



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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

JB PRITZKER, GOVERNOR

JOHN J. KIM, DIRECTOR

217/524-3301

**CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

7020 0090 0000 7718 5743

7020 0090 0000 7718 5774

OWNER/OPERATOR:

MWRD Chicago
Attn: John Murray
100 E. Erie
Chicago, Illinois 60811-3154

FACILITY LOCATION:

Harlem Avenue Solids Management Area
Attn: John Murray
7430 Portage Trail
Lyons, Illinois 60534

Re: 0310935044 – Cook Co.
Harlem Avenue Solids Mgmt Area
Permit No. 2017-013-DE/OP
Supplemental Permit No. 2021-440-SP
Log No. 2021-440
03R – Permits, 807 Storage/Treatment
Permit Approval

Dear Mr. Murray:

Permit has been granted to the Metropolitan Water Reclamation District of Greater Chicago as owner and operator to develop and operate an organic waste composting facility consisting of approximately 35 acres located within the Section 12, Township 38 North, Range 12 East of the Third Principal Meridian, Cook Co, Illinois, all in accordance with the application prepared and signed by Brian A. Perkovich, P.E. signed and dated January 12, 2017.

Supplemental Permit No. 2021-440-SP is hereby granted to the Metropolitan Water Reclamation District of Greater Chicago as owner and operator, approving a modification of an existing compost facility, all in accordance with the application prepared by Edward J. Staudacher, P.E., signature dated November 2, 2021. Final plans, specifications, application, and supporting documents, as submitted and approved, shall constitute part of this permit and are identified on the records of the Illinois EPA, Bureau of Land, and Division of Land Pollution Control by the permit number and log number designated in the heading above.

The application, Illinois EPA Log No. 2021-440, approved by this permit consists of the following document(s):

<u>DOCUMENT</u>	<u>DATE</u>	<u>DATE RECEIVED</u>
Original Application	November 3, 2021	November 8, 2021

2125 S. First Street, Champaign, IL 61820 (217) 278-5800
1101 Eastport Plaza Dr., Suite 100, Collinsville, IL 62234 (618) 346-5120
9511 Harrison Street, Des Plaines, IL 60016 (847) 294-4000
595 S. State Street, Elgin, IL 60123 (847) 608-3131

2309 W. Main Street, Suite 116, Marion, IL 62959 (618) 993-7200
412 SW Washington Street, Suite D, Peoria, IL 61602 (309) 671-3022
4302 N. Main Street, Rockford, IL 61103 (815) 987-7760

Waiver	February 1, 2022	February 1, 2022 via e-mail
Waiver	March 7, 2022	March 7, 2022 via e-mail
Additional Information	November 2, 2021	March 10, 2021

Specifically, Supplemental Permit No. 2021-440-SP approves the removal of conditions pertaining to a Beneficial Use Determination at this facility, and approves the modification of end-product compost pH range from 6.5-8.5 to 5.5-8.5.

Except for the differences described below, the special conditions of the permit letter for Supplemental Permit No. 2021-440-SP are identical to the special conditions of Permit No. 2017-013-DE/OP, issued April 13, 2017 and revision issued August 26, 2021.

Current Condition	Previous Condition	Change
III.12.c	III.12.c	Changed pH to "between 5.5 and 8.5."
III.15	III.15	Reworded to eliminate Section IV and refer to new BUD21-001.
N/A	IV.1-10	Removed all conditions pertaining to a Beneficial Use Determination.
IV.1-7	V.1-7	Renumbered after removal of Section IV.
V.1-4	VI.1-4	Renumbered after removal of Section IV.
VI.1-6	VII.1-6	Renumbered after removal of Section IV.

Pursuant to Section 39(a) of the Illinois Environmental Protection Act (Act) this permit is issued subject to the development, operating and reporting requirements for Solid Waste Facilities in 35 Illinois Administrative Code (IAC), Parts 807, the standard conditions attached hereto, and the following special conditions. In case of conflict between the permit application and these conditions (both standard and special), the conditions of this permit shall govern.

I. DEVELOPMENT

1. This Permit approves the development and operation of composting facility as detailed in permit application Log No. 2017-013.
2. At least seven (7) days prior to receiving waste at this location, the operator shall provide written notification to Illinois EPA's Des Plaines Regional Office, 9511 Harrison Street, Des Plaines, IL 60016.
3. The permittee shall submit an application for permit modification to the Illinois EPA and receive authorization before implementing any modification to the facility as defined in 35 IAC 807.

4. The permittee shall notify the Illinois EPA of any changes from the information submitted to the Illinois EPA in its application for a development and operating permit for this site. Permittee shall notify the Illinois EPA of any changes in the names or addresses of both beneficial and legal titleholders to the herein-permitted site. Such notification shall be made in writing within fifteen (15) days of such change and shall include the name or names of any parties in interest and the address of their place of abode; or, if a corporation, the name and address of its registered agent.

II. OPERATION

1. The permittee shall comply with all conditions of Illinois EPA Bureau of Water Permit No. 2014-AO58836 and any other permits issued by Illinois EPA.
2. For every odor complaint received, the operator shall record and report to the Illinois EPA's Des Plaines Regional Office within 24 hours after receiving the complaint, the date and time received, the name, address and phone number of the complainant, if volunteered upon request, and the name of the personnel receiving the complaint. Within seven days after the complaint, the operator shall report to the Illinois EPA on the date, time and nature of any action taken in response to an odor complaint.
3. The permittee shall insure that all utilities necessary for safe operation, including water supply and communications equipment, are available during operation of the facility.
4. If a breakdown of equipment occurs, the permittee shall insure that standby equipment is available or additional equipment can be brought on-site in time to comply with the requirements of this permit.
5. The permittee shall take measures to ensure that the waste does not become wind strewn or ignited and that no other provisions of the Act are violated.
6. The permittee shall maintain an accessible clear space between windrows suitable for housekeeping operations, visual inspection of windrow areas and fire fighting operations.
7. Open burning is prohibited at this facility, except in accordance with 35 IAC Parts 200-245, and any permits required by those regulations.
8. The operator shall implement as necessary methods for controlling dust, noise and vectors in accordance with application Log No. 2017-013, so as not to cause or contribute to a violation of the Act.
9. The operator shall control litter at the facility by patrolling the facility daily and collecting any litter accumulated. In addition, any litter from facility operations strewn beyond the confines of the facility shall be collected and properly disposed.

10. Non-compostable wastes shall be removed from incoming waste at the staging area. Non-compostable waste removed from incoming waste shall be regularly shipped off-site for disposal at a properly permitted facility.
11. The permittee shall implement appropriate noise control measures for shredding, chipping and windrow turning equipment.
12. The operator shall prevent tracking of mud by delivery and hauling vehicles onto public roadways.
13. No salvaging shall be conducted at this facility.
14. The operator shall implement controls at the facility to limit unauthorized access, prevent random dumping and ensure safety.
15. The operator shall have available at the facility or site office a written Operating Plan containing a description of the activities associated with composting. The Operating Plan shall be made available and explained to facility employees.
16. The operator shall provided annual training to employees on facility operating procedures for both normal and emergency situations. New employees shall be trained prior to participating in operations at the facility relevant to their employment. Employees shall sign an acknowledgment stating that they have received training in facility operating procedures and such acknowledgment shall be made a part of the records for the facility.
17. Any special waste as defined in Section 3.475 of the Illinois Environmental Protection Act, received at the facility, shall be immediately collected and hauled to a properly permitted facility.

III. COMPOSTING AND COMPOST MONITORING

1. The types of material that may be received and composted at this facility shall be limited to biosolids (generated from the MWRD's Stickney WRP), vegetative materials (including landscape waste, and wood chips), and additives as specified in condition III.2. This facility shall not accept more than 35,000 wet tons of biosolids, 175,000 cubic yards of vegetative materials (landscape waste, wood chips and other vegetative materials combined). Additives shall not consist more than 20% by volume of the material composted.
2. The types of additives, other than water, used in composting operations at this facility shall be limited to paper mill sludge as specified in application Log No. 2017-013.
 - a. The permittee shall only receive additives in containers which are not leaking.

- b. The permittee shall prevent excess liquids from additive delivery from contacting or contaminating the receiving area by placing sufficient absorbent material at the receiving area prior to unloading any waste.
 - c. The operator shall conduct load checking of each load of additives received for unacceptable materials and shall remove such materials or reject the load. Odorous loads which are likely to cause a nuisance to surrounding properties shall be rejected.
 - d. Any additive, or combination of additives, other than water, must not exceed 20 percent, by volume, of the composting material. Prior to the use of any additive not previously approved, the operator shall obtain written authorization from the Illinois EPA.
 - e. The permittee shall not receive additive if sufficient volumes of other material are unavailable the same day for blending with the additives so as not to exceed 20% by volume of total additive(s) in the composting material.
 - f. The permittee shall incorporate additives into windrows providing proper conditions for aerobic composting by the end of the day received.
 - g. In windrows containing additives, the windrow shall be covered by a compost cover fabric or a layer of wood chips, leaves or compost, placed thick enough to discourage foraging and maintain that cover, except during windrow maintenance, until the waste is no longer attractive to foragers.
 - h. The operator shall implement as necessary specific methods for controlling odors and vectors when receiving, processing, blending and composting additives in accordance with the contingency Plan of Application Log No. 2017-013.
3. Landscape waste, except for wood chips, received at the facility shall be processed and placed into windrows providing proper conditions for composting within 5 days of receipt.
 4. All incoming loads of material shall be inspected and the permittee shall reject material that are odorous and likely to cause a nuisance to surrounding properties and/or loads that contain a significant amount of non-compostable materials.
 5. The permittee shall construct and maintain windrows such that the windrows have a maximum height of seven (7) feet and a maximum width of twelve (12) feet. The permittee shall maintain an aisle width of at least eight (8) feet between.
 6. The permittee may temporarily store vegetative materials, in accordance with Permit Application Log No. 2017-013.
 - a. Vegetative materials shall be stored in Cell 1 at HASMA.

- b. The permittee may store up to 50,000 cubic yards of vegetative materials at any given time.
7. The operator shall conduct operations to minimize odors by:
 - a. Rejecting odorous loads likely to cause a nuisance to surrounding properties;
 - b. Load checking all incoming materials and rejecting bad loads;
 - c. Avoiding anaerobic conditions in the composting material;
 - d. Processing all materials received in a timely manner into windrows providing proper conditions for composting;
 - e. Mixing or covering odorous windrows with wood chips, end-product compost or applying odor neutralizing agents as necessary;
 - f. Considering the time of day and wind direction prior to turning or moving material; and
 - g. Forming windrows into a size and shape favorable to minimizing odors.
 8. The operator shall take measures to adjust the oxygen level within the windrow as necessary to promote aerobic composting. The oxygen level of each windrow of composting material shall be monitored, at a minimum, weekly.
 9. The temperature of each windrow of composting material shall be monitored at least weekly.
 10. The operator shall take measures to maintain the moisture level of the composting material within a range of 40% to 60%. The moisture level in each windrow of composting material shall be monitored, at a minimum, once every two weeks. If moisture is determined by the hand squeeze method, every twentieth sample shall be verified by a drying and weighing method, and such verification recorded.
 11. The operator shall turn each windrow at least four times per year and not less than once every six months.
 12. The end product of the composting process:
 - a. Must be free of any materials that pose a definite hazard to human health due to physical characteristics, such as glass or metal shards;
 - b. Must not contain manmade materials larger than four millimeters in size exceeding one percent of the end-product compost, on a dry weight basis;

- c. Must have a pH between 5.5 and 8.5;
- d. Must have reached stability, as demonstrated by one of the methods prescribed in 35 IAC 830 Appendix B;
- e. Must not contain fecal coliform populations that exceed 1000 MPN per gram of total solids (dry weight basis), or Salmonella species populations that exceed three MPN per four grams of total solids (dry weight basis); and
- f. Must not exceed, on a dry weight basis, the inorganic concentrations set forth below:

<u>Parameter</u>	<u>mg/kg (dry weight basis)</u>
Arsenic	41
Cadmium	21
Chromium	1200
Copper	1500
Lead	300
Mercury	17
Nickel	420
Selenium	36
Zinc	2800

- 13. The permittee shall conduct testing for the requirements of condition III.12 at a frequency of:
 - a. Once every 5000 cubic yards of end-product compost transported off-site, or
 - b. Once per year, if less than 5000 cubic yards of end-product compost are transported off-site per year.
- 14. The permittee shall conduct sample collection, preservation and analysis in accordance with methods set forth in 35 IAC 830.507.
- 15. End-product compost that meets the requirements of Condition III.12 is not a waste, if used in accordance with the conditions of Beneficial Use Determination Log No. BUD21-001.

IV. SURFACE WATER MANAGEMENT

- 1. The permittee shall maintain the composting surface to allow diversion of run-on waters away from the composting area.
- 2. The permittee shall allow the soil surfaces used for composting to dry periodically in order to promote aerobic conditions in the soil subsurface.

3. The permittee shall maintain the facility to prevent ponding of landscape waste leachate within the composting area or staging area. The site shall be maintained to promote and control runoff.
4. Issuance of this permit does not relieve the permittee of obtaining any necessary permits for water discharges, from the Illinois EPA's Bureau of Water.
5. The permittee shall implement best management practices to control runoff from composting areas to ensure the permitted facilities do not cause or contribute to a violation of the water quality standards contained in 35 IAC, Part 302.
6. The permittee shall control any runoff from the facility resulting from precipitation less than or equal to the 10-year, 24-hour precipitation event to ensure the runoff does not cause or contribute to a violation of the Act. Runoff from the composting area shall be directed to control berms and on-site drainage ways.
7. Storm water or other water which comes into contact with landscape waste received, stored, processed or composted, or which mixes with landscape waste leachate, is landscape waste leachate and must be collected and reused in the process, properly disposed off-site, or treated as necessary prior to discharge off-site to meet applicable standards of 35 IAC, Subtitle C, or transported to a properly permitted facility for treatment or disposal.

V. RECORDKEEPING

1. The permittee shall maintain records that demonstrate compliance with any additive limits.
2. The operator shall keep the following records at the facility, and they shall be available during normal business hours for inspection or photocopying by Illinois EPA personnel or designees. Records must be kept for three years.
 - a) Copies of the facility permit, design plans, operating plan, and any required reports must be kept at the facility, or at a definite location specified in the operating plan or permit, so as to be available during inspection of the facility.
 - b) The operator shall record the following information:
 - 1) The quantity of each load of landscape waste received;
 - 2) The origin, type and quantity of any additive accepted, when received at the facility;
 - 3) The type and quantity of any additive used in the composting process (water added during composting need not be quantified), as quantified based on a monthly review of additives remaining;

- 4) The dates of turning of each windrow or other pile;
 - 5) All monitoring data required pursuant to a facility permit;
 - 6) Conditions evaluated pursuant to the site operating plan;
 - 7) For any odor complaint received, the information collected;
 - 8) Details of all incidents that require implementation of the facility's contingency plan, and methods used to resolve them;
 - 9) Records pertaining to sampling and testing, as follows:
 - A) Locations in the composting area from which samples are obtained;
 - B) Number of samples taken;
 - C) Volume of each sample taken;
 - D) Date and time of collection of samples;
 - E) Name and signature of person responsible for sampling;
 - F) Name and address of the laboratory receiving samples, if applicable; and
 - G) Signature of the person responsible for sample analysis.
 - 10) The daily quantity of non-waste compost removed from the facility,
 - 11) Verification that requisite personnel training has been done
- c) The operator shall keep dated copies of the non-waste compost analyses.
3. The operator shall submit a written annual statement to the Illinois EPA, on a form provided by the Illinois EPA on or before April 1 each year that includes:
- a. An estimate of the amount of landscape waste material received for composting in the previous calendar year by weight (tons) and volume (cubic yards);
 - b. An estimate of the amount of additives received for composting in the previous calendar year;
 - c. An estimate of the amount and disposition of compost material in the previous calendar year; and
4. The permittee shall submit current 39(i) certifications and supporting documentation

with all applications for a permit.

VI. CLOSURE PLAN

1. The operator shall implement the Closure Plan in application Log No. 2017-013, dated January 7, 2013, upon commencement of closure of this facility.
2. The operator shall close the facility in a manner which:
 - a. Minimizes the need for further maintenance; and
 - b. Controls, minimizes or eliminates the release of landscape waste and landscape waste constituents to the groundwater or surface waters or to the atmosphere to the extent necessary to prevent threats to human health or the environment.
3. The operator shall initiate implementation of the closure plan within 30 days following the beginning of closure. Not later than 30 days following the beginning of closure the operator shall post a sign at each entrance, the text of which specifies in letters not less than three inches high: This facility is closed for all composting activities and all receipt of landscape waste. No dumping allowed. Violators will be prosecuted. The sign shall be maintained until certification of completion of closure is issued for the facility by the Illinois EPA.
4. Within thirty days after termination of operation, the operator shall notify the Illinois EPA in writing of site closure. A Final Composting Report shall be submitted to the Illinois EPA, and shall include the information in the Annual Report for the time since the end of the last report period.
5. Within 180 days following the beginning of closure the permittee shall remove all landscape waste, composting material, end-product compost, and any additives from the facility. Any material not fully composted, which must be transported off-site shall be managed at a compost facility operating in accordance with Section 21(q) of the Act.
6. Upon completion of closure activities the operator shall notify the Illinois EPA in writing that the site has been closed in accordance with the approved closure plan utilizing the Illinois EPA's form entitled "Affidavit for Certification of Closure of Permitted Non-Hazardous Transfer, Storage and Treatment Waste Facilities."

The original and three (3) copies of all certifications or reports, which are required to be submitted to the Illinois EPA by the Permittee, should be mailed to the following address:

Illinois Environmental Protection Agency
Permit Section
Bureau of Land - #33
1021 North Grand Avenue East

Post Office Box 19276
Springfield, Illinois 62794-9276

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

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

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

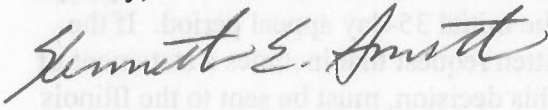
For information regarding the filing of an appeal, please contact:

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

Work required by this permit, your application or the regulations may also be subject to other laws governing professional services, such as the Illinois Professional Land Surveyor Act of 1989, the Professional Engineering Practice Act of 1989, the Professional Geologist Licensing Act, and the

Structural Engineering Licensing Act of 1989. This permit does not relieve anyone from compliance with these laws and the regulations adopted pursuant to these laws. All work that falls within the scope and definitions of these laws must be performed in compliance with them. The Illinois EPA may refer any discovered violation of these laws to the appropriate regulating authority.

Sincerely,



Kenneth E. Smith, P.E. Manager
Permit Section
Division of Land Pollution Control
Bureau of Land

KES:TWB:BGA\0310935044-COMP-2021440SP-APPROVAL

TWJ

Attachment: Standard Conditions

cc: Albert Cox, Ph.D., MWRD
Ann Ko, MWRD
Shreyas Patel, Chicago Dept. of Environment and Sustainability
Edward J. Staudacher, P.E.

Attachment

STANDARD CONDITIONS FOR CONSTRUCTION/DEVELOPMENT PERMITS ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY BUREAU OF LAND

August 22, 2001

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) grants the Environmental Protection Agency authority to impose conditions on permits which it issues.

These standard conditions shall apply to all permits which the Agency issues for construction or development projects which require permits under the Bureau of Land. Special conditions may also be imposed in addition to these standard conditions.

1. Unless this permit has been extended or it has been voided by a newly issued permit, this permit will expire two years after date of issuance unless construction or development on this project has started on or prior to that date.
2. The construction or development of facilities covered by this permit shall be done in compliance with applicable provisions of Federal laws and regulations, the Illinois Environmental Protection Act, and Rules and Regulations adopted by the Illinois Pollution Control Board.
3. There shall be no deviations from the approved plans and specifications unless a written request for modification of the project, along with plans and specifications as required, shall have been submitted to the Agency and a supplemental written permit issued.
4. The permittee shall allow any agent duly authorized by the Agency upon the presentation of credentials:
 - a. to enter at reasonable times the permittee's premises where actual or potential effluent, emissions or noise sources are located or where any activity is to be conducted pursuant to this permit.
 - b. to have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit.
 - c. to inspect at reasonable times, including during any hours of operation of equipment constructed or operated under this permit, such equipment or monitoring methodology or equipment required to be kept, used, operated, calibrated and maintained under this permit.

- d. to obtain and remove at reasonable times samples of any discharge or emission of pollutants.
 - e. to enter at reasonable times and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring, or recording any activity, discharge, or emission authorized by this permit.
5. The issuance of this permit:
- a. shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are to be located;
 - b. does not release the permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the proposed facilities;
 - c. does not release the permittee from compliance with other applicable statutes and regulations of the United States, of the State of Illinois, or with applicable local laws, ordinances and regulations;
 - d. does not take into consideration or attest to the structural stability of any units or parts of the project;
 - e. in no manner implies or suggests that the Agency (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.
6. Unless a joint construction/operation permit has been issued, a permit for operating shall be obtained from the Agency before the facility or equipment covered by this permit is placed into operation.
7. These standard conditions shall prevail unless modified by special conditions.
8. The Agency may file a complaint with the Board for modification, suspension or revocation of a permit:
- a. upon discovery that the permit application contained misrepresentations, misinformation or false statements or that all relevant facts were not disclosed; or
 - b. upon finding that any standard or special conditions have been violated; or
 - c. upon any violation of the Environmental Protection Act or any Rule or Regulation effective thereunder as a result of the construction or development authorized by this permit.