radium. Consequently, although the MOA between IEPA and IEMA has been in existence for most of the duration of Joliet's bio-solids program, IEPA waited 24 years before it applied such limitation to Joliet's Land Application of Sewage Sludge Permit.

<sup>4</sup> Although IEPA has also generally cited to Sections 12 and 39 of the Act in support of its Permit modification denial, these sections of the Act simply concern enforcement of the general prohibitions on causing water pollution and IEPA fails to offer any evidence that granting the Permit modification from 0.4 pCi/g to 1.0 pCi/g, as requested, would have caused a violation of these sections. Nor is any evidence concerning this issue set forth in the record.

language of the MOA, it is clear that IEPA did not even follow the terms of the MOA when it issued Joliet's modified permit on February 16, 2007, and obviously did not consider itself bound by the MOA at that time.

Finally, Joliet has shown, and the record reflects, that the modification of Special Condition 2 from 0.4 pCi/g to 1.0 pCi/g will not cause a violation of the Act. Prior to the hearing, Joliet provided IEPA and IEMA with substantial information supporting the request for modification of Special Condition 2. (R6 - R335). IEPA and IEMA agreed with many of the conclusions supported in the reports and documents prepared by Joliet's witnesses as evidenced by the Mr. Hutton's July 18, 2007 memorandum to various employees of IEPA. (R27 - R35). Most importantly, IEPA and IEMA accepted and agreed that a 10 millirem radiation dose is deemed safe. However, although the parties agree that such is an acceptable dose, IEPA and IEMA differ in opinion with respect to the method of calculation of the theoretical dose. Specifically, IEMA does not accept that topsoil is almost always stripped before homes are built and, therefore, IEMA's modeling assumes that the topsoil always remains underneath a house. In fact, the contrary is true because, as set forth in the record, the majority of building codes (as well as standard building practices) require that the topsoil be removed prior to construction.

Moreover, at the Permit hearing, Joliet's expert witnesses' testimony showed that Joliet's program of land application is safe, and that a more stringent limitation in Special Condition 2 is not necessary. Surprisingly, counsel for IEPA did not present any witnesses from IEPA or IEMA to challenge Joliet's expert witnesses' testimony.<sup>5</sup> Based on the above, there is substantial evidence in the record that supports Joliet's contention that a modification of its current permit

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<sup>5</sup> Moreover, no representatives from either agency even attended the hearing.

limitation to 1.0 pCi/g is safe and protective of human health and the environment, and will not cause a violation of the Act or applicable regulations.

The denial of Joliet's requested Permit modification will have a great negative impact on Joliet and the farmers that rely on bio-solids because such a limitation is too restrictive and scientifically unnecessary, as explained further below. Joliet has operated a successful and safe bio-solids program that is considered a model for others. In addition to providing a benefit to the recipient farmers/landowners, the program is beneficial to the environment because the only other alternative for dealing with the radium containing bio-solids would be to dispose of the material in a landfill. The current present value of the cost associated with the existing land application program is about \$10,265,000. However, the cost for disposal of such to a landfill would be more than four times the current cost, and totals \$48,083,408.

Therefore, for the reasons set forth herein, the Board should overturn IEPA's denial of Joliet's permit modification request, and remand the permit determination back to IEPA with instructions to revise Special Condition 2 to allow for a limit of 1.0 pCi/g of radium to be added to soil as a result of bio-solid applications.

### **III. BACKGROUND FACTS AND PROCEDURAL HISTORY**

#### **A. Background Facts**

Joliet is a municipality that operates three wastewater treatment plants ("WWTP"). (R2). In 1982, Joliet started a Land Application Program for the disposal of bio-solids from two of its WWTP operations, and has continued this successful program ever since. (R55). From the beginning of the program, Joliet used an independent agronomist to do all of the field-testing required by the permit it received from IEPA which authorized the land application of its bio-

solids. (R55). Joliet has never received any notice of violation or complaint regarding its bio-solids program. (Hearing Testimony dated January 13, 2009 of H.Harty 8:8-19, Exhibit 1, at 1).<sup>6</sup> Joliet's land application program follows the applicable environmental requirements concerning setbacks from streams, roads, and buildings to prevent any potential violation of the Act or the regulations. (D.Duffield 15:20-16:4, Exhibit 4, at 24). In fact, its program has met or exceeded all requirements set by the IEPA and the United States Environmental Protection Agency ("U.S. EPA"). (H.Harty 8:8-19, Exhibit 1, at 1).

Joliet has worked with Daniel Fiedler, a licensed Agronomist of Land Treatment Alternatives, since the inception of its bio-solids program. (R55). Mr. Fiedler serves as Joliet's independent agronomist and, in that capacity, has the responsibility of talking to interested growers, confirming achieved yields, conducting testing of the soil and calculating the amount of bio-solids necessary to achieve the expected yield of the crop. (R55). There is extensive testing that is conducted prior to the land application and thereafter. (R55).

After application, the dates and rates are recorded and kept on file. (H.Harty 9:5-21, Exhibit 2, at 1). All fields since the 1980s that have had bio-solids applied are on file, and additional testing is performed prior to the next application on the same field. (H.Harty 9:5-21, Exhibit 2, at 1). Joliet will not apply bio-solids to a field that has received bio-solids from other facilities. (H.Harty 9:5-21, Exhibit 2, at 1).

The bio-solids process begins at the Joliet treatment plant with the treatment of its sanitary sewage sludge. (H.Harty 7:18-8:17, Exhibit 1, at 2). Sludge settles in plant clarifiers and is directed to digesters at each plant. (R280 - R283). Bacteria in the digesters reduce the

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<sup>6</sup> Subsequent citations to witness testimony at the January 13, 2009 hearing will be referenced by witness name and reference to the hearing transcript.



amount of organic matter and stabilize the sludge for land application. (R280 - R283). Thereafter, the bio-solids are collected in the anaerobic digesters at Joliet's two older plants (the East Side and West Side Plants) and in the aerobic digester at its newer plant (Aux Sable Plant). (R280 - R283). The bio-solids are transferred to storage tanks at each plant site. (R280 - R283).

Joliet enters into an annual agreement with each landowner/grower whose fields have been identified by Joliet's agronomist as potential fields for the contract period. (R55). All farmers are informed of the constituents of the bio-solids and sign a User Information Sheet form accepting the bio-solids. (R282). This User Information Sheet identifies the analysis of the sludge, the crop to be grown and the yield goal. (H.Harty 7:18-8:17, Exhibit 1, at 2).

The hauling and land application is contracted by public bid to licensed applicators who are independent of the agronomist. (R55). The applicator provides tank trucks to transport liquid sludge from the Joliet plants to each specific field in the program. (H.Harty 9:5-21, Exhibit 2, at 1). Each truck holds approximately 5500 gallons per load. (H.Harty 9:5-21, Exhibit 2, at 1). The applicator provides fertilizer applicators with chisel plows mounted with injectors to apply the bio-solids below the ground surface in the top 12 inches of soil. (H.Harty 9:5-21, Exhibit 2, at 1). The application rates established by the agronomist and agreed to in writing by the landowner/grower are utilized. (R55). The percentage of solids of the sludge applied and the gallons applied are recorded to verify application rates. (H.Harty 9:5-21, Exhibit 2, at 1). The agronomist adds the current application based on the records of the total applied to a given field. Total loadings are compared to U.S. EPA and IEPA-allowed loadings to assure compliance. (R48).

To encourage acceptance of sludge in the spring, growers are paid \$50 per acre for the right to apply the bio-solids, and up to an additional \$50 per acre is paid if the crop yield is less

than the five-year average yield for that field. (H.Harty 7:18-8:17, Exhibit 1, at 2). The City of Joliet's Land Application Program has become a model for others to follow. (H.Harty 7:18-8:17, Exhibit 1, at 2). This program has merit in that Joliet is recycling the product to the best use of technology. (R55 - R59). The only economical alternative for Joliet would be to landfill, which has no benefit to the environment and is considerably more costly. (R60 - R65).

Although Joliet has operated its program since 1982, Joliet was not subject to a limitation on radium until October 2006, when IEPA issued Joliet permit 2006-SC-4784 ("October 2006 Permit").<sup>7</sup> (R6 - R8). The limitation in the October 2006 Permit concerned Joliet because it only allowed for a total accumulative increase of radium to a maximum level of 0.1 pCi/g resulting from the application of bio-solids. (R6 - R8). Based on this limitation, Joliet's agronomist and consultants concluded that the number of applications would be limited to only one. (R104 - R291). Joliet's agronomist informed Joliet that it would be very difficult, if not impossible, to get landowners/growers to agree to be part of the program for such limited benefit. (H.Harty 7:18-8:17, Exhibit 1, at 2). It was at this point that Joliet began a series of discussions with the IEPA and IEMA to attempt to reach an agreement to increase the limitation in its Permit before proceeding with the formal attempts to appeal the decision as described in Section B below. The documentation concerning these discussions is included in the record at R6 - R96.

The IEPA proposed regulations concerning water quality standard for radium on January 13, 2004 and adopted as the final rule on March 15, 2006, and docketed as PCB R2004-021. Mr. Dennis Duffield, who was employed at Joliet at that time, was actively involved in this

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<sup>7</sup> It is uncontroverted that IEPA never included any requirements in the Joliet land application permit that limited the quantity of radium applied to farm fields until October of 2006, some 22 years after it was originally issued. Furthermore, Joliet is not aware of any other permit with limits that predate its October 2006 permit. (D.Duffield 15:20-16:4, Exhibit 4, at 5).

rulemaking proceeding. (R317 - R318). It was during the course of the hearings concerning the proposed rule in PCB R2004-021, that Joliet first learned of the MOA between IEPA and IEMA regarding the radium in sludge. Based on the potential consequences of the above rule and the MOA, Joliet wrote a letter on April 4, 2004 to IEPA in which it expressed its concerns.

In a letter dated May 10, 2004, IEMA responded to Mr. Al Keller of IEPA, in which IEMA expressed concerns regarding the number of applications and the potential exceedance of the limitation provided for in the MOA. (R292 - R293). As requested in IEMA's May 2004 letter, Joliet submitted a new proposal for land application on February 28, 2005, in which it responded to IEMA's two concerns. (R104 - R291). To prepare this submittal, Joliet gathered a team of water supply engineers, wastewater treatment engineers, a consulting agronomist and a health physicist. (D.Duffield 15:20-16:4, Exhibit 4, at 6).

As part of its team, Joliet retained Mr. Eli Port of RSSI as its expert witness. Mr. Port is a consulting health physicist who performed dose modeling of the application procedure to determine the theoretical radiation dose to future residents of the currently agricultural land. (R107 - R277). RSSI used the RESRAD model to determine dose. (R107 - R277). RSSI used the inputs for radium concentration in sludge based on the concentrations measured in the sludge from the Joliet Eastside Wastewater Treatment Plant and the Joliet Westside Wastewater Treatment Plant. (R107 - R277). The models provided for eight applications of sludge over 20 years and nine applications of sludge over 22 years. (R107 - R277). The input information was based on the number of homes per acre, size of home, type of foundation and the normal practice of removing expansive topsoil prior to construction. (R107 - R277). All models had results that residents would receive a dose of less than 10 millirems of radiation per year. (R107 - R277).

On January 24, 2007, Joliet met with representatives of IEPA and IEMA. (R92 - R94). IEMA expressed two concerns regarding the allowable dose and correct field application. (R92 - R94). However, at this meeting, all parties agreed that 10 millirems per year was an allowable radiation dose. (R92 - R94). As a result of this meeting, IEPA agreed to an interim limitation raising the Special Condition 2 from 0.1 to 0.4 pCi/g. (R92 - R94). IEPA issued a modification to Joliet's Land Application of Sewage Sludge Permit on February 16, 2007 as provided below.

On June 29, 2007, Mr. Duffield sent a copy of the Rogina & Associates, Ltd. Report entitled "Land Application of Radium Bearing Bio-solids" to Jeff Hutton of IEPA. (R39). IEMA did its own modeling using the RESRAD model, but used a higher concentration of radium in soil than could result from the Joliet program. (R35 - R38). However, the inputs utilized by IEMA were not specific to Joliet and also improperly assumed that the home was built on radium-bearing topsoil. (R35 - R38). Therefore, IEMA's modeling was too conservative, as attested to by Mr. Hutton of IEPA in his memorandum summarizing Joliet's 2007 submittal. (R35 - R37). Mr. Hutton agreed with Joliet's conclusion that the 1.0 pCi/g background limitation, and the removal of the topsoil under the structures, would be sufficiently protective of human health and the environment. (R35 - R37). He also stated in his memorandum that this is the same limitation allowed by Wisconsin. (R35 - R37).

IEPA, IEMA and Joliet had two subsequent meetings, the first on August 14, 2007 (R32) and the second meeting on February 26, 2008. (R23 - R24). In addition, Joliet met with IEPA on August 28, 2008 to discuss its permit modification request submitted on June 17, 2008. (R3 - R22). However, the parties could not agree as to the appropriate limitation of Special Condition 2 and thereafter, Joliet filed this appeal as provided below. Because negotiations between IEPA,

IEMA, and Joliet have continued for several years, Section B summarizes the formal procedural history before the Board.

### **B. Procedural History**

On October 5, 2006, the IEPA Division of Water Pollution Control renewed Joliet's Land Application of Sewage Sludge permit 2001-SC-2708 and replaced it with permit number 2006-SC-4784 ("October 2006")(the new permit included Special Condition 2 which is the subject of this appeal as noted above). At Joliet's request, IEPA filed a petition with the Board on December 7, 2006 regarding an extension of time for which Joliet could appeal this permit. The Board accepted and docketed this request as PCB 07-38. The purpose of this extension was to facilitate negotiations between IEPA, IEMA, and Joliet regarding Special Condition 2. Joliet did not file a formal appeal because it thought the appeal would be unnecessary in light of its ongoing negotiations with the IEPA and IEMA. Therefore, on March 1, 2007, the Board dismissed the PCB 07-38 matter. During the course of those negotiations, IEPA, IEMA, and Joliet agreed that IEPA would issue an interim permit modification which would allow additional land applications up to 0.4 pCi/g.

Subsequently, on February 16, 2007 IEPA issued a modified permit (Permit No. 2006-SC-4784-2) to increase the allowable radium 226 and 228 in soil level from 0.1 to 0.4 pCi/g as set forth in Special Condition 2. However, as was understood by IEPA and IEMA, Joliet did not agree with the 0.4 pCi/g interim limitation and, therefore, Joliet filed an appeal on March 21, 2007. This appeal was docketed as PCB 07-94. During the pending of this appeal, Joliet continued its discussions with IEPA and IEMA regarding the limitation of Special Condition 2, and proceeded to develop additional information to support its position. Based on its ongoing discussions, Joliet filed a motion to dismiss this appeal on June 6, 2008. The Board granted this request and dismissed PCB 07-94 on June 19, 2008.

Thereafter, on July 30, 2008, Joliet submitted a permit application requesting a modification to increase the allowable soil levels provided in Special Condition 2 from 0.4 to 1.0 pCi/g, which Joliet deemed to be a safe and acceptable limitation based on its previous submittals, and the new information included with the application. On September 12, 2008, the IEPA denied this request on the basis that the 1984 MOA with IEMA limits the increase in soil radium to 0.1 pCi/g above background levels. (R1 - R2). In response, Joliet filed this present appeal docketed as PCB 09-25 on October 17, 2008.

On January 13, 2009, a public hearing was held before Hearing Officer Kathleen Crowley and there were no members of the public present nor any representatives from IEPA or IEMA. Joliet, - its attorney Roy Harsch, presented four witnesses:

- 1) **Harold Harty**, who is currently employed as the Plant Operations Superintendent in charge of Joliet's three wastewater treatment plants. Mr. Harty has been employed by Joliet for the past 34 years. Mr. Harty's testimony describes the processes of the Joliet plant and the details relating to its bio-solids program. (Testimony of H. Harty, 7:13-14:17)
- 2) **Dennis Duffield**, who is the Project Manager for Rogina and Associates, Ltd., a consulting firm. Prior to Rogina and Associates, Mr. Duffield served as the Joliet Director of Public Works and Utilities for 25 years. Mr. Duffield's testimony describes the history and background of radium regulations and the impact it had on Joliet's sludge disposal program. (Testimony of D. Duffield, 15:2-20:1)
- 3) **Eli Port**, who is the President of Radiation Safety Services, Inc. ("RSSI"), a consulting firm. Mr. Port is a health physicist and has been employed by RSSI for the past 33 years. He and his firm were employed by Joliet to assist in studying the potential health effects from the radionuclides in its wastewater treatment sludge in connection with Joliet's effort to continue its program to use the material on agricultural lands. Mr. Port's testimony focused on the safety of Joliet's program. (Testimony of E. Port, 20:11-27:5)

- 4) **Dr. Richard Toohey**, Director of Dose Reconstruction Programs for Oak Ridge Associated Universities, in Oak Ridge, Tennessee. Mr. Toohey was hired by Joliet to assist in assessing the health effects and risks of radium. (Testimony of Dr. R. Toohey, 27:18-31:14)

Respondent IEPA did not present any witnesses. Hearing Officer Crowley set a schedule at the hearing for the parties' post-hearing briefing.

#### **IV. BURDEN OF PROOF AND STANDARD OF REVIEW**

In this appeal, Joliet contests IEPA's denial to modify Special Condition 2 of its Permit 2006-SC-4784-2 to 1.0 pCi/g. Section 39(a) of the Act sets forth the standard concerning IEPA's authority to impose conditions in a permit: "In granting permits the Agency may impose such conditions as may be necessary to accomplish the purposes of this Act, and are not inconsistent with the regulations promulgated by the Board thereunder." 415 ILCS 5/39(a)(2007). As is evidenced by the record, Joliet believes that it has shown that no violations of the Act will occur if the IEPA issues its permit with the requested modification of 1.0 pCi/g and that its request is protective of human health and the environment.

Section 40(a)(1) of the Act and Section 105.112(a) of the Board rules places the burden of proof on the petitioner in permit appeals. 415 ILCS 5/40(a)(1)(2007); *Browning-Ferris Industries of Illinois, Inc. v. PCB*, 179 Ill. App. 3d 598, 534 N.E. 2d 616 (2d Dist. 1989). In *Browning-Ferris*, the appellate court held that a permit condition that is not necessary to accomplish the purposes of the Act or Board regulations is arbitrary and unnecessary and must be deleted from the permit. *Browning-Ferris* at 179 Ill. App. 3d 598, 603; 534 N.E. 2d 616, 620. Based on the facts presented in the record, the limitation contained in Special Condition 2 is arbitrary and unnecessary.

In making its determination, the Board is limited to its review of the record before the Agency when it made the decision. 415 ILCS 5/40(e)(3)(2007); *Citizens Utilities Company v. Illinois Environmental Protection Agency*, PCB 85-140 (Slip. Op. 3 March 9, 1989). As set forth herein, the record strongly supports Joliet's request that the Board should overturn IEPA's decision to modify Special Condition 2.

## V. ARGUMENT

### A. GRANTING JOLIET'S REQUEST FOR MODIFICATION OF SPECIAL CONDITION 2 WOULD NOT CAUSE A VIOLATION OF THE ACT OR RELEVANT BOARD REGULATIONS

The Board should overturn the IEPA's decision to deny Joliet's request to modify Special Condition 2 from 0.4 pCi/g to 1.0 pCi/g of its permit because this request does not violate the Act or Board regulations and, is protective of human health and the environment. In granting permits, the IEPA may impose such conditions as may be necessary to accomplish the purposes of this Act, and are not inconsistent with the regulations promulgated by the Board. 415 ILCS 5/39(a)(2007); *Illinois Environmental Protection Agency v. Jersey Sanitation Corporation*, 336 Ill. App.3d 582, 593, 784 N.E. 2d 867, 875-786, (4th Dist. 2003).

The record in this matter does not reference any provisions in the Act or associated Board regulations that specify the allowable increase of radium levels in soil in connection with land application of bio-solids. As evidenced in its September 12, 2008 denial letter (R1 - R3), IEPA has cited no rule under the Act or Board regulations that requires the specific limitation provided for in Special Condition 2.

Rather, IEPA generally cites to Sections 12 and 39 of the Act, and, specifically, references the 1984 MOA with IEMA, which is not referenced in the Act or Board regulations. (R1 - R3). In making its determination, the Board's review is limited to the record before the IEPA when it made the decision. 415 ILCS 5/40(e)(3)(2007); *Citizens Utilities Company v.*



*Illinois Environmental Protection Agency*, PCB 85-140 (Slip. Op. 3, March 9, 1989).

Consequently, if the record before the Board does not contain any specific references under the Act or Board regulations regarding the amount of allowed increased radium in soil levels, then how could IEPA justify denying Joliet's request for a modification based on a violation of the Act or Board regulations? The answer is that the IEPA cannot make this assertion. For example, in *Jersey Sanitation Corporation*, the court held that although there was a general duty to conduct monitoring for 15 years after the landfill site was closed, the IEPA could not impose conditions upon the landfill operator requiring a specific level of certain groundwater monitoring requirement when neither the Act or the Boards regulations provided any specific limitations. *Illinois Environmental Protection Agency v. Jersey Sanitation Corporation*, 336 Ill. App.3d 582, 594, 784 N.E. 2d 867, 876 (4th Dist. 2003). Based on the above, Joliet argues that it would be improper for the Board to deny its appeal based on the fact that the record is devoid of any reference to provisions in the Act or Board regulations which require the imposition of only a 0.1 pCi/g limitation as set forth in Special Condition 2.

Although there is no specific numerical limitation provided in the Act or Board regulations, Joliet would like to make it clear that it is not challenging IEPA's authority to regulate radium levels under the Permit. Rather, Joliet contests the limitation imposed by Special Condition 2 because it is unnecessary and unreasonable, given the environmental and economic investigations that were conducted by its consultants, which concluded that the soil concentration of radium can be increased to 1.0 pCi/g without exceeding a dose of 10 millirems per year. (R9 - R22).

Joliet has been operating its bio-solids program successfully for well over 25 years. (R55 - R57). Joliet has never received any notice of a violation or complaint regarding its bio-solids

program. Joliet's land application program follows the applicable environmental requirements concerning set backs from streams, roads, and buildings to prevent any potential violation of the Act or the regulations. (D.Duffield 15:20-16:4, Exhibit 4, at 24). In fact, its program has met or exceeded all requirements set by the IEPA and the U.S. EPA. (D.Duffield 15:20-16:4, Exhibit 4, at 24). The program has proved to be beneficial to Joliet and the participant famers/landowners. (R41 - R91).

In the June 2007 Rogina & Associates Report titled, "Land Application of Radium Bearing Bio-solids," ("June 2007 Report"), Mr. Dennis Duffield summarizes the benefits of the land application for the farmers/landowners. (R41 - R80). Specifically, the June 2007 report notes that the application of bio-solids increases the fertility of crop land and allows growers to achieve desired crop yields without expenditures for commercial fertilizer. (R54). The June 2007 Report also describes the actual operational procedures that are taken to assure the proper application rates as well as the safety of the program. (R55 - R59). Moreover, the report also discusses the environmental benefits of Joliet's current program in comparison to landfill disposal. (R60). Specifically, the June 2007 Report states that the disposal of bio-solids has the potential to increase the atmospheric concentration of radon. If the bio-solids are concentrated in limited portions of a landfill, atmospheric concentrations of radon above and downwind of the landfill may exceed background. (R60). In addition, to the potential environmental implications, the cost of disposing the bio-solids is well over four times that of its current program. (R81 - R91).

The environmental consulting firm of Clark Dietz, Inc., prepared an August 2004 report titled "Evaluation of Radium Removal Impacts to Sludge Handling at the Eastside and Westside Wastewater Treatment Facilities" at the request of Joliet to assess the costs and

benefits/disadvantages of changing its practice from land application to the disposal of its bio-solids in a landfill and concluded that the disposal of the bio-solids in a landfill is not cost effective. (R81 – R91). Clark Dietz determined that the total amount of solids requiring landfill disposal is approximately 43,927 tons and such landfilling would require significant capital, operational and maintenance costs. (R81 - R91). Specifically, the report concluded that landfill alternative would be over \$48 million in present value life cycle cost, versus the existing land application program which is just under \$10 million. (R81 - R91).

The report also cited to additional costs that were not as easily quantifiable, such as the substantial nutrient benefit to the local farmers participating in the program and a cumulative annual savings of approximately \$48,000. (R90). Based on the above, it would seem illogical for Joliet to expend the \$48 million in municipal funding when the cost of landfill disposal taking into account both economic and environmental considerations is not justified. Furthermore, Joliet has been operating its current program in compliance with all the IEPA and U.S. EPA rules at a fraction of what the landfill alternative would cost, plus, it has additional benefits.

Rogina & Associates updated the cost figures in its June 2007 report and concluded that the lowest cost alternative continues to be the current Joliet Program. Additionally, the cost figures were updated to reflect the total present value. (R60 - R65). The total present value of Joliet's current program is approximately \$10,265,000, whereas, the landfill disposal costs are almost \$48,100,000. (R65).

Throughout its 25 years of operation, Joliet has worked with experts to ensure that its program is safe and beneficial to the farmers/landowners. (R54 - R87). From the start of its program, Joliet has worked with the same independent agronomist, Dan Fiedler, who completes all of the field-testing required by the IEPA permit which authorizes the land application of its

bio-solids. (H.Harty 9:5-21, Exhibit 2, at 1). The June 2007 Report prepared by Rogina & Associates exemplifies that there is a significant amount of testing that is completed by Mr. Fielder, prior to entering Joliet's program and thereafter. (R55 - R57). More importantly, Mr. Fiedler has direct contact with both Joliet and the landowners/farmers and understands what it takes to operate a successful program. Based on Mr. Fiedler's experience, a limitation of 0.1 pCi/g would be unacceptable by most, if not all, of the farmers in the program because such limitation would only allow for one application of bio-solids. Therefore, this would be unacceptably disruptive to the participant farmers' long term fertilizer program. (H.Harty 9:5-21, Exhibit 2, at 1). Moreover, Mr. Fiedler indicates that even a limitation of 0.4 pCi/g would only allow four applications and that would still be unacceptably disruptive to the farmers' fertilizer program. (H.Harty 9:5-21, Exhibit 2, at 1). Joliet has been operating its program with an interim limitation of 0.4 pCi/g and Mr. Fiedler's letter shows that the growers have indicated that they cannot continue with a bio-solids application program that has such limitations. (H.Harty 9:5-21, Exhibit 2, at 1).

Joliet wishes to continue to operate a program that is beneficial to the farmers/landowners and Joliet. However, with such limitations, it is evident that Joliet cannot continue to operate its bio-solids program. Therefore, Joliet would be forced to dispose of its bio-solids in a landfill. Given the potential environmental implications as well as significant costs as explained above in the Clark Dietz August 2004 Report, this alternative is unreasonable. Furthermore, it is inconsistent with the "As Low As Reasonably Achievable" ("ALARA") criteria as defined by the Health Physics Society. (R48-R49). The ALARA criteria provides that the allowable radiation dose should be based on the following: "making every reasonable effort to maintain exposures to ionizing radiation as far below the dose limits as practical. Be consistent with the

purpose for which the licensed activity is undertaken, taking into account the state of technology, the economics of improvements in relation to state of technology, the economics of improvements in relation to benefits to the public health and safety, and other societal and socioeconomic considerations. The means are in relation to utilization of nuclear energy and licensed materials in the public interest.” (R49). In the June 2007 Report, Mr. Port indicated that reasonable efforts to limit ionizing radiation should include removing the topsoil from beneath the home. (R67).

Based on the above, Joliet requests that the Board should impose the appropriate limitation that will continue to allow it to operate its bio-solids program. Moreover, as explained below, the 1.0 pCi/g limitation which Joliet requests, is reasonable and will not cause a violation of the Act or Board regulations, and is consistent with the ALARA criteria.

Joliet has undertaken extensive investigations to understand and quantify the risks and benefits of its program and, based on its investigations, Joliet believes that a 1.0 pCi/g limitation is protective of human health and the environment, while also being the best economic and environmentally-friendly alternative.

Joliet’s consultants prepared several reports each of which are contained in the record and were provided to IEPA: (1) The Rogina & Associates June 2007 Report titled “Land Application of Radium Bearing Bio-solids” (R39 - R91); (2) The Clark Dietz August 2004 report titled “Evaluation of Radium Removal Impacts to Sludge Handling at the Eastside and Westside Wastewater Treatment Facilities” (“August 2004 Report”) (Referenced in June 2007 Report at R81 - R91); and (3) The RSSI October 25, 2004 report titled “Report of RESRAD Dose Modeling for Waste Water Treatment Plant Sludge Applied to Land Currently Used for Agriculture” (“RSSI October 2004”) (R107 - R272). Interestingly, although Joliet prepared

several reports in support of its request, absent in the record are any reports prepared by IEPA or IEMA which refute the claims asserted in Joliet's reports.

The August 2004 and the RSSI October 2004 reports were provided to IEPA in a letter dated February 28, 2005. (R104 - R327). It was in this letter that Joliet first requested that it be allowed to increase the soil concentration of radium by 1.0 pCi/g. The October 2004 Report was prepared by Eli Port of RSSI, a consulting health physics firm. (R105). The report summarizes the dose modeling of the application procedure utilized by Joliet's bio-solids' program to determine the dose to future residents of what is currently agricultural land, but later may be developed for residential purposes. (R107 - R272).

RSSI used the RESRAD 6.22 model which was developed at Argonne National Laboratory for the U.S. Department of Energy to calculate radiation dose. (R50). This program is the same model used by the Interagency Steering Committee on Radiation Standards ("ISCORS") in its review of bio-solids. (R105).

RSSI used the inputs for radium concentration based on the actual concentrations measured in the sludge from the Joliet Eastside Wastewater Treatment Plant and the Joliet Westside Wastewater Treatment Plant. (R112 - R113). The models provided for eight applications of sludge over 20 years and nine applications of sludge over 22 years. The input information was based on the number of homes per acre, size of home, type of foundation and the normal practice of removing expansive topsoil prior to construction. All models had results that residents would receive a radiation dose of less than 10 millirems per year. (R110 - R277). As evidenced in the record, IEPA, IEMA, and Joliet agreed at the January 24, 2007 meeting, that a dose of 10 millirems per year was found to be an acceptable and safe limitation. (R92 - R94). Mr. Port's testimony at the hearing also confirms this (E.Port 21:2-10).

Q. Mr. Port, I guess in summary follow-up do you have an opinion as to whether based on our various meetings that we've had that are detailed into the record as well as your individual meetings with IEMA, the Department of Nuclear Safety staff that are also referenced in the record, that both IEPA and IEMA accept the ten millirem dose as being an acceptable number?

A. Yes.

Interestingly, IEMA also prepared its own modeling of the potential dose using the RESRAD model. (R50). However, Joliet contests that the inputs utilized by IEMA were improper and, therefore, IEMA's modeling should not be dispositive of IEPA's decision to modify Special Condition 2 as requested by Joliet. Mr. Jeff Hutton, who is the permit writer for IEPA's Division of Water Pollution Control ("DWPC"), prepared a memorandum analyzing the two models. (R35 - R38). In this memorandum, Mr. Hutton, even expressed concerns and identified certain flaws with the input values utilized by IEMA because they were not reflective of the actual circumstances. (R35 - R38).

Based on Mr. Hutton's analysis of the two models, the biggest factor impacting exposure is the question of whether the topsoil is removed before construction of the residence. (R35). This is the main issue to be determined by the Board in this matter as Mr. Port, Joliet's expert health physicist, testified at the hearing. (E.Port 21:11-22:14).

Q. And can you characterize what appears to be the sole point of dispute in this matter?

A. The issue we have discussed repeatedly has been whether it is reasonable to assume that houses will be built as required by code or follow conventional building practices or whether the non-confirming homeowner, someone who builds a home that's in non-conformance with either building practices or code should be protected should he choose to build a home on uncompacted soil.

Q. Have you evaluated the RESRAD modeling done by IEMA?

- A. To some extent, yes.
- Q. And have you looked at that modeling to see how it compares to the modeling that you performed?
- A. Yes.
- Q. And if IEMA were to have accepted the assumptions, the removal of topsoil, could you tell us what the result would be, if you know?
- A. I believe that when they ran the RESRAD model, which is a computer code, with topsoil removed, because they used some input parameters that were different from ours, we used – they used default values and we used values supplied by the City of Joliet, they, at one picocurie per gram increased loading of the soil at under six millirem and we have about nine millirem.

Consequently, the issue before the Board is whether the evidence in the record supports Joliet's assertion that it is reasonable to assume that houses will be built as required by local building codes and conventional building practices. The evidence in the record clearly supports Joliet's assertion. Joliet engaged in discussions with IEPA and IEMA for over four years and such negotiations were ultimately fruitless only because of this one difference of opinion. In actuality, the difference of opinion is really not between IEPA and Joliet but, rather, between IEMA and Joliet. However, IEMA is not even a party to this case, and it is illogical that IEPA chose to ignore the evidence in the record when it denied Joliet's permit modification decision, including evidence prepared by IEPA's own representative, Mr. Hutton, who is charged with writing the permits in the Division of Water Pollution Control.

Mr. Hutton's own memorandum concluded that "If IEPA allows an increase of 1.0 pCi/g above background and assumes removal of top soil under the structure, it will be protective of human health." (R37). Further, Mr. Hutton noted that this is the same increase above background levels that is allowed under Wisconsin's rules and results in less than 10 millirem



per year of radiation exposure based on Joliet's model. (R37). Evidently, IEMA is in disagreement with the IEPA and Joliet; however, the record is devoid of any sound evidence which would support IEMA's position and, consequently, IEPA's reliance on it. IEMA's only justification for assuming that the top soil will not be removed under the structure is based on Joliet's alleged lack of documentation to verify that building codes require removal of topsoil. (R33 - R34). Joliet disagrees with this assertion because IEMA's calculation is overly conservative and is at odds with actual practice.

Moreover, Joliet's expert, Dennis Duffield of Rogina & Associates, conducted a survey of the communities that receive bio-solids from Joliet. Based on Mr. Duffield's investigations, it is common home construction practice to remove topsoil prior to building, and all of the communities that participate in Joliet's bio-solids program have building codes that require removal of topsoil prior to construction of the home or building. (R51 - R52). The survey results were documented in Appendix A to the June 2007 Report. (R52).

Once again, the record shows that IEPA agreed with Joliet's investigations. Mr. Hutton indicated in his July 2007 memorandum that he contacted several builders selected at random from the phone book and all said the same thing: "The top 3 feet of soil is removed prior to construction so that the footings of the structure are below the frost line." (R35). The reason for this practice is a simple one, as explained by Joliet in a letter dated December 22, 2007 to Al Keller of IEPA's Division of Water Pollution Control: because the land is tilled two or more times a year, the topsoil layer has absolutely no structural bearing capacity and must be removed prior to building any type of structure. (R26 - R28). Based on the above, there is substantial evidence in the record to support that this is a reasonable assumption. Not only do IEPA

personnel agree, as evidenced by Mr. Hutton's July 2007 memorandum (R35- R38), there is a stark absence in the record of any evidence refuting the above.

Based on the way Joliet operates its program, and given what is legally required by most local building codes and considered to be a standard practice, a limitation of 1.0 pCi/g will not cause a violation of the Act or Board regulations. However, even if it assumed that the topsoil will not be removed, the difference in dose is minimal. Joliet's consultants conducted an additional model which assumed the topsoil will not be removed prior to construction of a home or building and, based on the results, the anticipated dose would be 15.35 millirems, which is 5.35 millirems more than the 10 millirems per year agreed upon. (R12). At the hearing Mr. Port, Joliet's expert witness, testified as to what the actual difference means. (E.Port 23:4-23:9).

Q. Can you perhaps place into perspective what the difference in dose is from the assumption of removing topsoil or not removing the topsoil?

A. Yes. And, frequently, in explaining load doses it's difficult to assign any significance to the doses other than to compare with other sources of comparable dose. I did a quick investigation of the doses – the difference in doses of a person who lives in a wooden structure versus a brick or masonry structure. And the ranges – in the United States the estimates are the difference between wood and brick. This is the EPA's estimate from its website, 77 millirem. The University of Iowa Healthcare System has an estimate of 75 millirem for the difference between a wooden house and a brick house. The European Nuclear Safety has difference that ranges up to about 200 millirem for a difference between living in a wooden structure and living in a brick and cement structure.

Q. So that's on the low end then of those exposures for a masonry structure is what basically the increase in dose we're talking about?

A. Yes, it is.

The Board must make its determination based on the information contained in the record. 415 ILCS 5/40(e)(3)(2007); *Citizens Utilities Company v. Illinois Environmental Protection Agency*, PCB 85-140, (Slip. Op. 3, March 9, 1989). Based on all the evidence presented in the record and discussed above, the record before the Board indicates that Joliet's request to modify Special Condition 2 from 0.4 to 1.0 pCi/g was incorrectly denied by the IEPA and, therefore, the Board should overturn the IEPA's decision.

In addition to the above, there is a final point that merits the Board's consideration. The fact that IEPA, as represented at the hearing by the Illinois Attorney General's office, did not present any witnesses at the hearing, nor did any representatives from IEPA or IEMA attend the hearing, is significant. (32:19 - 33-20). The evidence in the record before the Board, which includes all of the above referenced reports prepared by Joliet's consultants and IEPA's own internal memorandum supporting the requested modification of 1.0 pCi/g based on the reasonable assumption that the top soil will be removed, demonstrates that Joliet's request for a modification will not cause any violations of the Act or applicable regulations.

**B. RELIANCE ON THE 1984 MOA TO JUSTIFY THE CONDITION IS IMPROPER BECAUSE THAT WOULD CONSTITUTE RULEMAKING, AND IS LIMITED ON ITS FACT TO A LOWER LIMITATION THAN WHAT IEPA ALREADY GRANTED**

Finally, in the event that IEPA should rely on the 1984 Memorandum of Agreement between IEPA and IEMA, the MOA cannot bestow upon IEPA any enforceable authority to set any specific limit, as such would constitute an improper rulemaking under the Administrative Procedure Act. IEPA's justification for denying Joliet's request to modify its Land Application of Sewage Sludge permit based on its 1984 MOA with IEMA is improper and violates the APA. In adopting rules, administrative agencies must comply with the public-notice and comment requirements set forth in the APA. 5 ILCS 100/5-40; *Sparks & Wiewel Construction Co., v.*

*Martin*, 620 N.E. 2d 533, 542, 250 Ill. App. 3d 955, 967 (4th Dist. 1993). The MOA falls within the definition of a “rule” as that term is defined under the APA and no exceptions apply. Nor does the Act itself provide IEPA with any specific and independent rulemaking authority in this context.

The APA defines a “rule” as each agency statement of general applicability that implements, applies, interprets, or prescribes law or policy, but does not include (i) statements concerning only the internal management of an agency and not affecting private rights or procedures available to persons or entities outside the agency, (ii) informal advisory rulings issued under Section 5-150, (iii) intra-agency memoranda, (iv) the prescription of standardized forms, or (v) documents prepared or filed or actions taken by the Legislative Reference Bureau under Section 5.04 of the Legislative Reference Bureau Act. *5 ILCS 100/1-70; Sparks v. Martin*, 620 N.E. 2d 533, 542; 250 Ill. App. 3d 955, 968; 189 Ill. Dec. 565, 575 (App. 4th 1993).

Here, the 1984 MOA clearly falls within the definition of a rule. The MOA is of general applicability as it does not specify any specific entity, and it provides for the implementation of a standard regarding the disposal of sludge resulting from treatment of water or sewage and containing radium occurring naturally from ground waters. (R336). Furthermore, the MOA prescribes the policies to be taken based on the content of the radium-containing sludge. (R337 - R339). Moreover, the MOA, on its face, does not fall within any of the exceptions provided above. The fact that this MOA is between IEMA and IEPA, two separate and distinct governmental agencies, is dispositive that no exceptions apply and, therefore, the MOA clearly falls within the definition of a rule as defined in the APA.

Because the MOA falls within the definition of a rule as provided above, IEPA and IEMA were required to follow the proper procedures under Section 5 ILCS 100/5-40 of the

APA. Specifically, Section 5-40 set forth the public notice and commenting provisions. Unless an administrative agency rule conforms with the public notice and comment requirements, it is not valid or effective against any person or party, and may not be invoked by an administrative agency for any purpose. *Sparks & Wiewel Construction Co., v. Martin*, 620 N.E. 2d 533, 542, 250 Ill. App. 3d 955, 967 (4th Dist. 1993). Therefore, the MOA constitutes improper rulemaking in violation of the APA. Consequently, IEPA has no legal basis for denying Permit Condition 2 in reliance on a MOA which is not legally binding.

The facts in this case exemplify the very reason why the APA requires that proper rulemaking procedures be followed. Further, IEPA's own actions support Joliet's argument that the MOA has no legal teeth because IEPA has not relied on this MOA despite the fact that it has been in existence for well over 20 years, and IEPA exceeded the limitation of 0.1 pCi/g in the MOA when it issued Joliet's February 2007 modified permit with a limitation of 0.4 pCi/g.

The issues and concerns identified by IEMA would have been resolved had proper rulemaking procedures been followed, because the regulated community would have had notice and the opportunity to comment. Moreover, because this MOA is of general applicability it affects other communities that have similar bio-solid land application programs.

The law and facts are clear: IEPA and IEMA cannot institute an enforceable rule without following the proper procedures in the APA. Although under the APA the MOA should be invalidated, Joliet is willing to accept Special Condition 2 with a modification of 1.0 pCi/g.

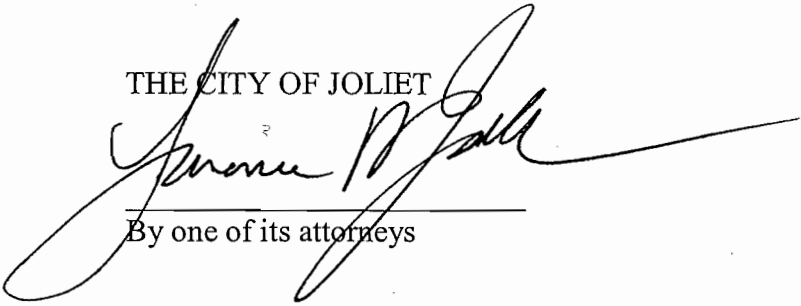
#### IV. CONCLUSION

As set forth above, IEPA may impose conditions in a permit when the condition is necessary to accomplish the purpose of the Act. Here, IEPA denied Joliet's request to modify its permit, but this denial was not supported in the record before the IEPA. In fact, the opposite was true: Joliet's experts conducted substantial investigations to determine whether the modification it requested was protective of human health and the environment and IEPA personnel agreed with Joliet's investigations. However, inexplicably, IEPA chose to ignore the sound scientific evidence in the record, and it denied Joliet's permit modification request based on a MOA that it has ignored for over 20 years and, further, is invalid because it constitutes impermissible rulemaking in violation of the APA.

For these reasons, the Board should find that IEPA inappropriately denied Joliet's request for modifications of its Permit. The record reflects that Joliet proved that the requested limitation of 1.0 pCi/g in Special Condition 2 of Joliet's Permit would not cause a violation of the Act and, therefore, the Board should overturn IEPA's decision, and remand with instructions to IEPA to issue the Permit with a 1.0 pCi/g radium limitation.

Respectfully Submitted,

THE CITY OF JOLIET

  
By one of its attorneys

Date: February 20, 2009

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**CERTIFICATE OF SERVICE**

It is hereby certified that true copies of the foregoing **Petitioner's Post Hearing Memorandum** were mailed, first class, on Friday, February 20, 2009, to each of the persons on the attached service list.

It is hereby certified that a true copy of the foregoing Petitioner's Brief was hand delivered to the following on Friday, February 20, 2009:

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