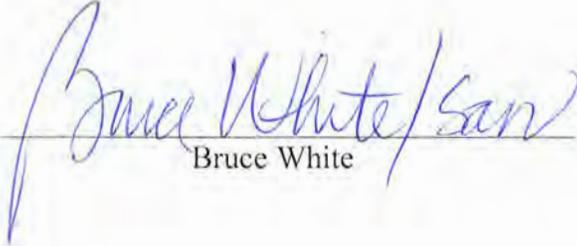


CERTIFICATE OF SERVICE

I, on oath state that I have served the attached **Petition for Adjusted Standard, Proposed Order, Appearance of Bruce White, and Appearance of Robert Weinstock** electronically on this 26th day of February, 2014 to:

Greg Richardson
Deputy General Counsel
Illinois Environmental Protection Agency
1021 North Grand Ave. East
P.O. Box 19276
Springfield, Illinois 62794-9276

Christopher J. Grant
Assistant Atty General
69 W. Washington Street
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Chicago, IL 60602



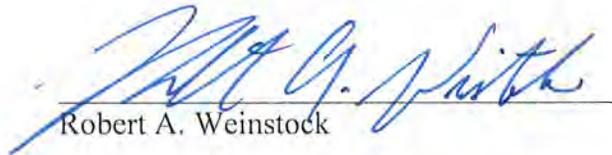
Bruce White

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

KRAMER TREE SPECIALISTS, INC.,)
)
) Petitioner,)
)
vs.) PCB 2014-XX
)
ILLINOIS ENVIRONMENTAL)
PROTECTION AGENCY,)
)
) Respondent.)

APPEARANCE

I hereby file my appearance in this proceeding, on behalf of Kramer Tree Specialists, Inc.


Robert A. Weinstock

Robert A. Weinstock
Barnes & Thornburg LLP
One North Wacker Drive
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BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

KRAMER TREE SPECIALISTS, INC.,)	
)	
Petitioner,)	
)	
vs.)	PCB 2014-XX
)	
ILLINOIS ENVIRONMENTAL)	
PROTECTION AGENCY,)	
)	
Respondent.)	

PETITION FOR ADJUSTED STANDARD

NOW COMES Petitioner Kramer Tree Specialists, Inc. (“Kramer” or “KTS”) by its attorneys, pursuant to Section 28.1 of the Illinois Environmental Protection Act (“Act”) 415 ILCS 5/28.1 and 35 Ill. Adm. Code Part 104, and petitions the Illinois Pollution Control Board (“Board”) to grant it an adjusted standard from certain of the requirements of 35 Ill. Adm. Code §§ 830.202(d), (e)(3), (f), (g), (h)(1), 830.205(a)(1)(A), 830.206(f), (j), (k), (l) and (n), 830.503, 830.504 and 830.507; for its leaf mulch production facility located at 300 Charles Court, West Chicago, Illinois 60185.

Introduction

Petitioner Kramer owns and operates a ten-acre tree care facility at 300 Charles Court in West Chicago, DuPage County, Illinois. As part of that operation, Kramer produces and sells leaf mulch. The general term “leaf mulch,” as defined by Kramer, refers to both a blend of virgin leaves (“leaf mulch”) as well as a blend of leaves and sized woody material (“special blend”). Both types of leaf mulch are carefully produced to ensure that grass or other foreign materials are excluded from the process and product. Though the production of these leaf mulch products involves the stacking and storage of select landscape wastes, Kramer’s production processes do not meet the general use compost standards as set forth in Section 830.503 of the Illinois Administrative Code (“Ill. Adm. Code”). Kramer’s processes do not align with some of those standards for the simple reason that those standards are intended to promote the decomposition of

landscape wastes, which is the antithesis of Kramer's goal to prevent the decomposition of leaves so they may be reconstituted into commercial mulch products. Issuance of an Adjusted Standard is warranted, therefore, to address this fundamental misfit of certain aspects of those regulations to Kramer's ongoing economically successful and environmentally responsible leaf mulch operations.

Kramer produces two types of mulch which include leaves: leaf mulch and special blend. Leaf mulch blend is made up entirely of virgin leaves that are ground to one inch or less in size, producing a uniform appearance throughout the mulch product. Kramer's special blend mulch includes both ground virgin leaves (approximately 10% to 20% of the total mixture) and wood materials drawn from all tree parts and sized from fine-ground to roughly 1.5 inches (approximately 80% to 90% of the mixture). The special blend mulch is processed so that an equivalent number of particles of the varying sizes described are present in each batch. The leaves in these mulches are processed and mixed so as to maintain consistent texture and color quality of the mulches, which are sold to retail, commercial, and municipal customers year-round. Customers base their selection of leaf mulch on aesthetic factors such as color, texture and consistency.

Kramer's production of leaf mulch takes place on an annual cycle. As described more fully in the following paragraphs, Kramer's staff collects leaves during the fall, produces leaf mulch product on a rolling basis beginning in the winter, and sells all of its leaf mulch inventory by the following October, leaving a clean concrete pad available for the receipt of leaves when the next fall leaf-collection season begins. Most of the leaf mulch is sold in the spring: Approximately 60% is sold by the end of May each year and approximately 80% is sold before the end of July. Under no circumstances does Kramer store leaves at its facility from year-to-year.¹

Currently, Kramer has contracts with several municipalities to collect leaves and, each year, collects approximately 15,000 cubic yards of leaves which it manages through leaf mulch production at its West Chicago facility. All leaves are picked up by Kramer's

¹ Though Kramer has never failed to sell out of its leaf mulch in the five years that it has produced the products, to the extent that any leaves or leaf mulch remains unsold at the end of the annual cycle, Kramer would dispose of such remaining material at a local composting facility, currently Green Organics, Inc. in Bristol, Illinois.

own personnel, who are trained to collect only leaves and not any other organic or inorganic waste. Additionally, when leaves are unloaded from Kramer trucks at Kramer's facility, another trained Kramer staff member is present to ensure that no non-leaf substances are included in the feedstock for the leaf mulch processes. Kramer does not accept leaf deliveries from other entities and, therefore, is able to police the quality of the leaves processed at the Kramer facility. If any material other than leaves is inadvertently collected, Kramer personnel are trained to look for and remove such material during unloading and the production process. Any non-leaf material is appropriately disposed of off-site, with organic material being taken to a local composting facility, currently Green Organics, Inc. in Bristol, Illinois.

Unlike at a compost facility where operations promote decomposition, Kramer has designed its production process to control the handling and storage of leaves so as to minimize leaf decomposition. Both the unprocessed leaves and mulch product are handled by Kramer's staff on a five-and-a-half-acre, reinforced concrete pad designed to control precipitation run-on and run-off. Unprocessed, collected leaves are initially placed, then more tightly stacked, on the highest part of the concrete pad so that any water contained within the stacks will drain away from the leaves through clean woodchip solids filters and towards water collection points built into the concrete pad. The unprocessed leaf stacks are shifted as little as possible so that the oxygen content within the pile – and, consequently, any potential leaf decay – is minimized. Stacked leaves are then processed through grinding, and, for special blend products, mixing with ground tree limbs, trunks and/or shredded wood waste. Each stack (both those of unprocessed leaves and those of processed leaf mulch) are built to a height of roughly twenty-five (25) feet² to minimize surface area and thereby avoid decomposition caused by exposure to oxygen and moisture. Stacks are organized on the concrete pad in tight formations that discourage pathways for wind to carry oxygen into the stacks. Kramer personnel monitor the temperature and moisture of stacks at regular intervals to insure that temperature and moisture levels remain low enough to discourage decomposition. Composting operations target a range of 40% to 60% moisture level in order to facilitate decomposition; conversely, Kramer manages leaf and leaf mulch piles such that moisture

² Twenty-five (25) feet is the maximum height permitted under local land use restrictions.

content remains below 40%. Kramer's practices contrast starkly with the operation of composting facilities, where stack height and arrangement are designed to facilitate the circulation of moisture and oxygen through stacks of decomposing material.

Production involves the removal of leaves from the stacks for grinding to produce pieces that are one inch or less in size. Sometimes leaves are ground twice to produce a desired product, in terms of color and texture, for the leaf mulch requirements of specific customers. For the special blend, leaves are removed from the stacks, mixed with wood from trees, and ground to half-an-inch to one-inch in size. During production, Kramer takes several precautions to ensure that odors and dust are minimized, which meet or exceed the operational requirements of the compost regulations, (35 Ill. Adm. Code §§ 830.202(c) & (e); 830.206(g) & (j); 830.205(f)), and which are described in detail in the permit application, attached hereto as Exhibit A, at pages 19-21, .

The actual production of special blend mulch (i.e. the grinding of input materials and blending) usually begins in late January each year; leaf mulch production generally begins in March.³ Kramer uses this production timeline to assure that the mulch products are ready for sale by April or May of each year, just as municipalities, corporations and individuals generally commence landscaping activities and the market demand for mulch begins. Leaf mulch production continues through the spring and summer until about October 1st each year. Kramer times the production of its leaf mulches so that product is available to meet customer needs but also so that mulch is not produced prematurely to avoid leaf decay.

Throughout the year, Kramer manages the pace and timing of its leaf mulch grinding so as to keep a roughly two to four week supply of leaf mulch products on hand to meet customer orders. Since leaves are only received at the facility in the fall, or as part of tree removals, the leaf stacks are managed as described above so that leaves are available to produce mulches through the planting season. To the extent there is any unsold leaf mulch or leaves that have not been processed by October of the year following their receipt, Kramer disposes of such material by transporting it to a permitted

³ During the winter, tree feed stock, without leaves, is received at the Kramer facility. Therefore, clean leaves that have been managed at the facility since the autumn are added to this material to produce special blend mulch during the winter months.

compost facility, currently Green Organics, Inc. in Bristol, Illinois. Leaf mulch and leaves are not and will not be stored at the facility from year to year.

As further explained below, Kramer's leaf mulch operations do not constitute "composting," as the term is ordinarily understood. Fundamentally, composting involves the managed decomposition of organic material; Kramer's operations, in contrast, are designed to impede the decomposition of leaves so that they may be processed and mixed into useable mulch products. Because conventional composting and Kramer's operation share some characteristics, Kramer's operations are consistent with many aspects of the Illinois regulations on composting; some composting standards, however, are simply at cross-purposes with Kramer's production of leaf mulch. Accordingly, Kramer's leaf mulch facility can and will continue to meet the requirements governing compost operations set forth in 35 Ill. Adm. Code Part 830, subject to the Board's approval of the adjustments to the specific standards imposed by § 830.202(d), (c)(3), (f), (g), (j)(1), § 205(a)(1)(A), § 206(f), (j), (k), (l) and (n), § 503, § 504, and § 507, as explained herein.

The Production and Sale of Leaf Mulch is an Economically Successful Business

As described above, Kramer's leaf mulch operation is conducted in a manner that is sensitive to the particular environmental issues associated with storing and processing leaf waste into mulch. While Kramer's leaf mulch business provides an environmental benefit – converting fallen leaves into a useful product that is returned to the economic mainstream – it is also economically successful.

The most important input to Kramer's leaf mulch production is, of course, leaves, which Kramer is paid to collect under leaf waste removal contracts with various municipalities. The wood chips used in Kramer's special blend are also collected pursuant to tree removal contracts. In other words, Kramer is actually paid to collect the raw materials for its leaf mulch products. The only input costs for Kramer's leaf mulch products, therefore, are the fuel and machine costs related to grinding leaves (and shredding wood for the special blend), as well as attendant labor costs. The costs of production of leaf mulch are approximately \$3.00 per cubic yard; for special blend, the cost is roughly \$6.00 per cubic yard.

Kramer sells its leaf mulch products by the cubic yard, at an average price of roughly \$9.50 per cubic yard of leaf mulch and approximately \$13.00 of special blend, exclusive of any delivery charges.⁴ Kramer's primary mulch leaf customers are commercial landscaping entities, such as landscape contractors and landscape industry suppliers. As shown on the table reproduced below, in 2012, commercial purchases amounted to over 92% of Kramer's leaf mulch customers, while residential and municipal purchasers constituted roughly 3% and 5%, respectively. These proportions have remained relatively constant over the last four years.

Mulch Quantity generated by KTS – By Customer Type - For the last (4) years.

	Commercial	Residential	Municipal
	Cubic Yards	Cubic Yards	Cubic Yards
2009			
<u>Special Blend:</u>	48,490 C.Y.	2,818 C.Y.	2,236 C.Y.
<u>Leaf Mulch:</u>	5,024 C.Y.	0 C.Y.	1,353 C.Y.
<u>% of Total Sales:</u>	<u>89.3%</u>	<u>4.7%</u>	<u>6.0%</u>
2010			
<u>Special Blend:</u>	53,399 C.Y.	2,637 C.Y.	4,246 C.Y.
<u>Leaf Mulch:</u>	3,922 C.Y.	140 C.Y.	0 C.Y.
<u>% of Total Sales:</u>	<u>89.1%</u>	<u>4.3%</u>	<u>6.6%</u>
2011			
<u>Special Blend:</u>	49,658 C.Y.	1,438 C.Y.	2,203 C.Y.
<u>Leaf Mulch:</u>	1,205 C.Y.	51 C.Y.	420 C.Y.
<u>% of Total Sales:</u>	<u>92.5%</u>	<u>2.7%</u>	<u>4.80%</u>
2012			
<u>Special Blend:</u>	47,948 C.Y.	1,547 C.Y.	2,061 C.Y.
<u>Leaf Mulch:</u>	1,489 C.Y.	26 C.Y.	445 C.Y.
<u>% of Total Sales:</u>	<u>92.4%</u>	<u>2.93%</u>	<u>4.68%</u>

In 2012, Kramer sold approximately 73,938 cubic yards of all its mulch products,⁵ of which approximately 53,516 cubic yards – or over 72% – were leaf mulch products. As demonstrated in the following chart, the greatest volume of leaf mulch sold was to commercial green industry customers such as landscape contractors and landscape

⁴ These approximate, average prices per cubic yard are conservative. Kramer prices its mulch product based, in part, on the volume that a particular customer purchases. The prices referenced above are approximately those paid by Kramer's largest, commercial customers and, therefore, represent the lowest range of prices per cubic yard offered by Kramer.

⁵ Including non-leaf mulch varieties such as mulches made entirely from processed tree parts, which are not at issue in this Petition.

industry suppliers. In 2012, Kramer had over 130 commercial customers. In addition, a significant volume of the leaf mulches is sold to municipalities and park districts; in 2012, for example, Kramer sold leaf mulch to a total of roughly eleven (11) municipal customers. These leaf mulch sales totaled over \$713,012 in revenue, which amounts to over half of the \$1.3 million dollars in gross revenues generated by Kramer's overall mulch business in 2012.

	<u>Mulch Quantity and Revenue generated by KTS - For the last (4) years.</u>							
	<u>2009</u>		<u>2010</u>		<u>2011</u>		<u>2012</u>	
	<u>Cubic Yards</u>	<u>Revenue</u>	<u>Cubic Yards</u>	<u>Revenue</u>	<u>Cubic Yards</u>	<u>Revenue</u>	<u>Cubic Yards</u>	<u>Revenue</u>
<u>Special Blend:</u>	53,544 C.Y.	\$722,844	60,282 C.Y.	\$813,807	53,299 C.Y.	\$754,103	51,556 C.Y.	\$693,061
<u>Leaf Mulch:</u>	6,377 C.Y.	\$ 44,639	4,062 C.Y.	\$ 28,434	1,676 C.Y.	\$ 16,286	1,960 C.Y.	\$ 19,951
<u>Totals:</u>	59,921 C.Y.	\$767,483	64,344 C.Y.	\$842,241	54,975 C.Y.	\$770,389	53,516 C.Y.	\$713,012

All of the leaves brought to the Kramer property are transported there for processing into mulch for sale, and are returned to the economic mainstream; none are managed to produce compost or to be disposed of as waste.

Section 104.406(a) Statement

As a general matter, the 35 Ill. Adm. Code 830 composting regulations are designed to promote the creation of compost from landscape wastes in an environmentally protective manner. In contrast, Kramer's leaf mulch operations are designed and operated to achieve the opposite, *i.e.* to prevent or at least minimize the creation of compost. This clear divergence of goals means that Kramer cannot both comply with all of the 35 Ill. Adm. Code 830 compost standards and operate its leaf mulch business.

Attached to this petition, as Exhibit B, is a proposed order that sets forth the particular adjustments to relevant regulatory provisions requested by Kramer through this Petition. In accordance with 35 Ill. Adm. Code §§ 104.406(a) and (f), Kramer now lists the standards for which it hereby seeks adjustment and specifically indicates the content of those adjustments:

- The language of subsection (d) of Section 830.202 shall be modified to read:
 "Kramer shall have available for inspection a plan for the intended purposes of leaf mulch and special blend mulch and a contingency plan for handling end product mulch that does not meet leaf mulch standards as set forth in Kramer Tree Specialist's permit application. Such a plan may include, but is not limited to,

consideration of the following: on-site usage; identification of potential buyers including but not limited to gardeners, landscapes, vegetable farmers, turf growers, operators of golf courses, and ornamental crop growers; maintaining consistent product quality for such factors as stability, color, texture, odor, pH, and man-made inerts; and removal of leaf mulch and special blend mulch that cannot be used in the expected manner because it does not meet the leaf Mulch standards.”

- The language of subsection (c)(3) of Section 830.202 shall be modified to read:

“Methods for taking into consideration the following factors prior to turning or moving leaf mulch materials:

 - A) Time of day;
 - B) Wind direction;
 - C) Percent moisture;
 - D) Estimated odor potential; and
 - E) Degree of maturity.”
- The language of subsection (f) of Section 830.202 shall be modified to read:

“Landscape waste must be processed within five days after receipt into windrows or other piles which inhibit conditions for composting. Incoming brush or woody landscape waste may be stored in designated areas for use as a carbon source and bulking agent, rather than being processed into windrows or other piles.”
- The language of subsection (g) shall be modified to read:

“The facility must be designed and constructed so that run-on is diverted around the leaf storage and leaf mulch area. The runoff from the facility resulting from precipitation less than or equal to the 10 year, 24 hour precipitation event must be controlled so as not to cause or contribute to a violation of the Act.”
- Kramer shall comply with the reporting requirements of subsection (k) of Section 830.202 except that it shall report on leaf mulch and mulching materials where the regulation refers to compost and compost materials.
- The language of paragraph (l) of subsection (1) of Section 830.202 shall be modified to read:

“Unless otherwise authorized in a facility permit, all landscape waste, composting material, end-product compost, leaf mulch, leaf mulch material, and additives must be removed from the facility within 180 days following the beginning of closure.”
- The language of paragraph (1)(A) of subsection (a) of Section 830.205 shall be modified to read:

- l) All permitted leaf mulch production facilities must meet the following process standards:
 - Λ) Landscape waste must be processed within 24 hours after receipt at the facility into windrows or other piles as detailed in an approved site-specific operating plan. Incoming leaves, and brush or woody landscape waste, may be stored in designated areas for use as leaf mulch ingredients or production [sic], a carbon source and bulking agent, if so provided as a permit condition, rather than being processed in windrows or other piles.
- The language of paragraph (l)(C) of subsection (a) of Section 830.205 shall be modified to read:
 - C) The operator of a leaf mulch production operation shall take measures to maintain moisture level of the leaf piles and leaf mulch at or below 40% on a dry weight basis, in accordance with an approved site-specific operating plan.
- The introductory paragraph of Section 830.206 shall be modified to read:

“All activities at a permitted facility associated with mulching must be conducted in accordance with an operating plan containing, at a minimum, the following information:”
- The language of subsection (f) of Section 830.206 shall be modified to read:

“Management procedures that will be used in leaf mulching, which must include:

 - 1) A description of any treatment the wastes will receive prior to windrowing or piling (e.g., chipping, shredding) and the maximum length of time required to process each day’s receipt of waste into windrows or leaf stacks;
 - 2) The specifications to which the windrows, leaf stacks, or leaf mulch stacks will be constructed (width, height, and length) and calculation of the capacity of the facility;
 - 3) A list of additives, including the type, amount and origin, that will be used to adjust moisture, temperature, oxygen transfer, pH, carbon to nitrogen ratio, or biological characteristics of the composting or leaf mulching material, and rates and methods of application of such additives; and
 - 4) An estimate of the length of time necessary to complete the leaf mulch production process.”
- The language of paragraph (1) of subsection (g) of Section 830.206 shall be modified to read:

“Consideration of the following factors prior to turning or moving the stored leaf material:

- A) Time of day;
- B) Wind direction;
- C) Percent moisture;
- D) Estimated emission potential; and
- E) Degree of maturity; and”

- The language of subsection (k) of Section 830.206 shall be modified to read:
“Methods for monitoring temperature, oxygen level and moisture level of leaf mulch material, in accordance with Section 830.205(m);”
- The language of subsection (l) of Section 830.206 shall be modified to read:
“Methods of adjusting temperature, oxygen level and moisture level of leaf mulch material, in accordance with Section 830.205(a);”
- The language of subsection (n) of Section 830.206 shall be modified to read
“Methods to obtain samples and test end-product leaf mulch to demonstrate compliance with Subpart E of this Part.”
- Section 830.503 shall be replaced with the following language:

Leaf Mulch:

- 1) Must be free of any materials which pose a definite hazard to human health due to physical characteristics, such as glass or metal shards;
 - 2) Must not contain man-made materials larger than four millimeters in size exceeding 1% of the end-product leaf mulch, on a dry weight basis;
 - 3) Must have a pH of between 6.5 and 8.5;
 - 4) Must not exceed, on a dry weight basis, the inorganic concentrations set forth in Section 830. Table A; and
 - 5) Must not contain fecal coliform populations that exceed 1000 MPN per gram of total solids (dry weight basis), or Salmonella species populations that exceed 3 MPN per 4 grams of total solid (dry weight basis).
- As demonstrated in this Petition, Kramer’s operational goals are the opposite of a composting facilities’. Because Sections 830.504 and 830.507 require the use of testing requirements and sampling methods, respectively, that were drafted to ensure achievement of the operational goals for composting facilities, Kramer

asks that those sections be adjusted as applied to Kramer's operations. For purposes of leaf mulch, requirements and methodology applicable to end-product compost, as set forth in Section 830 Appendix B(d) would not apply. Additionally, Kramer would propose to add testing methodology for moisture level to demonstrate compliance with the proposed adjusted moisture content requirement in Section 830.205(a)(1)(C) of a maximum moisture level of 40%, on a dry weight basis. Such moisture level is consistent with Kramer's goal of preventing decomposition. These adjusted testing requirements would be set forth in Kramer's site-specific operating plan, and require approval by IEPA in connection with Kramer's permit application.

The purpose of this Petition for Adjusted Standard is to resolve this dichotomy between the general regulatory requirements and Kramer's business needs, while maintaining the environmentally protective features of each. Kramer proposes to adhere to the adjusted standards as set forth above, while otherwise complying with 35 Ill. Adm. Code 830. Kramer will, during the course of obtaining a permit from IEPA, demonstrate compliance with all other provisions of 35 Ill. Adm. Code 830 not specifically addressed herein. The Operational Criteria described in the following section will be followed by Kramer and describe how Kramer will meet the adjusted standards and remaining provisions of 35 Ill. Adm. Code 830.

Kramer's Operational Criteria

Should the requested adjusted standard be approved, Kramer's leaf mulch operations would meet or exceed the requirements of 35 Ill. Adm. Code 830, as adjusted, including but limited to the following:

- 1) All virgin leaves accepted by Kramer for processing into its leaf mulch products shall be collected and delivered to the Kramer facility by Kramer personnel. No other sources of leaves will be accepted at the Kramer facility or incorporated into Kramer's leaf mulch operations. Trained Kramer personnel will inspect all leaves as they are collected in the field to insure that only leaves are collected. Additionally, trained Kramer personnel will inspect

each load of leaves as it is unloaded and before it is stacked at Kramer's facility. Any non-leaf material will be disposed of in accordance with any applicable laws or regulations. Organic, non-leaf material will be disposed of at a permitted composting facility.

- 2) Leaves shall be placed only on the approximately 5.5 acres reinforced concrete pad (minimum thickness eight inches) at the Kramer facility. No leaves, wood or mulch will be stored on the bare ground.
- 3) The concrete pad shall be maintained in good condition and so that any runoff from the leaves or mulch products are controlled through engineered drainage flows and retention ponds, and are managed in compliance with applicable water regulations and permitting requirements.
- 4) Leaves are received at the Kramer facility during the fall season (approximately October through November) each year and removed from the Kramer facility in the form of sold mulch products, by October 15th of the following year. To the extent that any leaves or leaf mulch remains unsold at the end of the annual cycle, in October, those leaves or leaf mulch will be disposed of at a permitted composting facility. Leaves will not be stored at the Kramer facility from leaf collection cycle to leaf collection cycle.
- 5) Leaves are placed in stacks when received at the Kramer facility and managed with the goal of preventing composting. Such management includes a minimum of handling so that oxygen and moisture conditions within leaf stacks remain consistent with the Kramer goal of minimizing the development of compost.
- 6) Leaf stacks are no more than twenty-five (25) feet in height with an outward slope of one vertical to one horizontal. This stack height and shape minimize the extent to which leaf or leaf mulch is exposed to oxygen and precipitation, which inhibits any decomposition. Twenty-five (25) feet is the maximum stack height permitted under local land use restrictions. Stacks are separated by about ten to twelve feet to facilitate management. Kramer currently is under contract with several municipalities to collect approximately 15,000

cubic yards of leaves for management at its West Chicago facility as described in this Petition. The reinforced concrete pad has been designed and constructed to provide capacity to properly manage more than 30,000 cubic yards of leaves should future business development reach that level. Should business growth occur, the additional leaves would be managed using the same protective procedures as are now in use at the facility.

- 7) The leaf stacks are located on the highest part of the concrete pad to facilitate drainage of any water contained in the stacks away from the leaves. That water is filtered through clean wood chips. The filtered water then flows to designated collection points. These collection points are engineered and will be maintained so that collected water flows to one of two retention ponds on the facility. Kramer's operations comply with applicable water regulations and permitting requirements.
- 8) Leaves are made into Kramer mulch products by grinding with a grinder. Leaves may be ground once or twice depending on the mulch product being made. Production of leaf mulch begins in late winter/early spring and continues through September to meet demand.
- 9) Finished leaf mulch products are placed in curing piles of about twenty-five feet in height by seventy-five feet wide by seventy-five feet long. This pile height and shape minimize the extent to which leaf or leaf mulch is exposed to oxygen and precipitation, which inhibits any decomposition. Twenty-five (25) feet is the maximum pile height permitted under local land use restrictions. A pile of this size holds about 3,000 cubic yards of mulch. Kramer manages the pace and timing of its leaf mulch grinding so as to keep a roughly two to four week supply of leaf mulch products on hand. Kramer's production schedule and decisions of when to process leaves into mulch products are based on its experience with the seasonal nature of leaf mulch demand and are aimed at pacing processing so that sufficient stores of recently-processed leaf mulch product are available when customers demand

it. Any leaf mulch product that has not been sold by the end of the year, in October, is disposed of at a permitted composting facility.

- 10) Kramer minimizes the potential for emissions from its mulching operations through the use of a fine spray mister over the grinding area. Paving of the roadways and the concrete pad within the facility also reduce the potential for dust emissions. Control of the potential for dust emission and leaf blowing is also maintained through the two- to four-foot high concrete walls which border the operational area at the Kramer facility. Kramer's operations comply with applicable air regulations and permitting requirements, and the odor and dust control requirements set forth in the 35 Ill. Adm. Code Part 830 regulations.
- 11) The temperature of each leaf stack is monitored on a weekly basis. Temperature measurements are taken a few feet above the base of each stack and three to four feet into the stack. If a temperature of greater than 60 degrees centigrade is found, that leaf stack will be adjusted to allow internal materials to cool.
- 12) The moisture content of the leaf mulch will be tested regularly as follows: The moisture content goal will be no more than 40% by weight and each 1000 cubic yards of leaf mulch blend or special blend will be sampled for moisture in accordance with a methodology to be approved by IEPA as part of the site-specific operating plan. Records of this testing will be maintained at the Kramer facility.
- 13) Financial Assurance - Kramer will provide a Financial Assurance Plan consistent with 35 IAC Sections 830.601, 830.602, 830.603, 830.604, 830.605 and 830.606 as Section 13.0 Subpart F of its permit application, attached hereto as Exhibit A. Kramer's Financial Assurance Plan, to be approved by IEPA in conjunction with the permit application, accounts for the costs estimated to be necessary to transport and dispose of the entire volume of leaves and leaf mulch held at Kramer's facility at any time.

A more detailed description of each aspect of these conditions as applied to the Kramer leaf mulch operation is included in Kramer's original Permit Application, attached hereto as Exhibit A.⁶

Operations such as Kramer's leaf mulch production were simply not considered when the 35 Ill. Adm. Code 830 compost facility regulations were drafted or adopted. However, the proposed combination of the generally applicable 35 Ill. Adm. Code 830 provisions and the site-specific conditions described herein would meet shared goals of the Illinois Pollution Control Board, IEPA and Kramer of ensuring an environmentally responsible leaf mulch production operation. Following approval of this Petition for Adjusted Standards, Kramer will re-apply to IEPA for a permit, which would incorporate the 35 Ill. Adm. Code 830 standards, as modified by the Adjusted Standard sought through this Petition, and will continue its operations in accordance therewith.

Section 104.406(b) Statement

The regulations from which adjusted standards are sought were promulgated to implement, in part, the State programs under Sections 5, 21, 22.33, 22.34, 22.35 and 39 of the Illinois Environmental Protection Act (415 ILCS 5/5, 21, 22,33, 22.34, 22.35, 27 and 39) as authorized by Section 2 of that Act (415 ILCS 5/2). The regulations from which adjusted standards are sought were not promulgated to implement, in whole or in part, the requirements of the Clean Water Act (33 U.S.C. § 1251 *et seq.*), the Safe Drinking Water Act (42 U.S.C. § 300(f) *et seq.*), the Comprehensive Environmental Response, Compensation and Liability Act (42 U.S.C. § 9601 *et seq.*), the Clean Air Act (42 U.S.C. § 7401 *et seq.*), or the State programs concerning the Resource Conservation and Recovery Act, Underground Injection Control, or the National Pollution Discharge Elimination System (415 ILCS 5/28.1).

Section 104.406(c) Statement

There are no levels of justification for these adjusted standards for which this Petition is filed specified in the 35 Ill. Adm. Code 830 provisions.

⁶ An updated Permit Application would be submitted to the IEPA for consideration once this Petition for Adjusted Standard is resolved.

Section 104.406(d) Statement

The Kramer facility, located at 300 Charles Court in West Chicago, Illinois is a ten-acre parcel of which approximately five-and-a-half acres are used for the leaf mulching operations underlying this Petition for an Adjusted Standard.⁷ This West Chicago facility was opened in March 2008; Petitioner Kramer Tree Specialists, Inc. has been in operation since 1974. Kramer's mulch production has been ongoing for about twenty-five (25) years and the production of mulches containing leaves began in 2008. Currently seventy-nine (79) employees work at the Kramer West Chicago location with eight of them involved in the mulch production aspects of the operations.

The mulching operations consist of the transport of the collected fallen leaves and trees from municipal, commercial and residential properties to the Kramer facility for the production of two types of mulch. These mulch products are ultimately sold to commercial and municipal customers. One type of mulch is referred to as "leaf mulch," and is comprised of 100% ground virgin leaves. The other type is referred to as "special blend," and is comprised of 10% to 20% leaves mixed with 80% to 90% wood from trees, all of which are ground together. For each type of mulch, the color, size of the leaves, and moisture content of the end product are the critical attributes effecting marketability. A copy of the Kramer Permit Application is attached to this Petition to provide more detailed information, in addition to that described in this Petition above, about the location, design and operating procedures for the West Chicago facility (*See Exhibit A*).

As noted in the Introduction above, Kramer employees collect and transport for use in its leaf mulch production only landscape wastes that are exclusively comprised of fallen leaves. Kramer personnel are trained to reject or remove any other organic material (such as grasses or food waste) or inorganic material (such as metals, plastic, or other garbage) during waste collection and unloading. Upon arrival at the Kramer site, each load of leaves is reviewed by a Site Yard Manager to make sure that only leaves, as opposed to other wastes, are unloaded and stacked. If a delivered load is found to contain an amount of unusable material that is inappropriate for use in leaf mulch that renders it

⁷ Kramer uses the concrete pad for the operations to produce its non-leaf mulch products as well. That mulch is not comprised of recycled landscape materials and therefore is not subject to this Petition for an Adjusted Standard.

difficult to separate usable leaf-waste, Site Yard Manager will reject such load at the staging area. In that event, or if incidental unusable materials are found within a load of otherwise usable leaf-waste, Kramer personnel remove unusable loads or materials and place them in a dumpster positioned at the receiving area. Those collected materials are then properly disposed of offsite, with any unacceptable organic material being disposed of at a permitted composting facility.

Accepted leaf loads are placed on the concrete pad in stacks of no more than twenty-five (25) feet in height,⁸ with an outward slope one vertical to one horizontal (1V:1H), or less depending on the stability of the stack. Stacks of this height and shape minimize surface area and exposure of leaves to moisture and oxygen, thereby inhibiting decomposition. The length of the stacks varies depending on orientation and room on the pad. Ten (10) to twelve (12) feet of open space is maintained between stacks to facilitate management and inspection of the stacked leaves. Stacks are oriented so that the face exposed to the predominant wind direction is minimized thereby decreasing the potential for wind blown movement. To the extent that any leaves or leaf mulch does become windblown, Kramer personnel are instructed to retrieve such windblown material using the same equipment and techniques involved in Kramer's primary leaf collection activities. The two- to four-foot concrete wall around the facility operational area also serves to prevent windblown movement off-site.

The stacking of the leaves also takes place within this concrete staging area. During leaf mulch production, the stacked leaves are processed through a grinder or other similar machine to reduce leaf size. Currently, the Kramer facility manages approximately 15,000 cubic yards of leaves, although additional capacity exists should an increased volume of leaves be collected under future contracts. The approximately 15,000 cubic yard volume of leaves currently handled at the West Chicago facility will reduce to about 10,000 cubic yards once leaf mulch processing has been completed. This volume reduction is due to the drying and grinding process associated with mulch production.

⁸ The maximum allowable height under local land use restrictions.

Once the leaves are processed into mulch, the finished products are stored in a curing pile area on the concrete pad. A curing pile is approximately twenty-five feet tall by seventy-five feet wide and seventy-five feet long and holds about 3,000 cubic yards of leaf mulch ready for sale. Again, this height and shape maximally inhibits decomposition by minimizing exposure to moisture and oxygen: twenty-five (25) is the highest permissible pile under local land use restrictions.

In order to keep the leaves from decomposing and becoming anaerobic, each load is stacked so as to maximize density and minimize surface area. This approach also serves to reduce any potential for odors that might otherwise result from collected leaves. The stacks are maintained to reduce moisture and oxygen infiltration as well. Moisture content in stacks is maintained below 40% to inhibit decomposition. The temperature within each pile is monitored on a weekly basis. Stack size, shape, and placement are managed to maintain an internal stack temperature of less than 50 degrees centigrade to inhibit decomposition. If an elevated internal temperature of greater than 60 degrees centigrade is found, stacks may be disturbed to allow material inside the stack to cool. Finally, stacks are excavated during the cooler part of the day to the extent possible as another means of controlling heat.

The pad on which production takes place is reinforced concrete in a continuous slab with a minimum thickness of eight inches. The leaves are piled on the more elevated areas of the pad so that any water will drain away from the pile. The pad is constructed so that both precipitation run-on and run-off are controlled by the slope of the pad, which causes any liquid to flow into designated collection points. Attachment 2 of the Permit Application (Exhibit A) contains figures showing more details as to the location and nature of the pad construction and drainage features.

There are two storm water retention ponds at the facility to manage precipitation falling on the concrete pad; .96 acres of the pad drain to one pond and 4.59 acres of the pad drain to the other. The adequacy of the ponds and drainage systems was evaluated by Christopher B. Burke Engineering, Ltd., an independent consulting firm (*See* Attachment 8 to the Permit Application attached to this Petition as Exhibit A). Precipitation which comes into contact with the leaves is managed through a filter berm

composed of finely ground white wood material to filter out solids, and then collected and properly disposed of offsite, or treated as necessary prior to discharge in accordance with 35 Ill. Adm. Code Subtitle C. The filter berm is two to four feet in width and about one foot high. The used filter medium is recycled into the special blend mulch or disposed of at a permitted offsite composting facility.

The Kramer leaf operations do not result in emissions, discharges or releases. As noted above, storm water is managed through storm water piping, retention ponds and the concrete pad design. In addition, a Debris Turbulent Air Blower (Buffalo Turbine Model # CKB4SM) is used to produce a fine mist over the grinding area to control any particulate emissions that might otherwise result from that aspect of the mulch production operations. Dust is also controlled through the paving of roads and the concrete pad. The operation is designed and managed so that it does not result in releases.

Section 104.406(e) Statement

The general standards from which this adjusted standard is sought are not compatible with the Kramer operations or resulting leaf mulch products. For example, 35 Ill. Adm. Code 830.205(a)(1) speaks in terms of processing landscape waste into windrows, piles or other contained composting systems to “*provid[e] proper conditions for composting.*” 35 Ill. Adm. Code § 830.205(a)(1)(A)(emphasis added) While Kramer does place the received leaves into stacks when they are received, such stacks are not designed or managed to promote composting. To the contrary, part of Kramer’s operational goal in processing the leaves into mulch is to *minimize composting.* Therefore, this general standard can not be implemented at the Kramer facility if leaf mulch products are to be produced.

In place of the general compost-oriented plans, Kramer has developed plans for its leaf management to minimize compost development and produce mulch. Details as to the size of the piles; monitoring; temperature, moisture and oxygen controls; and quality control for mulch products have all been included in Kramer’s operating plan which is attached to this Petition as part of the Permit Application. (Exhibit A) Kramer is not seeking adjusted standards for subparts of 35 Ill. Adm. Code 830.206 not specifically

addressed herein above, but instead is committed to complying with those existing regulations.

35 Ill. Adm. Code 830.503, 830.504 and 830.507 each speak in terms of the nature and testing of "General Use Compost". Kramer does not produce compost through its operations and therefore these provisions do not fit Kramer's operations or products. However, Kramer does meet the intent, if not the specific language, of each of these provisions, through quality control of the mulch produced at its West Chicago location. That mulch is free of materials that would "pose a definite hazard to human health due to physical characteristics, such as glass or metal." as provided in the 35 Ill. Adm. Code 830.503 "General Use Compost" standard. In addition, the product mulch does not contain man-made materials larger than four millimeters in size exceeding 1% of the end product mulch on a dry weight basis. (*See* 35 Ill. Adm. Code 830.503) Therefore, Petitioner has proposed that standards equivalent to those promulgated for general use compost, but designed for the particular nature of leaf mulch production, be applied to its operations as shown above.

With respect to the general regulatory testing requirements of 35 Ill. Adm. Code 830.504 and 830.507, there is no standard testing method for leaf-based mulch. Therefore, while the collection of representative samples as provided in 35 Ill. Adm. Code 830.507 is feasible, it would be illogical to apply the prescribed 830 Appendix B Test Methods for compost stability to leaf mulch. Kramer is, however, proposing to add test protocols to monitor temperature in stacks and to assure that moisture content of leaf mulch does not exceed 40%, by dry weight, and those methodologies would be subject to IEPA review and approval as part of the site-specific operating plan.

Section 104.406(f) Statement

The information required under Section 104.406(f) is supplied above, in the Section 104.406(a) Statement and in the subsection titled "Kramer's Operational Criteria."

Section 104.406(g) Statement

Petitioner does not believe that any qualitative or quantitative difference between the impacts to the environment of its operations under the general regulations or the requested adjusted standard would exist. The adjusted standard requested herein merely recognizes that Petitioner does not operate a classic composting facility as contemplated under the regulations. Petitioner seeks to minimize actual composting, while the regulations are designed to promote it. Should the adjusted standard sought through this Petition be granted, Kramer will operate its facility in an environmentally protective manner, minimizing odors, discharges, emissions or releases to achieve the same overall protective goals, as required under the regulations. Only those aspects of the regulations which seek to facilitate composting or to test the stability of general use compost would be affected by granting this Petition.

Section 104.406(h)

Granting this adjusted standard is justified because the Kramer operation is an environmentally beneficial process that returns material that would otherwise be waste into the economic mainstream, consistently generates revenue, and provides employment for a significant number of individuals. The general composting regulations are incongruous with Kramer's leaf mulch operations. Adjusting those general standards as requested herein, will not detract from the environmental benefit of the standards at issue, but will instead allow this beneficial mulching operation to continue in an environmentally sound, permitted, and compliant manner.

Section 104.406(i) Statement

The adjusted standard requested herein may be granted consistent with Federal law. The germane aspects of the leaf mulching operation are not regulated by Federal law and therefore there are not relevant Federal regulatory or statutory authorities which must be complied with in proceeding with this adjusted standard action.

Section 104.406(j) Statement

Petitioner hereby requests a hearing on this Petition for An Adjusted Standard in accordance with Board rules.

Section 104.406(k) Statement

Attached to this Petition for An Adjusted Standard as Exhibit A is a copy of the May 2011 Application for a Leaf Mulch Production Facility filed with the IEPA. That document provides detailed information as to the operations including protective measures undertaken to produce the leaf mulch products. The IEPA letter of August 18, 2011 denying that permit is attached as Exhibit C. This Petition for an Adjusted Standard is being submitted to address the bases identified by IEPA for its denial of the permit application.

Section 104.406(l)

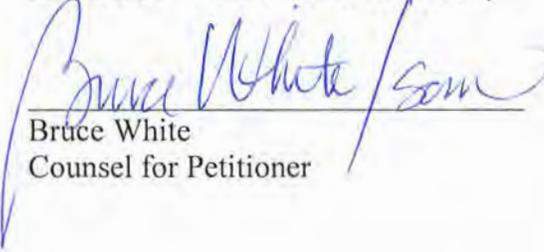
No other additional information is required under the regulations of general applicability from which this adjusted standard is sought.

Conclusion

The fundamental reason underlying this Petition for An Adjusted Standard is simply that the 35 Ill. Adm. Code 830 standards were developed to govern facilities which compost landscape waste. Kramer is not such a facility; rather it is a recycler of leaves into mulch that works to prevent composting. To require Kramer to comply with the general composting regulations would be akin to fitting a square peg into a round hole. Given the discrepancy in operational goals between Kramer and the general requirements, it is unavoidable that certain aspects of the existing regulations do not neatly apply to the Kramer operations. It is only those few defined points of departure for which adjusted standards are sought hereunder. Subject to those adjustments, Kramer's leaf mulch operations could and would comply with all other requirements of the composting regulations set forth in 35 Ill. Adm. Code Part 830.

WHEREFORE, this Petition for An Adjusted Standard should be granted.

RESPECTFULLY SUBMITTED,



Bruce White
Counsel for Petitioner

Dated: February 26, 2013

Bruce White
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Barnes & Thornburg LLP
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Chicago, Illinois 60606
(312)214-4584
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Exhibit A

**PERMIT APPLICATION FOR A
LEAF MULCH PRODUCTION FACILITY**

Submitted to:

*Illinois Environmental Protection Agency
Division of Land Pollution Control
Permit Section, Bureau of Land
1021 North Grand Avenue East
Springfield, IL 62794-9276*

On behalf of:

*Kramer Tree Specialists, Inc.
300 Charles Court
West Chicago, Illinois 60185
May 2011*

Submitted by:

*JPL Environmental Engineering
1122 North Clark Street, #3803
Chicago, IL 60610*

Distribution:

3 Original – Illinois Environmental Protection Agency
1 Copy – Kramer Tree Specialists, Inc.
1 Copy - JPL Environmental Engineering



Illinois Environmental Protection Agency

Bureau of Land • 1021 N. Grand Avenue E. • Box 19276 • Springfield • Illinois • 62794-9276

General Application for Permit (LPC - PA1)

This form must be used for any application for permit, except for landscape waste composting or hazardous waste management facilities regulated in accordance with RCRA, Subtitle C from the Bureau of Land. One original, and two copies, or three if applicable, of all permit application forms must be submitted. Attach the original and appropriate number of copies of any necessary plans, specifications, reports, etc. to fully support and describe the activities and modifications being proposed. Attach sufficient information to demonstrate the compliance with all regulatory requirements. Incomplete applications will be rejected.

Note: Permit applications which are hand-delivered to the Bureau of Land, Permit Section must be delivered to the above address between 8:30 am and 5:00 pm, Monday through Friday (excluding State holidays).

NOTE: Please complete this form online, save a copy locally, print and submit it to the Permit Section #33, at the above address.

I. Site Identification:

Site Name: Kramer Tree Specialists, Inc. IEPA ID Number: _____
 Street Address: 300 Charles Court P.O. Box: _____
 City: West Chicago State: IL Zip Code: 60185 County: DuPage
 Existing DE/OP Permit Numbers (if applicable): N/A

2. Owner/Operator Identification:

Owner		Operator	
Name:	<u>Kramer Land Development LLC</u>	Name:	<u>Kramer Tree Specialists, Inc.</u>
Street Address:	<u>300 Charles Court</u>	Street Address:	<u>300 Charles Court</u>
PO Box:	_____	PO Box:	_____
City:	<u>West Chicago</u> State: <u>IL</u>	City:	<u>West Chicago</u> State: <u>IL</u>
Zip Code:	<u>60185</u> Phone: <u>630-293-5444</u>	Zip Code:	<u>60185</u> Phone: <u>630-293-5444</u>
Contact:	<u>Joseph Kramer</u>	Contact:	<u>Joseph Kramer</u>
Email Address:	<u>joe@kramertree.com</u>	Email Address:	<u>rthomas@kramertree.com</u>

TYPE OF SUBMISSION/REVIEW PERIOD:	TYPE OF FACILITY:	TYPE OF WASTE:
New Landfill/180 days (35 IAC Part 813)	<input type="checkbox"/> Landfill	<input type="checkbox"/> General Municipal Refuse
Landfill Expansion/180 days (35 IAC Part 813)	<input type="checkbox"/> Land Treatment	<input type="checkbox"/> Hazardous
Sig. Mod. to Operate/90 days (35 IAC Part 813)	<input type="checkbox"/> Transfer Station	<input type="checkbox"/> Special (Non-Hazardous)
Other Sig. Mod./90 days (35 IAC Part 813)	<input type="checkbox"/> Treatment Facility	<input type="checkbox"/> Chemical Only (exec. putrescible)
Renewal of Landfill/90 days (35 IAC Part 813)	<input type="checkbox"/> Storage	<input type="checkbox"/> Inert Only (exec. chem. & putrescible)
Developmental/90 days (35 IAC Part 807)	<input checked="" type="checkbox"/> Incinerator	<input type="checkbox"/> Used Oil
Operating/45 days (35 IAC Part 807)	<input type="checkbox"/> Composting	<input type="checkbox"/> Potentially Infectious Medical Waste
Supplemental/90 days (35 IAC Part 807)	<input type="checkbox"/> Recycling/Reclamation	<input type="checkbox"/> Landscape/Yard Waste
Permit Transfer/90 days (35 IAC Part 807)	<input type="checkbox"/> Other (Specify) _____	<input checked="" type="checkbox"/> Other (Specify) _____
Renewal of Experimental Permit (35 IAC Part 807)	<input type="checkbox"/> Leaf Mulch _____	

3. Description of this Permit Request:

Application to accept landscape waste consisting of leaves in order to stack, store and process them into leaf mulch on 5.5 acres out of a 10 acre parcel located at the owner's existing tree care facility. Leaf mulch will be produced on an existing concrete pad that is also used for production of wood mulch.

IL 532-0334
LPC 040 Rev. 4/2010

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed \$50,000 for the violation and an additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.