



SCOTT A. THOMPSON  
Executive Director

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

KEVIN STITT  
Governor

March 12, 2020

Mr. Shawn Cowan  
Green Leaf Recycling of Oklahoma  
P.O. Box 1108  
Roland, OK 74954

Re: Tier II Permit – Class II Composting Facility  
Green Leaf Recycling of Oklahoma  
Sequoyah County  
Solid Waste Permit No. 3568011

Dear Mr. Cowan:

The Oklahoma Department of Environmental Quality (DEQ) received a Tier II permit application from Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma (Green Leaf) for the construction of a new Class II composting facility on June 21, 2019 with supplemental information submitted July 18, 2019, July 24, 2019, September 5, 2019, September 9, 2019, September 19, 2019, November 4, 2019 and November 22, 2019.

Pursuant to 27A O.S. § 2-14-301(A), the application Notice of Filing was published in the *Sequoyah County Times*, Sallisaw, Oklahoma, on July 17, 2019. An affidavit of publication was received by DEQ, by email, on July 18, 2019. The public copy of the application was placed at the Muldrow Public Library. An electronic copy of the application was placed on DEQ's Land Protection Division Web Page, <https://www.deq.ok.gov/land-protection-division/permit-public-participation-process/>, and in DEQ Central Records. Green Leaf met the public notice requirements of 27A O.S. § 2-14-301(A).

On September 12, 2019, DEQ issued an Administrative Notice of Deficiency (NOD) to Green Leaf. On September 19, 2019, by email, DEQ received the Response to NOD. Supplemental information was received by email on November 4, 2019 and November 22, 2019.

DEQ inspected the proposed facility site on October 31, 2019 and found the site to be as depicted in the application.

DEQ determined the application to be administratively complete on November 22, 2019. Pursuant to Oklahoma Administrative Code (OAC) 252:4-7-8, the Solid Waste Permitting Unit conducted a technical completeness review with respect to the application and inspection. DEQ found the application to be technically complete on January 27, 2020 and issued a Draft Permit for public notice.



Mr. Shawn Cowan  
Green Leaf Recycling of Oklahoma  
March 12, 2020  
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Green Leaf published notice for the Draft Permit in the January 31, 2020 edition of the *Sequoyah County Times*, Sallisaw, Oklahoma. An affidavit of publication was received by DEQ, by email on March 3, 2020. The public copy of the Draft Permit was placed at the Muldrow Public Library. An electronic copy of the Draft Permit was placed on DEQ's Land Protection Division Web Page, DEQ's Main Web Page, <https://www.deq.ok.gov/permits-for-public-review/>, and in DEQ Central Records. Green Leaf met the public notice requirements of 27A O.S. § 2-14-302. No comments nor request for a public meeting were received by Green Leaf or DEQ.

Permit Condition B.7 requires a temporary easement be executed allowing DEQ and/or its contractors the right to access the property to perform closure, post-closure monitoring, or corrective action in the event of default by the Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma. The executed Temporary Easement, signed by the landowner/lessor, is required to be submitted to DEQ within thirty (30) days of issuance of this permit.

The closure cost estimate in the amount of \$6,000 is approved. A letter of credit from Firststar Bank in Roland, Oklahoma was received by DEQ on March 9, 2020 for \$6,105 which fully funded the closure cost estimate including the 2020 inflation factor of 1.75%.

Please be advised that DEQ considers the application to be in compliance with the rules and regulations of DEQ and is issuing the enclosed solid waste permit for the Class II Composting Facility. Green Leaf is approved to accept waste at the Class II Composting Facility. The Solid Waste Permit number for the facility is 3568011.

Should you have any questions please contact Ms. Cindy Hailes of my staff at (405) 702-5114.

Sincerely,



Hillary Young, P. E.  
Chief Engineer  
Land Protection Division

HY/ckh

Enclosure

cc: Chris Gremillion, Sequoyah County ECLS



SCOTT A. THOMPSON  
Executive Director

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

KEVIN STITT  
Governor

# SOLID WASTE PERMIT

The Department of Environmental Quality hereby approves the following permit:

**PERMIT NUMBER:** 3568011  
**APPLICANT:** Shawn Cowan  
**FACILITY NAME:** Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma  
**FACILITY TYPE:** Class II Composting Facility  
**COUNTY:** Sequoyah County

The above named applicant, having complied with the requirements of the law, is hereby granted permission to construct, operate, maintain and close a Class II composting facility, in particular a vermicomposting facility, located in a leased building and on approximately 1.54 acres, located in the City of Muldrow, Sequoyah County, Oklahoma.

That leased space is located at the following address: 2605 East Shawntel Smith Blvd., Muldrow, Oklahoma.

## Legal Description of Site

The site is located in a part of the SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  SE  $\frac{1}{4}$  of Section 21, Township 11 North, Range 26 East of the Indian Base and Meridian, described as: Beginning 136.00 feet West of the SE Corner of the SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  SE  $\frac{1}{4}$ ; thence North 88 feet to Highway 64 right-of-way for a point of beginning; thence West along highway 64 right-of-way 194.00 feet; thence North 360.00 feet; thence East 194.00 feet; thence South 360.00 feet to the point of beginning.

The leased area is located within a piece, parcel or tract of land situated in Sequoyah County, Oklahoma, more particularly described in "Exhibit "D-1" in the Application. The landowner/lessor on the warranty deed is Larry and Judy Cowan.

In accordance with Oklahoma Administrative Code (OAC) 252:515-19-38(b)(4), Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma has applied for a smaller buffer zone. OAC 252:515-19-38(b) requires all disposal facilities to be designed and maintained with a waste-free buffer zone of at least fifty (50) feet in width between all waste disposal and/or handling areas and adjacent property. The buffer zone is required to be contained within the permit boundary. The buffer zones on the north, south and west sides of the facility are fifty (50) feet between all processing areas and adjacent property. The smaller buffer zone proposed in the application is twenty-two (22) feet six (6) inches on the on the east side of the building. Since all operations will be contained within an enclosed building except for unloading of leaves, straw and grass clippings, and Permit Conditions will limit adjacent property impact from the waste, and a letter from the adjacent landowner east of the proposed site approving the smaller buffer zone was included in the Application, the smaller buffer zone is approved.



# SOLID WASTE PERMIT (continued)

Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma is allowed to accept, store and vermicompost up to 100 tons or 200 cubic yards per year of Type 1 and Type 2 feedstocks including medical marijuana waste. Any storage or treatment of any waste types or volumes not authorized in this Permit is prohibited.

This Permit has been prepared by the Oklahoma Department of Environmental Quality, pursuant to its authority under the Oklahoma Solid Waste Management Act, 27A O.S. § 2-10-101 *et seq.*, and the Oklahoma Administrative Code (OAC) 252 (Rules) of the Oklahoma Department of Environmental Quality promulgated thereunder. It sets forth conditions and requirements for the construction, operation, and maintenance of the Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma.

Issuance of this Permit does not convey any property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of state or local laws or regulations.

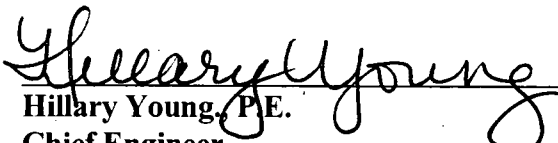
The provisions of this Permit are severable. If any part or provision of this Permit or the application of any provision of this Permit to any circumstance is held invalid by a court of competent jurisdiction, the decision of that court or the application of such provision to other circumstances and the remainder of this Permit shall not be affected thereby.

## Incorporation by Reference


Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma Compost Permit Application (Application) was received on June 21, 2019, with supplemental information submitted July 18, 2019, July 24, 2019, September 5, 2019, September 9, 2019, September 19, 2019, November 4, 2019 and November 22, 2019.

Any inaccuracies found in the Application or supporting documentation may provide cause for potential enforcement action against Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma and the amendment, modification or revocation of this Permit.

=====  
Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma is authorized to operate and close the Class II vermicomposting facility in conformity with the application and other documents incorporated by reference. Commencing operations under this Permit constitutes acceptance of, and consent to, the conditions contained herein.

  
Hillary Young, P.E.  
Chief Engineer  
Land Protection Division

Date: 3-12-2020

  
Kelly Dixon  
Director  
Land Protection Division

Date: 3-12-2020

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## A. PERMIT SUMMARY

1. **Name of facility:** Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma
2. **Type of facility:** Class II Composting Facility
3. **Method of processing:** Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma will process Type 1 and Type 2 feedstocks by shredding the waste then vermicomposting in raised beds.
4. **Name of applicant, applicant representative and applicant address:**

Mr. Shawn Cowan, Owner/Operator  
Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma  
P.O. Box 1108  
Roland, OK 74954  
Phone: (479) 459-0200
5. **Location of site:**

2605 East Shawntel Smith Blvd.  
Muldrow, OK 74948
6. **Type of waste(s) to be accepted:** The following types of Type 1 and Type 2 feedstocks may be accepted, stored and vermicomposted:
  - a. Marijuana roots, stems, stalks and fan leaves that are not included in the OAC 310:681-1-4 definition of medical marijuana waste;
  - b. Medical marijuana waste as defined in OAC 310:681-1-4. This includes wastes generated by the cultivation, research, education, processing and dispensing facilities, and testing laboratories as included in the permit modification application. Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma shall obtain all Oklahoma Medical Marijuana Authority (OMMA) required licenses and permits prior to accepting medical marijuana waste for disposal.
  - c. Leaves, straw and grass clippings;
  - d. Food wastes from produce markets and other sources; and
  - e. Newspaper, shredded paper and cardboard.
7. **Source(s) of waste:** Medical marijuana waste generators in the state of Oklahoma. Local retailers for the food, newspaper, paper and cardboard. Local residents for the grass clippings, leaves and straw.
8. **Estimated amount of waste to be received per day:** 750 pounds
9. **Population to be served:** approximately 649,000 persons.
10. **Area of permitted boundary:** Approximately 1.54 acres or 67,082 square feet. Enclosed metal building occupies approximately 0.35 acres of the 1.54 acres.
11. **Location standards:** Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma has met the following OAC 252:515 location standards:

- a. 100-year flood plain;
  - b. Scenic rivers;
  - c. Recreation/preservation areas;
  - d. Endangered or threatened species;
  - e. Public water supply; and
  - f. Wetlands
12. **Buffer zones:** The buffer zones on the north, south and west sides of the facility are fifty (50) feet between all processing areas and adjacent property. The smaller buffer zone on the east side of the building is twenty-two (22) feet six (6) inches.
13. **Legal right to property:** Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma operates on a current lease agreement, which is granted by the landowner/lessor to establish and operate a Class II composting facility.
14. **Estimated active life of site prior to final closure:** This Permit shall continue in effect until DEQ approves the final closure. The active life of site may also be influenced or determined by the landowner/lessor and the lease agreements.
15. **Financial assurance:** Proof of financial assurance in the amount of the closure cost estimate must be in place prior to DEQ approval for the facility to accept waste.

## **B. GENERAL CONDITIONS**

1. **Duty to comply:** Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma shall comply with the Oklahoma Solid Waste Management Act 27A O.S. § 2-10-101 *et seq.* (Act), the Environmental Quality Code (Code) and rules promulgated thereunder, including referenced provisions of the Oklahoma Administrative Code (OAC) 252:515 Management of Solid Waste (Rules), and all conditions of this permit. Any permit noncompliance constitutes a violation of this permit and is grounds for enforcement action; including permit modification, administrative civil penalties, summary suspension or revocation, and denial of a pending permit application.
2. **Duty to apply:** Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma shall apply for a permit modification or amendment when such application is required by the Rules or requested by DEQ.
3. **Need to halt or reduce activity not a defense:** It shall not be a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit.
4. **Duty to mitigate:** Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma shall take all reasonable steps to minimize or correct any adverse impact on the environment and public health resulting from noncompliance with this Permit or site operation.
5. **Proper operation and maintenance:** Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma shall at all times properly operate and maintain all facilities and

systems of treatment and control which are installed or used by the facility to achieve compliance with the Act and the conditions of this Permit. Proper operation and maintenance includes effective performance of operations and adequate funding, operator staffing and training, and the provision of appropriate waste-handling equipment.

6. **Duty to provide information:** Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma shall furnish to DEQ, within a time specified, any information which DEQ may request to determine:
  - a. Whether cause exists for modifying, amending, suspending, or revoking this Permit;
  - b. Compliance with this Permit;
  - c. Whether a new or modified Permit should be issued;
  - d. Copies of records required to be kept by the Rules.
7. **Temporary easement:** OAC 252:515-3-34(c) requires a temporary easement be executed allowing DEQ and/or its contractors the right to access the property to perform closure, post-closure monitoring, or corrective action in the event of default by the Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma. The executed Temporary Easement, signed by the landowner/lessor, is required to be submitted to DEQ within thirty (30) days of issuance of this permit.
8. **Inspection and entry:** Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma shall allow authorized representatives of DEQ, upon the presentation of credentials as may be required by law, to:
  - a. Enter upon the permitted site or where records required by this Permit are kept;
  - b. Inspect, photograph and videotape at reasonable times any site construction, waste management or disposal operation;
  - c. Sample or monitor, for the purpose of assuring compliance with this Permit, any substances or parameters at any location.
9. **Records:** Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma shall keep on file this Permit and permit application and copies of all:
  - a. As-built facility construction plans, drawings, and specifications;
  - b. A current inventory of worm beds including the quantity and size of the beds;
  - c. Repair and maintenance records;
  - d. Quantity of worm castings and worm tea produced and shipped from the site;
  - e. A daily log to record operational information, including the quantity of feedstocks received;
  - f. Reports filed with DEQ, including all incident reports; and
  - g. Closure records.



- 10. Reporting requirements:** Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma shall give notice to DEQ as soon as possible of any planned physical alterations or additions to the permitted facility and of any planned changes in the Permit or activity which may result in noncompliance with permit requirements. In the event that Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma becomes aware that it failed to submit any relevant facts or submitted incorrect information in the permit application or in any report to DEQ, it shall promptly submit correct facts or information. Failure to make a prompt submission is grounds for enforcement action and the amendment, modification or revocation of this Permit.
- 11. Renewal of lease:** Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma shall submit to DEQ a copy of the renewed lease. If the terms of the lease are modified between Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma and the landowner/lessor, DEQ may determine cause exists for modifying the Permit. Should the lease agreement not be renewed and the lease becomes null and void, Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma shall immediately notify DEQ and suspend operations or commence closure activities.
- 12. Suspended operations:** Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma may suspend development or operations of the Class II composting facility. To do so, Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma must:

  - a. Provide prior written notice to DEQ of the intent to suspend development or operations;
  - b. Renew such notice annually;
  - c. If site development or operations remain suspended for more than one year, without DEQ approval to continue the suspension, Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma shall perform closure activities in accordance with the approved closure plan and OAC 252:515-27; and
  - d. Post full financial assurance in accordance with OAC 252:515-27 and the approved closure cost estimates.
- 13. Resuming operations:** If Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma suspends operations, then prior to resuming such operations, the Permit must be modified if the Permit does not comply with all current laws and regulations or if required by DEQ.
- 14. Change in feedstock type:** In the future, if Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma wishes to accept feedstock other than those listed in the application, a Permit Modification shall be submitted to DEQ for approval.
- 15. Obligation to provide financial assurance:** OAC 252:515 requires Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma to establish and maintain financial assurance. Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma shall ensure financial assurance mechanisms are funded in the appropriate amount based on approved closure cost estimates.

16. **Transfer of permit:** This Permit may not be transferred to any other person except after notice to and approval of DEQ. No transfer will be approved until the applicant complies with all transfer requirements in the Rules.
17. **Corrective action requirement:** Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma shall conduct corrective action if inspection of the site, or any monitoring results, indicate the potential for, or actual release of, contaminants into the environment.
18. **Duration of permit:** OAC 252:515-3-5(a) mandates the duration of this permit is for the life of the facility.
19. **Cessation of operations:** If Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma ceases to accept waste for thirty (30) days or more without prior notice to DEQ, OAC 252:515-3-5(b) deems the facility to be in the process of final closure.
20. **Consent to conditions:** Commencing work under this Permit will constitute consent to all permit conditions.

### C. CONSTRUCTION CONDITIONS

1. **Construction authorization:** Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma shall construct the facility in accordance with the data, design criteria, plans, and specifications in the permit application, the Act and Rules, and the specific conditions set forth in this Permit for individual components of construction.
2. **Construction of surface water and runoff controls:** Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma shall construct and maintain the site as specified in the permit application to control surface water drainage and runoff at the site.
3. **Construction of worm vats and worm tea containers:** Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma shall not exceed 48 worm vats within the processing building. If more worm vats are required, Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma shall apply for a permit modification. The worm tea must be contained within leak-proof containers during processing.
4. **Operation of a composting facility:** Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma shall not commence operation of the composting facility until DEQ provides written approval to accept waste and commence operations.

### D. OPERATING CONDITIONS

1. **Holding period:** Type 2 feedstocks, including marijuana wastes shall, upon arrival, be brought inside the processing building for weighing and storage. The medical marijuana waste will be mixed with yard waste and/or other waste streams then ground and placed inside the worm vats for vermicomposting within twenty-four (24) hours of acceptance. No unprocessed feedstock may be stored for more than one (1) year. After 1 year, the unprocessed feedstock shall be properly disposed as solid waste.

2. **Acceptance of Type 2 feedstocks:** No more than 100 tons of Type 2 feedstocks may be processed within one year without applying for a permit modification to operate a Class III composting facility.
3. **Completed process:** The vermicomposting process shall be considered complete when the waste is consumed by the worms, and the worm castings and worm tea meet the Processes for the Further Reduction of Pathogens (PFRP) as defined by the Code of Federal Regulations Title 40, Part 503, Appendix B, Section B, at which time the worm castings and worm tea may be removed from the worm vats and are no longer considered solid waste.
4. **Vector control:** Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma shall control onsite populations of disease vectors using techniques appropriate to the protection of human health and the environment, as described in the operations plan.
5. **Odor control:** Suitable control measures, shall be taken whenever odors are detectable outside the composting facility.
6. **Fire prevention and mitigation:** Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma shall implement its plan for fire prevention and response efforts in the event of a fire, including immediately calling the fire department. Access to a fire extinguisher/water source will be available at the site.
7. **Air criteria:** Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma shall ensure that it does not violate any applicable requirements of the Oklahoma Clean Air Act, as amended, or rules promulgated thereunder.
8. **Open burning prohibited:** Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma is prohibited from burning any waste at this facility.
9. **Prohibited wastes:** As specified in the permit application, only the following Type 1 and Type 2 feedstocks may be accepted, stored and vermicomposted:
  - a. Marijuana roots, stems, stalks and fan leaves that are not included in the OAC 310:681-1-4 definition of medical marijuana waste;
  - b. Medical marijuana waste as defined in OAC 310:681-1-4. This includes wastes generated by the cultivation, research, education, processing and dispensing facilities, and testing laboratories as included in the permit modification application. Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma shall obtain all Oklahoma Medical Marijuana Authority (OMMA) required licenses and permits prior to accepting medical marijuana waste for disposal.
  - c. Leaves, straw and grass clippings;
  - d. Food wastes from produce markets and other sources; and
  - e. Newspaper, shredded paper and cardboard.

Any storage, treatment, and/or disposal of other wastes not authorized in this Permit is prohibited, unless exempted from permit requirements. Any receipt, storage or disposal of any weight or volume of hazardous waste is strictly prohibited.

10. **Disposal facility:** Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma shall dispose of all unprocessable medical marijuana waste at a site permitted to accept such wastes.
11. **Preservation of aesthetics:** Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma shall keep the parking lot clean and waste free and the grass will be cut and maintained to maintain the aesthetic quality of the site.
12. **Water management:** Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma shall operate the site to prevent the discharge of contaminated stormwater, unless the proper permit is obtained from DEQ's Water Quality Division. All waste contaminated water including, but not limited to, wash down water from trucks, floors and equipment shall be collected and reused in the worm beds or transported and disposed at a facility permitted to manage the waste contaminated water.
13. **Out of state waste:** The facility shall not accept any medical marijuana waste from outside the State of Oklahoma.

## E. REQUIRED NOTICES

1. **Twenty-four hour reporting:** Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma shall report to DEQ any noncompliance which may endanger health or the environment. Any such information shall be reported orally within 24 hours from the time Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma becomes aware of the circumstances. The report shall include the following:
  - a. Information concerning release of any waste that may cause an endangerment to public drinking water supplies;
  - b. Information of a fire or explosion at the facility which could threaten the environment or human health outside the facility; and
  - c. The description of the occurrence and its cause shall include:
    - 1) Name, address, and telephone number of the owner or operator;
    - 2) Name, address, and telephone number of the facility;
    - 3) Date, time, and type of incident;
    - 4) Name, quantity and generator(s) of materials involved;
    - 5) The extent of injuries, if any;
    - 6) An assessment of actual or potential hazards to the environment and human health outside the facility;
    - 7) Estimated quantity and disposition of recovered material that resulted from the incident; and
    - 8) If the occurrence is determined to be a result of faulty equipment, then similar equipment throughout the facility will be replaced to prevent the same occurrence.
2. **Written incident report:** A written report shall also be submitted to DEQ within five (5) days of the time Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma

becomes aware of the incident. The written report shall contain a description of the situation and the cause; the period(s) of the situation (including exact dates and times); whether the situation has been corrected; and, if not, the anticipated time it is expected to be corrected; and steps taken or planned to reduce, eliminate, and prevent recurrence of the situations.

## F. CLOSURE CONDITIONS

1. **Closure plan:** Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma shall amend the approved closure plan and submit to DEQ for approval when:
  - a. A closure cost estimate adjustment is required; or
  - b. Modifying the Permit when such modification will affect closure duties or requirements.
2. **Notice of final closure:** Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma shall give written notice to DEQ fifteen (15) days prior to closure of the facility.
3. **Certification of final closure:** Within 60 days after the completion of final closure for the entire site, Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma shall submit to DEQ a notarized statement signed by an authorized agent for Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma and a certification, signed and sealed by an independent professional engineer registered in the State of Oklahoma, that the site was closed in accordance with the approved closure plan, the Permit, and applicable Rules.
4. **Closure approval:** Final closure of the site must be in accordance with this Permit, the approved Closure Plan, and regulatory requirements and must be approved in writing by DEQ.

## G. FINANCIAL ASSURANCE


1. **Establishment of financial assurance:** Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma shall establish financial assurance in accordance with OAC 252:515-27 based upon the cost for removal and disposal, by a third party not affiliated with Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma of the maximum amount of feedstock and product material that the site is capable of storing at any time, in addition to removal of equipment, temporary buildings, and establishing permanent vegetation at the facility if required.
2. **Increase of approved closure cost estimate:** Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma shall increase the approved closure cost estimate and the amount of financial assurance provided if, at any time during the active life, changes to the closure plan or facility conditions increase the maximum cost of closure.
3. **Annual adjustment of approved closure cost estimate:** Cowan Innovations LLC. DBA Green Leaf Recycling of Oklahoma shall adjust the closure cost estimate annually and submit the revised closure cost estimate to DEQ no later than April 9<sup>th</sup> of each year. If there are no significant changes to the closure plan, the closure cost estimate may be adjusted by use of an inflation factor derived from the most recent annual "Implicit Price Deflator for Gross National Product" or the "Implicit Price Deflator for Gross Domestic Product"


published by the U.S. Department of Commerce in its Survey of Current Business in the year for which the adjustment is being made. The first adjustment shall be made by multiplying the approved cost estimate by the inflation factor. The result is the adjusted cost estimate. Subsequent adjustments shall be made by multiplying the latest adjusted cost estimate by the latest inflation factor. The approved adjusted cost estimates shall be placed in the operating record.


## ROUTING SLIP

**Date:** March 12, 2020

**TO:** Kelly Dixon, Director  
Land Protection Division 

**THROUGH:** Hillary Young, P.E., Chief Engineer  
Land Protection Division 

David Cates, P.E., Engineering Supervisor   
Land Protection Division

**FROM:** Cynthia K. Hailes, P.E.   
Land Protection Division

**SUBJECT:** Tier II Solid Waste Permit  
Green Leaf Recycling of Oklahoma  
Class II Composting Facility  
New Solid Waste Permit No. 3568011


**For your signature and initial memorandum:**

**Hillary Young – 2 signatures**  
**Kelly Dixon – 1 signature**

Please return to: Cynthia Hailes

March 6, 2020

**MEMORANDUM**

**TO:** Kelly Dixon, Director   
Land Protection Division


**THROUGH:** Hillary Young, P.E., Chief Engineer  
Land Protection Division

**THROUGH:** Karen Jayne, Environmental Attorney  
Office of the General Counsel

**THROUGH:** Patrick Riley, Environmental Programs Manager  
Solid Waste and Sustainability Unit

**THROUGH:** David Cates, P.E., Engineering Manager  
Solid Waste Permitting Unit

**THROUGH:** Amber Edwards, Environmental Programs Manager  
Solid Waste Compliance Unit

**FROM:** Cynthia K. Hailes, P.E.   
Solid Waste Permitting Unit

**SUBJECT:** New Class II Composting Facility Permit  
Green Leaf Recycling of Oklahoma  
Vermicomposting Facility  
Solid Waste Permit No.: 3568011  
Sequoyah County, Oklahoma

**PENDING APPLICATION**

The initial Tier II application was received by the Department of Environmental Quality (DEQ) on June 21, 2019 with supplemental information submitted on July 18, 2019, July 24, 2019, September 5, 2019, September 9, 2019, September 19, 2019, November 4, 2019 and November 22, 2019. This permit will allow Cowan Innovations LLC DBA Green Leaf Recycling of Oklahoma to construct and operate a Class II composting facility in Sequoyah County, Oklahoma. Green Leaf Recycling of Oklahoma intends to apply for a license and a permit with the Oklahoma Medical Marijuana Authority to accept and compost medical marijuana waste through vermicomposting. The medical marijuana waste will be mixed with Type I and Type II feedstock (food waste, paper waste and yard waste) and fed to worms to digest. Worm casting and worm tea will be the composted products. The application contains DEQ required background information, facility design and operation plans and facility closure plan. OAC 252:4-7-59(1)(F) requires this permit application for an off-site processing facility to be processed as a Tier II application.



**PUBLIC NOTICE AND COMMENT**

Pursuant to 27A O.S. § 2-14-301(A), the application Notice of Filing was published in the *Sequoyah County Times*, Sallisaw, Oklahoma, on July 17, 2019. An affidavit of publication was received by DEQ, by email, on July 18, 2019. The public copy of the application was placed at the Muldrow Public Library. An electronic copy of the application was placed on DEQ's Land Protection Division Web Page, <https://www.deq.ok.gov/land-protection-division/permit-public-participation-process/>, and in DEQ Central Records. Green Leaf met the public notice requirements of 27A O.S. § 2-14-301(A).

Green Leaf published the notice of filing for the Draft Permit in the January 31, 2020 edition of the *Sequoyah County Times*, Sallisaw, Oklahoma. An affidavit of publication was received by DEQ, by email on March 3, 2020. The public copy of the Draft Permit was placed at the Muldrow Public Library. An electronic copy of the Draft Permit was placed on DEQ's Land Protection Division Web Page, DEQ's Main Web Page, <https://www.deq.ok.gov/permits-for-public-review/>, and in DEQ Central Records. Green Leaf met the public notice requirements of 27A O.S. § 2-14-302. No comments nor request for a public meeting were received by Green Leaf or DEQ.

**RECOMMENDATION**

The permit application for the proposed Green Leaf Recycling of Oklahoma Composting Facility located in Sequoyah County has been reviewed by the staff of Solid Waste Permitting Unit (SWPU). It meets the requirements of the Oklahoma Solid Waste Management Act and the Rules of the Oklahoma Department of Environmental Quality promulgated thereunder. The SWPU recommends the application be approved and a Solid Waste Permit be issued.

**LAND PROTECTION DIVISION  
CONTROL SHEET**

Program Code 085

Subject: Green Leaf Recycling

Type of Letter: Approval - Final Permit

Date Draft Submitted: 3/3/20

Send Copies to: K. STAMBAUGH

		<u>Initials</u>	<u>Date</u>
1.	Typist	<u>CUH</u>	<u>3/3</u>
2.	Preparer (Add or mark through names below as appropriate for review)	<u>CUH</u>	<u>3/3</u>

**Letters to be submitted in draft (not on letterhead) form to the following:**

3.	Preparer's Supervisor	<u>D. Cates</u>	<u>DAC 3/5</u>
4.	Compliance	<u>A. Edwards</u>	<u>AC 3/5/20</u>
5.	Attorney/Legal	<u>K. Jayne</u>	<u>JR 3/10/20</u>
6.	<del>Clerical</del>	<u>P. Riley</u>	<u>PR 3-5-20</u>
7.	Signatory	<u>H. Young</u>	<u>HY 3/6</u>
8.			

**Final letter (prepared on letterhead & ready for mailing) to be submitted to the following:**

1.	Preparer (I have re-read this letter for content & quality)	<u>CUH 3/12</u>
2.	Data Entry (if applicable)	
3.	Clerical	
4.	Preparer's Supervisor	<u>DAC 3/12</u>
5.	Signature	
6.	Edoctus Barcode Preparation:	<u>SW3568011</u>

Letter will be returned to clerical person for copying and mailing.

Date letter mailed/Initial: 3/12/2020 mw  
 Certified Mail # \_\_\_\_\_

(This control sheet is to be attached to file copy of **final letter** and placed in facility file.)

MAR 09 REC'D

A handwritten signature in black ink, consisting of several loops and a long horizontal stroke extending to the right.