

ILLINOIS POLLUTION CONTROL BOARD  
October 20, 2011

IN THE MATTER OF: )  
)  
TERRONA FARMS' REQUEST FOR AN ) AS 12-2  
ADJUSTED AGRONOMIC RATE OF ) (Adjusted Standard - Land)  
MUNICIPALLY COLLECTED LEAVES )  
FOR FARMLAND APPLICATION )

ORDER OF THE BOARD (by G.T. Girard):

On September 9, 2011, Terrona Farms located in Peotone, Will County, filed a petition for an "adjusted agronomic rate" (Pet.). Terrona Farms requests authorization from the Board to land apply landscape waste (leaves) to the organic farm at a rate higher than the "agronomic rates" defined as "not more than 20 tons per acre per year" by Section 21(q) of the Environmental Protection Act (Act) and the Board's rules. 415 ILCS 5/21(q), (q)(2), and 35 Ill. Adm. Code 830.105(b). Terrona Farms is requesting to measure the agronomic rate in inches rather than tons per acre per year and to spread leaves on a selected area of the farm to a thickness of 12 inches. Pet. at 18-19. To do so, the petitioner needs an authorization from the Board pursuant to Section 21(q) of the Act since application of leaves to a thickness of 12 inches may exceed the agronomic rate of 20 tons per acre per year. Section 21(q) of the Act allows the Board to authorize a higher rate of application if the owner or operator demonstrates "to the Board that the site's soil characteristics or crop needs require a higher rate". 415 ILCS 5/21(q) as amended in P.A. 97-220 (eff. 7/28/2011).

The requirement to make this type of demonstration to the Board is a legislative change adopted in Public Act 97-220 (eff. 7/28/2011). Prior to the adoption of P.A. 97-220, demonstrations were made to the Illinois Environmental Protection Agency (IEPA). The Board has today opened a rulemaking docket on its own initiative to specifically address authorizations pursuant to Section 21(q) of the Act (415 ILCS 5/21(q) as amended in P.A. 97-220 (eff. 7/28/2011)) within the Board's procedural rules. The rulemaking docket is entitled Procedural Rules for Authorizations Under P.A. 97-220 for Certain Landscape Waste and Compost Applications and On-Farm Composting Facilities: New 35 Ill. Adm. Code 106.Subpart I, R12-11. As explained in that opinion, such requests could be handled under the Board's existing procedural rules as variances if the material is to be removed within 5 years, but usually would be handled as adjusted standards. Although the R12-11 rules have not been adopted, the proposed rules can serve as useful guidance to persons seeking Section 21(q) authorizations. The Clerk is directed to serve Terrona Farms a copy of today's R12-11 opinion and order along with this order.

Here, based on the information contained in the petition, the Board has docketed Terrona Farms September 9, 2011 filing as an adjusted standard, rather than as a variance. Today, the Board directs the petitioner to file a new adjusted standard petition addressing the jurisdictional, procedural and informational deficiencies, which are discussed in this opinion.

## **DISCUSSION**

In the Discussion below, the Board addresses the deficiencies of Terrona Farm's petition. Jurisdictional and procedural requirements make it necessary for Terrona Farms to file a certificate of publication and be represented by an attorney if Terrona Farms is not an individual. The petition content requirements are given in 35 Ill. Code 104.406 and must be included in any petition filed by Terrona Farms as an individual or by its attorney. Additionally, the R12-11 proposed rules can be referenced.

### **Certificate of Publication**

Section 28.1(d)(1) of the Environmental Protection Act (415 ILCS 5/28.1 (2010)) and Section 104.408(a) of the Board's procedural rules (35 Ill. Adm. Code 104.408(a)) require the adjusted standard petitioner to publish a notice of filing of the petition by advertisement in a newspaper of general circulation in the area likely to be affected by the proposed adjusted standard. Publication must take place within 14 days after the petition is filed. *See* 415 ILCS 5/28.1(d)(1) (2010); 35 Ill. Adm. Code 104.408(b). Within 30 days after filing the petition, petitioner must file a certificate of publication with the Board. *See* 35 Ill. Adm. Code 104.410. Failure to publish within 14 days deprives the Board of statutory authority to hear the petition. *See, e.g., In re Petition of SCA Tissue North America, L.L.C. for an Adjusted Standard from 35 Ill. Adm. Code 218.301 and 218.302(c), AS 05-1 (Jan. 6, 2005)* (dismissing adjusted standard petition for lack of jurisdiction when publication of notice took place after the 14-day period).

Thirty days have elapsed since Terrona Farms filed the adjusted standard petition with the Board. Terrona Farms has not filed a certificate documenting that the necessary notice of its petition was published within 14 days after the petition's filing. The Board directs Terrona Farms to file the required certificate when filing the new adjusted standard.

### **Appearances**

Section 1 of the Corporation Practice of Law Prohibition Act (705 ILCS 220/1 (2010)), Section 1 of the Attorney Act (705 ILCS 205/1 (2010)), and Section 101.400(a)(2)(ii) of the Board's procedural rules (35 Ill. Adm. Code 101.400(a)(2)) require "[w]hen appearing before the Board, any person other than individuals must appear through an attorney-at-law licensed and registered to practice law." Terrona Farms must appear to the Board through an attorney.

### **Petition Content Requirements**

For the Board to grant individual adjusted standards, the petitioner must provide adequate proof per Section 28.1(c) of the Act and 35 Ill. Adm. Code 104 Subpart D<sup>1</sup>. The Board finds that the petition does not adequately address the petition content requirements of 35 Ill. Adm. Code 104.406. Specifically, the Board notes that the following informational requirements must be addressed in a new or amended adjusted standard petition:

---

<sup>1</sup> [www.ipcb.state.il.us/SLR/IPCBandIEPAEnvironmentalRegulations-Title35.asp](http://www.ipcb.state.il.us/SLR/IPCBandIEPAEnvironmentalRegulations-Title35.asp)

**35 Ill. Adm. Code 104.406:**

- (a) Petitioner requests authorization to increase the agronomic rate to 12-inches as measured by height instead of by weight. Pet. at 18-19. The petition needs to request an adjusted agronomic rate in a unit of measurement that is directly comparable to the current definition of agronomic rates in units of weight per area per time. (See subsection (f) below regarding the measurement of agronomic rates and nutrient calculations.)

The Petition needs to reference the standard from which an adjusted standard is sought and the effective date. Section 21(q) of Act (415 ILCS 5/21 (q) (2010)) includes the provisions for land application of landscape waste and increases in agronomic rate, Part 830.102 is the definition of “Agronomic Rate”, and Part 830.105(b) is the provision for land applying landscape waste or landscape waste compost at the agronomic rate.

- (b) Although Part 830 does not implement the following federal requirements or State programs, the petition needs to indicate so: the federal requirements of the Clean Water Act; Safe Drinking Water Act; Comprehensive Environmental Response, Compensation and Liability Act; or Clean Air Act; or the State requirements of the Resource Conservation and Recovery Act; Underground Injection Control; or National Pollutant Discharge Elimination System.
- (c) The Petition needs to indicate that the regulations of general applicability at 35 Ill. Adm. Code 830.102 and 830.105(b) do not specify a level of justification. As such, the petition should include adequate proof regarding the factors in Sections 27(a) and 28.1(c) of the Act (415 ILCS 5/28.1(c) (2010)) that are listed at 35 Ill. Adm. Code 104.426(a).
- (d) The petition needs to indicate the location of, and area affected by the petitioner's activity, number of persons employed by the petitioner's facility, age of the facility, relevant pollution control equipment already in use, and the qualitative and quantitative nature of emissions, discharges or releases generated by the petitioner's activity.

In particular, the petition must include a map showing the 5-7 acre area where the leaves would be applied as well as the surrounding areas that would be affected (residences, businesses, roads, etc.)

The petition proposes to apply a 12-inch layer of leaves in the fall. Pet. at 3,19. As noted under section (f), the petition must indicate the total rate of leaf application in both inches per year and tons per acre per year. The annual application rate must include any additional layers of various thicknesses that would be applied during the course of the year for maintenance or other purposes.

On pages 3-4 of the petition, Step Four is noted as “Late Spring”, and Step Five is noted as “Early Spring”. The petition must clarify if the “Early Spring” in Step Five would occur in the year after the “Late Spring” in Step Four.

On page 3 of the petition, the following statement appears to have been cut off: “This way the nitrogen content will rise throughout the summer and be a ready source to help in ...”

- (e) The petition must address the efforts that would be necessary if the petitioner were to comply with the standard.
- (f) **Measurement of Agronomic Rate:** The petitioner must request an agronomic rate in a unit of measurement that is directly comparable to the current definition of agronomic rates in units of weight per area per time. The petitioner proposed a measurement in inches rather than weight, indicating this would be a more objective form of measurement. The petitioner reasoned that the definition of “Agronomic Rates” in the Act and Board rules of “*not more than 20 tons per acre per year*” could be considered a wet weight measurement that would result in height measurements of leaves that would vary depending on moisture content. Pet. at 18.

In comparison, the petitioner cited to the Rutgers University Fact Sheet<sup>2</sup> and Case Study of Muth Farms<sup>3</sup>, referring to an application rate based on dry weight where a 6-inch layer of full leaves (not barrel shredded) is equivalent to “20 tons/acre of dry matter”. Pet. at 3, 8 and 18. The Board’s initial landscape waste rulemaking record includes references to determining “leaf spread rates”, where 3 inches of leaves corresponded to a leaf spread rate of 12.8 tons per acre on a dry basis and 40 tons per acre on a wet basis. See R93-29, Prefiled Testimony of Shirley Baer, Exh. 1-45<sup>4</sup> at 57.

---

<sup>2</sup> “Plant Nutrients in Municipal Leaves”, by Joseph R. Heckman, Ph.D, Daniel Kluchinski, and Donn A. Derr, Ph.D, Rutgers Cooperative Research & Extension, NJAES, Rutgers, The State University of New Jersey, Revised November 1998, Copyright 2004.  
[http://njsustainingfarms.rutgers.edu/PDF/Municipal\\_Leaves\\_Plant\\_Nutrients\\_Available\\_FS824\\_1998.pdf](http://njsustainingfarms.rutgers.edu/PDF/Municipal_Leaves_Plant_Nutrients_Available_FS824_1998.pdf)

<sup>3</sup> “Multiple soil health & economic benefits applying municipal collected un-composted leaves to farmland: Case Study of Bob and Leda Muth Family Farm, Williamstown, NJ” by Jack Rabin, Rutgers Cooperative Extension, October 2005, updated September 22, 2011.  
[http://njsustainingfarms.rutgers.edu/PDF/Muth\\_Leaf\\_Application\\_2011.pdf](http://njsustainingfarms.rutgers.edu/PDF/Muth_Leaf_Application_2011.pdf)

<sup>4</sup>Exhibit 1-45: “Yard Waste Programs: Existing Regulations, Collection, Composting, Compost Characteristics and Land Application.” University of Illinois, Chicago, OTT-6, July 1990. This document is available on the Board’s website at  
[www.ipcb.state.il.us/documents/dsweb/Get/Document-73916](http://www.ipcb.state.il.us/documents/dsweb/Get/Document-73916).

The petitioner must use an appropriate method to calculate the agronomic rate in “tons per acre per year” that corresponds to the proposed application rate of 12 inches per year in terms of both dry and wet weight basis. Further, the petitioner must address how the “agronomic rate” will be measured and specified for the practical reason of calculating nutrient loading such that the moisture content does not influence the effective nutrient loading.

**Nutrient Calculations:** The petition must include nutrient calculations showing the current nutrient content of the soil, the proposed nutrient loading of the leaf application, and the nutrient requirements for the intended crop. The petition cites to the Rutgers University Fact Sheet “Plant Nutrients in Municipal Leaves” lists the nutrient concentrations in municipal leaves on a dry weight basis. Pet. at 8-9. Based on the nutrient calculations, the petition must demonstrate that the proposed agronomic rate does not oversupply the intended crop.

**Soil samples:** Petition must indicate which soil sample results provided in the petition correspond to the field proposed for the leaf application. The petitioner must ensure that soil sampling results are representative of the land area proposed for leaf application by providing more than one soil sample result for the proposed field.

**Stormwater management:** The petition must include a description of the methods of minimizing stormwater/snowmelt runoff.

**Nuisance Prevention:** The petition must include a description of the methods of preventing nuisance conditions (e.g. vectors, odors, litter).

**Nutrient Imbalance:** The petition must describe how any nutrient imbalance problems will be addressed at the leaf application site, including the application of fertilizer (nitrogen) to prevent a temporary shortage of available nitrogen for the succeeding crop.

**Model Study:** The petition indicates that Terrona Farm’s plan for a 3-year cycle of rotation is modeled after the Muth Farm plan in New Jersey. Pet. at 3. The Muth Farm plan appears to be based on a 5-year cycle of rotation. The petition must explain how Terrona Farms’ 3-year cycle is equivalent to the Muth Farms’ 5-year cycle. Since the Muth farm plan is based on an initial application of a 6-inch layer of leaves, the petition must include a demonstration to show that an application of 12 inches would produce similar results.

**Removal of landscaping containers:** The petition must indicate if leaves will be arriving in bags, boxes or similar containers, and if so, how Terrona Farms will remove the containers prior to spreading and how Terrona Farms will dispose of the containers.

**Leaf Storage:** The petition indicates, “Leaves are to be stored on a all weather staging area. When conditions are acceptable leaves will be loaded into a manure spreader and dispersed on the field at the determined thickness.” Pet. at 3. The Board notes that under Part 830, permitted compost facilities must process landscape waste within 24 hours of receipt, while most other compost facilities must process landscape waste within 5 days after receipt. *See* 35 Ill. Adm. Code 830.202(f) and 830.205(a)(1)(A). In the initial landscape waste rulemaking, “Five days was chosen as the maximum time for waste storage prior to treatment by composting to minimize the potential for odor problems due to anaerobic conditions in accumulated material.” 5-18-1994 Prefiled Testimony of Gary Cima, IEPA in R93-29.

Since the petitioner is not proposing to be classified as a compost facility, leaves should not be allowed to compost before they are land applied. The petition must include a time frame consistent with the 5-day window within which the leaves would be spread on the receiving land. *See* R93-29, June 30, 1994 Opinion at 14.

In the case of inclement weather where storage times would exceed 5 days, the petition must provide for a method of remedy, including reduction or cessation of receipt of the landscape waste until such time as Terrona Farms’ is able to spread the leaves.

- (g) The petition must address the impact of the petitioner’s activity on the environment if petitioner were to comply with the standard versus petitioner’s impact if petitioner were to comply with only the adjusted standard.
- (h) Since the regulation of general applicability does not specify a level of justification, the petitioner needs to explain how the proposed adjusted standard will be justified with adequate proof pursuant to the factors of Section 28.1(c) of the Act (415 ILCS 5/28.1(c)) that are listed at 35 Ill. Adm. Code 104.426(a).
- (i) The petition must address whether the adjusted standard is consistent with federal law.
- (j) The Petition needs to indicate if the petitioner requests or waives a hearing on the petition.
- (k) The petition provides excerpts from Texas A&M University (Pet. at 7), Natural Resources Conservation Service (Pet. at 7), and “Plant Nutrients in Municipal Leaves”<sup>5</sup> (Pet. at 8), but did not include any citations. The petition also refers to the “Muth Farm” plan in New Jersey by Rutgers University. Pet. at 3. The

---

<sup>5</sup> “Plant Nutrients in Municipal Leaves”

[http://njsustainingfarms.rutgers.edu/PDF/Municipal\\_Leaves\\_Plant\\_Nutrients\\_Available\\_FS824\\_1998.pdf](http://njsustainingfarms.rutgers.edu/PDF/Municipal_Leaves_Plant_Nutrients_Available_FS824_1998.pdf)

petition must include the source (author, date, name of publication) for the information provided. The petition also needs to provide more complete documentation of the Muth Farm case study and the article “Plant Nutrients in Municipal Leaves” since this is the model Terrona Farms proposes to follow.

The petition also refers to the New Jersey Administrative Code “NJAC 7:26, 1.12.” However, the citation appears to be incorrect. The petition must include the correct citation the New Jersey Code<sup>6</sup>.

### **CONCLUSION**

Any person may apply landscape waste or landscape waste compost at agronomic rates less than 20 tons per acre per year without a permit or making a demonstration to the Board. *See* 415 ILCS 5/21(q) and 35 Ill. Adm. Code 830.105(b). However, if the petitioner proposes to apply landscape waste at a rate greater than 20 tons per acre per year, the Board directs Terrona Farms to file a new petition addressing the informational deficiencies outlined in the Discussion above. In addition, Terrona Farms must file the required certificate of publication, and an appearance by an attorney if Terrona Farms is not an individual.

IT IS SO ORDERED.

I, John Therriault, Assistant Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above order on October 20, 2011, by a vote of 5-0.



---

John Therriault, Assistant Clerk  
Illinois Pollution Control Board

---

<sup>6</sup> *See* NJAC 7:26A-1.4(a)(12) at [www.michie.com/newjersey/lpext.dll?f=templates&fn=main-h.htm&cp](http://www.michie.com/newjersey/lpext.dll?f=templates&fn=main-h.htm&cp)].