

Spakes, Rita

From: Cusher, Annette
Sent: Monday, April 03, 2017 9:30 AM
To: Spakes, Rita
Subject: FW: City of Little Rock Yard Waste Compost Facility 2016 AEIR (AFIN 60-01071)
Attachments: FINAL 2016 Annual Report Composting Facility 2017-03-31.pdf

Follow Up Flag: Follow up
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From: Jason J Ghidotti, PE [<mailto:jjg@ftn-assoc.com>]
Sent: Friday, March 31, 2017 4:36 PM
To: Cusher, Annette
Subject: City of Little Rock Yard Waste Compost Facility 2016 AEIR (AFIN 60-01071)

Ms. Cusher,

FTN is pleased to submit the attached 2016 Annual Engineering Inspection Report (AEIR) for the City of Little Rock Yard Waste Composting Facility (Permit No. 0031-SCYW). Please contact me or Paul Crawford if you have any questions.

Thanks,
Jason

Jason J Ghidotti, PE*
FTN Associates, Ltd.
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Little Rock, Arkansas 72211
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water resources / environmental consultants

**2016 ANNUAL REPORT
CITY OF LITTLE ROCK
YARD WASTE COMPOST FACILITY
PERMIT NO. 0031-SCYW, AFIN: 60-01071**

MARCH 31, 2017

2016 ANNUAL REPORT
CITY OF LITTLE ROCK
YARD WASTE COMPOST FACILITY
PERMIT NO. 0031-SCYW, AFIN: 60-01071

Prepared for

City of Little Rock
Department of Public Works
Division of Solid Waste Services
10803 Ironton Cutoff
Little Rock, AR 72206

Prepared by

FTN Associates, Ltd.
3 Innwood Circle, Suite 220
Little Rock, AR 72211

FTN No. R04010-1511-001

March 31, 2017

CERTIFICATION

In view of the requirements for compost reporting, I have inspected the compost site at the Little Rock Solid Waste Facility. To the best of my knowledge, the compost facility generally complies with permit conditions and Regulation No. 22, including the following:

1. Compliance with the operating requirements of Regulation No. 22 and permit conditions;
2. No changes to the operating plan have been made that are not identified in this report;
3. Stormwater controls have been maintained;
4. One corrective action required during 2016 by the Arkansas Department of Environmental Quality was implemented; and
5. No other items were observed that may impact permit compliance at the compost facility.



Jason J Ghidotti, PE, Arkansas License #10031
Project Manager
FTN Associates, Ltd.

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1.0 INTRODUCTION

The City of Little Rock (CLR) owns and operates a municipal solid waste management facility at 10803 Ironton Cutoff Road in Pulaski County, Arkansas. Facilities at this complex include a Class 1 landfill, Class 4 landfill, and yard waste composting site, all permitted on April 27, 1993, by the Arkansas Department of Environmental Quality (ADEQ) under Permit No. 0266-S. The complex also includes an administration building, shop building, records storage building, scale house, solid waste collection section building, vehicle wash site, fuel station, leachate pretreatment system, and a cart maintenance facility. The solid waste management facility is operated by the Solid Waste Services Division of the CLR Department of Public Works. On October 17, 2008, a separate permit for the yard waste compost facility, Permit No. 0031-SCYW, was issued to CLR.

ADEQ policy requires that all permitted compost facilities prepare an annual report that addresses the quantity of compost produced. This report documents findings of a site inspection by the Engineer on February 10, 2017 and compliance with annual reporting requirements. Appendix A presents correspondence with ADEQ during the year. Appendix B shows photos from the inspection.



2.0 OPERATIONS SUMMARY

The yard waste composting facility was operated by American Composting, Inc. (ACI), through the first quarter of 2001. On March 28, 2001, CLR decided not to renew its contract with ACI, and CLR has operated the facility since then. ACI removed all of the final product stored at the site in July 2001.

The composting facility is a 20-acre, asphalt-paved site where yard waste is aerobically composted using the windrow composting method. The service area is the city of Little Rock. Incoming yard waste is weighed at the scale house and the source and tonnage recorded in electronic and paper records. The composting process consists of a four-step process as described in the sections below.

2.1 Preliminary Processing

Incoming yard waste is unloaded at a designated receiving area. Unacceptable items or oversized items such as large tree trunks are sorted out and disposed at the landfill. The remaining yard waste is then processed by grinding for size reduction.



The yard compost site utilizes the windrow method of composting. This facility also produces mulch and boiler fuel.

2.2 Active Composting

The active compost process begins by constructing windrows of ground yard waste with front-end loaders. As the compost process progresses, windrows are periodically turned using a windrow turning machine or front-end loaders. Water is added as needed and pile temperature is monitored during the process.

2.3 Curing

As the active composting process progresses, windrows are gradually combined until finally, a large curing pile is constructed for final compost curing. The curing process allows time for the compost process to progress to maturity.



Finished compost (foreground) and mulch (background).

2.4 Final Screening

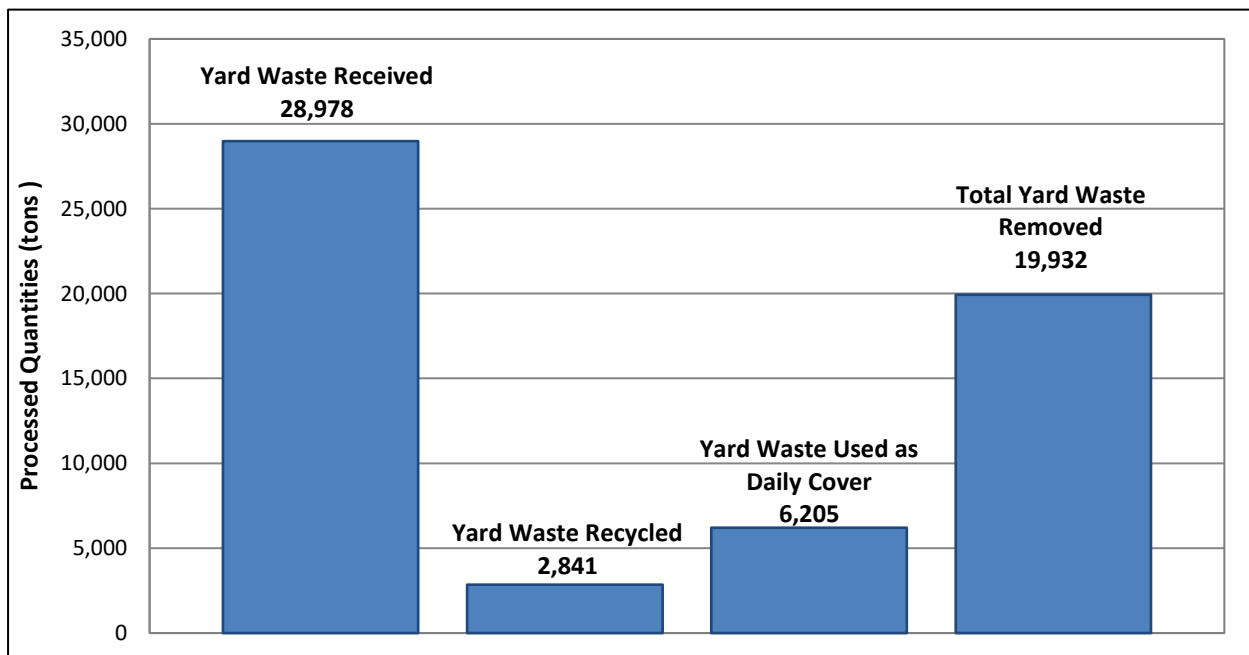
After the curing process is complete, the compost is screened to reduce particle size and screen out plastic bag remnants and oversized materials. Final screening produces a uniform, high-quality material suitable for use as a soil amendment. Screen rejects are disposed of in the Class 1 landfill.



Boiler fuel is composed of ground hard and soft wood.

3.0 PROCESSED QUANTITIES

In addition to compost, this facility produces mulch and boiler fuel (ground hard and soft wood). The scale house tracks the total tons of finished products (compost, mulch, and boiler fuel) removed from the site, the inert reject material that is sorted out and disposed of in the Class 1 landfill, and the yard and tree waste received at the facility. In addition, CLR tracks the tons of ground yard waste utilized as alternate daily cover (ADC) at the Class 1 landfill. The graph below shows the tonnage handled for the 2016 calendar year. The facility received 28,978 tons of yard waste during 2016. Of the 28,978 tons of yard waste received, 19,932 tons of finished product was removed from the facility; 6,205 tons was used as mulch for daily cover on the Class 1 landfill; and 2,841 tons was recycled (see Appendix C).



4.0 COMPLIANCE WITH OPERATING REQUIREMENTS

Based on quarterly inspections by ADEQ, the yard waste compost site is in compliance with the operating requirements of Regulation No. 22 and permit conditions. However, ongoing maintenance and site improvements are needed to keep the facility in compliance with environmental regulations. Correspondence with ADEQ is included in Appendix A.

4.1 Blowing Litter

Yard waste including leaves, grass, and shrubbery prunings are typically collected in plastic bags. During the composting process, some blowing litter problems are generated due to the grinding of the above plastic bags. To address blowing litter problems, CLR installed a perimeter fence in January 2002. Removal of ground plastic trapped by the perimeter fence is carried out regularly at the facility. The perimeter fence and facility was clean at the time of inspection.

4.2 Site Inventory

Site inventory is the comparison between the amount of incoming material (yard and tree waste) and the amount of material leaving the composting site, which is composed of finished products (compost, mulch and boiler fuel), compost rejects, and ground yard waste utilized as alternate daily cover material at the Class 1 landfill. The facility had several piles of unprocessed waste, ground waste and compost. The materials were well-segregated.

4.3 Pond Maintenance

City crews perform ongoing maintenance activities on the compost runoff pond such as mowing of the cover vegetation of the pond's banks. The pond and perimeter swales were in good condition at the time of the inspection. Minor amounts of litter were present in the east swale from traffic to the Class 1 and Class 4 landfills. The facility routinely collects and disposes of this litter.

5.0 PROPOSED CHANGES TO THE OPERATING PLAN

No changes in the current method of operations were required.

6.0 STORMWATER CONTROLS

All proposed stormwater controls are in place and functioning. On October 25, 2006, ADEQ issued NPDES Stormwater Industrial General Permit No. ARR000220, and a renewal notice was issued on January 12, 2011. The NPDES permit allows the discharge of the CLR composting runoff pond into “waters of the United States.” On November 7, 2006, CLR began discharging the compost runoff pond into a ditch located just north of the pond. As a backup system, stormwater from the compost runoff pond can be diverted to the leachate pond or directly to the city’s sewer line. According to facility management, the diversion systems were not utilized during 2016.

7.0 CORRECTIVE ACTIONS

The inspections performed by ADEQ during the present reporting period resulted in one category 2 violation regarding §22.805 of Regulation No. 22 (listed as “Operations in accordance with permit documents” on the inspection form). The compost grinder and screen were non-functional during the third and fourth quarterly inspections. By the December of 2016, the grinder and screen were functional according to facility responses to ADEQ (Appendix A). The grinder was operational at the time of this inspection. Other than ongoing maintenance activities, there are no pending corrective actions required by ADEQ.

APPENDIX A

Permit Modifications and Department Correspondence



Department of
Public Works

10803 Ironton Cutoff
Little Rock, Arkansas 72206
888-4299
Fax 888-4589

September 23, 2016

AFIN: 60-01071
PMT#: 0031-SCYW REC'D SCAN

SEP 27 2016

Lori Burke, Inspector
Arkansas Department of Environmental Quality
Solid Waste Management Division
5301 Northshore Drive
North Little Rock, AR 72118-5317

DOC ID: 70339
TO: LBzyle SWMD

Re: Quarterly Inspection, AFIN 60-01071, Permit 0031-SCYW

Dear Ms. Burke:

In response to your inspection of September 1, 2016, the following is a list of comments and corrective actions to be undertaken on the City of Little Rock's Compost Site:

Compost Site, Permit # 0031 – SCYW

- Lack of equipment. We took delivery of a new screen machine the week of September 12th. Awaiting installation of a fire suppression system and vendor training. Both of these items should be completed by mid-October. The engine for the grinder has been shipped off for rebuilding and expect the machine to be back and operational by mid-October also.

Thank you for your cooperation in this matter. If I can be of any further assistance please contact me at your convenience.

Sincerely,

Warren Atkins
Solid Waste Services Manager



Department of
Public Works

10803 Ironton Cutoff
Little Rock, Arkansas 72206
888-4299
Fax 888-4589

December 5, 2016

AFIN: 60-01071
PMT#: 0031-SCYW REC'D SCAN

DEC 07 2016

DOC ID#: 70699
TO: LB7E12 C005 SWMD

Lori Burke, Inspector
Arkansas Department of Environmental Quality
Solid Waste Management Division
5301 Northshore Drive
North Little Rock, AR 72118-5317

Re: Quarterly Inspection, AFIN 60-01071, Permit 0031-SCYW

Dear Ms. Burke:

In response to your inspection of November 16, 2016, the following is a list of comments and corrective actions to be undertaken on the City of Little Rock's Compost Site:

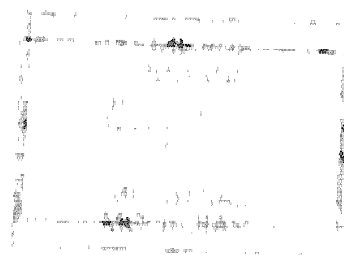
Compost Site, Permit # 0031 – SCYW

- No materials being processed at time of inspection due to grinder being non-functional. Rebuilt engine was reinstalled in grinder this past week and is being tested at this date. Production should resume this week and plan on working overtime to grind stockpiled materials.

Thank you for your cooperation in this matter. If I can be of any further assistance please contact me at your convenience.

Sincerely,

Warren Atkins
Solid Waste Services Manager



APPENDIX B

Photographs from Inspection



Photo 1: Yard Waste facility from southwest corner



Photo 2: Yard waste as received



Photo 3: Facility equipment



Photo 4: Facility equipment



Photo 5: Compost windrows



Photo 6: Litter fence and swale

APPENDIX C

Monthly Yard Waste Quantities

**2016
Recycled Yard Waste**

Date	Yard Waste Received	Yard Waste Recycled	Compost Waste	Daily Cover Grinding	Total Removed
January	1,952.28	186.19	0.00	1,112.65	653.44
February	2,028.73	230.30	0.00	419.05	1,379.38
March	2,191.52	703.71	0.00	1,103.98	383.83
April	2,316.79	639.61	0.00	696.49	980.69
May	2,174.37	456.44	0.00	531.76	1,186.17
June	2,085.37	275.51	0.00	187.85	1,622.01
July	2,810.94	155.69	0.00	1,002.25	1,653.00
August	3,397.12	85.81	0.00	612.68	2,698.63
September	2,004.59	86.73	0.00	11.56	1,906.30
October	1,971.83	4.78	0.00	208.80	1,758.25
November	2,427.31	9.99	0.00	95.37	2,321.95
December	3,617.26	6.62	0.00	222.53	3,388.11
Total	28,978.11	2,841.38	0.00	6,204.97	19,931.76