

October 5, 2020 Project No. 20-137492

Ms. El Kromhout

Florida Department of Environmental Protection Permit Processing Central District 2600 Blair Stone Road, MS 4565 Tallahassee, FL 32399

APPLICATION FOR RESEARCH, DEVELOPMENT, AND DEMONSTRATION – LEACHATE EVAPORATOR J.E.D. SOLID WASTE MANAGEMENT FACILITY (WACS #89544)
ST. CLOUD, OSCEOLA COUNTY, FLORIDA

Dear Ms. Kromhout:

On behalf of Waste Connections of Osceola County, LLC., Golder Associates Inc. has prepared this Application to renew a research, development, and demonstration (RD&D) project associated with the initial installation and operation of a leachate evaporator at the J.E.D. Solid Waste Management Facility. This Application package contains one hard copy of the Application. One electronic copy of the Application is also being sent via email. Payment for the \$1,000 for the first year of the RD&D permit will be made with credit card via the Florida Department of Environmental Protection's Business Portal.

Should you have any questions regarding this report, please call Mr. Kirk Wills at (813) 388-1026 or the undersigned at (904) 363-3430.

Sincerely,

Golder Associates Inc.

Don E. Grigg, PE

Senior Engineer and Associate

Jesse C. Brown, PE

Senior Consultant and Associate

DEG/JCBams

CC: J.E.D. Solid Waste Management Facility

Enclosure

https://golderassociates.sharepoint.com/sites/121785/project files/6 deliverables/rd&d permit renewal/jed evap app cover letter.docx

Golder Associates Inc.

9428 Baymeadows Road, Suite 400 Jacksonville, Florida, USA 32256

T: +1 904 363-3430 +1 904 363-3445



Department of **Environmental Protection**

Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400 DEP Form #: 62-701.900(32)

Form Title: Application For a Permit to Construct and Operate a Research, Development and Demonstration Facility

Effective Date January 6, 2010

Incorporated in Rule: 62-701.310(5), F.A.C.

APPLICATION FOR A PERMIT TO CONSTRUCT AND OPERATE A RESEARCH, DEVELOPMENT AND DEMONSTRATION FACILITY

GENERAL INSTRUCTIONS: Pursuant to Section 403.70715, Florida Statutes, (FS) the Department may issue a Research, Development and Demonstration (RD&D) Permit to the owner or operator of any solid waste management facility who proposes to utilize an innovative and experimental solid waste treatment technology or process, for which permit standards have not been promulgated. The purpose of this application form is to assist the applicant in providing information to the Department for obtaining an RD&D permit. In accordance with Rule 62-701.315(9), Florida Administrative Code, (F.A.C.), a fee in the amount of \$1,000 per year, but not to exceed \$3,000 for three years, shall be submitted with the application by check made payable to the Department of Environmental Protection. The RD&D permit can be issued for not longer than three years and is renewable no more than three times. Complete appropriate sections for the type of facility for which application is made and include all additional information, drawings, and reports necessary to evaluate the facility.

Please Type or Print in Ink

A. **GENERAL INFORMATION**

Skag	en and consists	of an evaporator t	ank, a volatile organic compounds and ammo	nia stripper column, a landfill (
comp	ressor and asso	ciated piping and	appurtenances, all mounted on two trailer boo	lies.
Type of	application:			
	Construction Operation	[] []	Construction/Operation	[x]
Classific	cation of application	ation:		
	lew Renewal	[] [x]	Substantial Modification Minor Modification	[] []
Facility	name: <u>J.E.D.</u>	SOLID WASTE I	MANAGEMENT FACILITY	
DEP ID number: 89544		County: OSCEOLA	County: OSCEOLA	

7.	Location coordinates:								
	Section: 11,13,14,17,18 Township: 285	Range: <u>32E, 33E</u>							
	Latitude: 28° 03' 32" Longitud	le:81°	05' 46"						
	Datum: WGS84 Coordinate Method	d: DGPS							
	Collected by: Johnston's Surveying	ompany/Affiliation: Johnsto	n's Surveying						
8.	Applicant name (operating authority): Waste Connections of Osceola County, LLC								
	Mailing address: 1510 Omni Way Street or P.O. Box	St. Cloud City	FL State	34773 Zip					
	Contact person: Kirk Wills	Telephone:(<u>8</u>	<u>13)388-102</u>	26					
	Title: South Region Engineer								
9.	Authorized agent/Consultant: Golder Associates In Mailing address: 9428 Baymeadows Road, Suite			32256					
	Street or P.O. Box	City	State	Zip					
	Contact person: <u>Don Grigg</u>	Telephone:(<u>9</u>	04)363-343	30					
	Title: Senior Engineer								
10.	Landowner (if different than applicant):								
	Mailing address:Street or P.O. Box	City	State	Zip					
		·		·					
	Contact person:	r eleptione.()						
11.	Approximate land area required for operation of thi	s facility: < 0.5 acres (for t	he evaporator sys	stem)					
12.	Anticipated construction starting and completion dates:								
	From: October 2019 To: June 2020								
13.	Anticipated operation starting and completion dates	3:							
	From: June 2020 To: October 2021								

B. ADDITIONAL INFORMATION

- 1. Attach a site plan, of a scale not greater than 200 feet to the inch, which shows the project location and identifies the proposed waste storage and handling areas, general facility layout, and any other relevant features such as water bodies or wetlands on or within 200 feet of the site and potable water wells on or within 500 feet of the site.
- 2. Attach a facility design and operation plan which includes:
 - a. A detailed description of how the wastes are to be handled or processed at the facility including any necessary testing required to properly operate the facility;
 - b. If applicable, process flow diagrams for the facility operations which are signed and sealed by a professional engineer;
 - c. A description of the types of equipment that will be used at the facility;
 - d. A projection of the volume and weights of material intended to be processed or handled at the facility;
 - e. A description of any expected air emissions and wastewater discharges from the facility which may be potential pollution sources;
 - f. A ground water monitoring plan which meets the applicable requirements of Rule 62-701.510 and Chapter 62-520, F.A.C. or a description why a ground water monitoring plan is not applicable to the facility; and
 - g. A description of what steps will be taken to prevent discharge of leachate and mixing of leachate with stormwater.
- Attach a closure plan which describes how the facility will be closed upon completion of the project and how the closure activities will be funded.

C.

ne undersigned applicant or authorized repres	sentative of Waste Connections of Osceola County, LLC
aware that statements made in this form and	attached information are an application for a <u>research, developm</u>
formation in this application is true, correct an ndersigned agrees to comply with the provisio	orida Department of Environmental Protection and certifies that the nd complete to the best of his/her knowledge and belief. Further, the ons of Chapter 403, Florida Statutes, and all rules and regulations on hit is not transferable, and the Department will be notified prior to the
Kin Will	1501 Omni Way
Signature of Applicant or Agent	Mailing Address
Kirk Wills, South Region Engineer	St. Cloud, FL 34773
Name and Title (please type)	City, State, Zip Code
kirk.wills@wasteconnections.com	(813)388-1026
E-Mail address (if available)	Telephone Number
	October 2, 2019
ofessional Engineer registered in Florida (or F orida Statutes):	Public Officer if authorized under Sections 403.707 and 403.7075,
nd found to conform to engineering principles then properly maintained and operated will co epartment. It is agreed that the unit of princed in	of this waste processing facility have been designed/examined by a applicable to such facilities. In my professional judgment, this famply with all applicable statutes of the State of Florida and rules of will provide the applicant with a set of instructions of proper 9428 Baymeadows Road, Suite 400
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Signature on E. Grigg, PE. Elorida Professional Exore Name and Title (please 1996)	s applicable to such facilities. In my professional judgment, this famply with all applicable statutes of the State of Florida and rules of will provide the applicant with a set of instructions of proper 9428 Baymeadows Road, Suite 400 Mailing Address Jacksonville, FL 32256 City, State, Zip Code
signature on E. Grigg, PE. Ebrida Professional Eron Name and Title (please 1706)	9428 Baymeadows Road, Suite 400 Mailing Address eer Jacksonville, FL 32256 City, State, Zip Code dgrigg@golder.com
signature Signature Name and Title (please type)	s applicable to such facilities. In my professional judgment, this farmply with all applicable statutes of the State of Florida and rules of will provide the applicant with a set of instructions of proper 9428 Baymeadows Road, Suite 400 Mailing Address Jacksonville, FL 32256 City, State, Zip Code dgrigg@golder.com E-Mail address (if available)
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1.

2.

WRITTEN CONSENT OF THE SOLE MEMBER AND SOLE MANAGER OF THE BOARD OF MANAGERS OF WASTE CONNECTIONS OF OSCEOLA COUNTY, LLC

The undersigned, being the sole member and the sole manager of the Board of Managers of Waste Connections of Osceola County, LLC, a Florida limited liability company (the "Company"), hereby consents to the following actions and adopts the following resolutions:

WHEREAS, the Company's sole member and the sole manager of the Board of Managers wishes to authorize the Company's employees listed below to perform certain administrative tasks on behalf of the Company.

BE IT RESOLVED that each of Nikki Crews, Chris Ruane, and Kirk Wills be, and each of them hereby is, authorized to execute by and on behalf of the Company, any and all documents required in connection with the permit and regulatory applications, reports, filings, and other documentation relating to and necessary for the day-to-day operations of JED Landfill by the Company, including, without limitation, Title V and other permit renewal applications and reports, Florida Department of Environmental Protections reports and filings, discharge monitoring reports, and emissions and compliance reports for air quality, and all other documentation related thereto, and that any such action taken to date involving the above is hereby ratified and approved.

IN WITNESS WHEREOF, the undersigned sole member and the sole manager of the Board of Managers of the Company has duly executed this Written Consent in The Woodlands, Texas on the date set forth below.

Dated: March 11, 2020 **SOLE MEMBER:**

FLORIDA WASTE HOLDINGS, INC., a Delaware corporation

By: Name: Worthing F. Jackman

President and Chief Executive Officer Its:

SOLE MANAGER OF THE BOARD OF MANAGERS:

Worthing F. Jackman, Manager

STATE OF TEXAS

COUNTY OF MONTGOMERY

This instrument was signed before me on the 11th day of March, 2020, by Worthing F. Jackman.

Notary's Printed Name: /

Commission expires:

Notary Public, State of Texas

DENISE BACHMEYER My Notary ID # 11084122 Expires May 20, 2022

{00088146.DOC.2}



REPORT

Application for Research, Development, and Demonstration Permit

Waste Connections of Osceola County, LLC

J.E.D. Solid Waste Management Facility

Submitted to:

Florida Department of Environmental Protection

2600 Blair Stone Road, MS 4565 Tallahassee, FL 32399

Submitted by:

Golder Associates Inc.

9428 Baymeadows Road, Suite 400, Jacksonville, Florida, USA 32256

+1 904 363-3430

20-137492

October 5, 2020

Distribution List

Florida Department of Environmental Protection

Waste Connections of Osceola County, LLC.



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1.0 INTRODUCTION

Waste Connections of Osceola County, LLC (WCOC) owns and operates the J.E.D. Solid Waste Management Facility ("JED Landfill") in Osceola County, Florida, which is an active Class I landfill and is currently operating under operating Permit No. 0199726-033-SO-01 (and subsequent modifications) issued by the Florida Department of Environmental Protection (FDEP) on June 17, 2017. The 10-year operating permit expires on June 13, 2027 and authorizes operation of Phases 1 through 5, which includes Cells 1 through 15, representing a disposal area of approximately 208 acres.

In this application, WCOC is seeking authorization to renew a Research, Development and Demonstration (RD&D) Permit No. 019976-038-SO-21 to install and operate a Skagen leachate evaporator system (30,000 gallons per day), consisting of an evaporator tank, a volatile organic compounds (VOC) and ammonia stripper column, a landfill gas compressor system, and associated pumps, piping, and appurtenances. WCOC previously submitted an air construction permit application to the Division of Air Resource Management, which has been issued as permit number 0970079-014-AC.

2.0 DESIGN AND OPERATION PLAN

WCOC is seeking to renew the existing RD&D Permit to install and operate a leachate evaporation system at the JED Landfill. No changes are being proposed with this application from the initial application submitted to the FDEP on October 11, 2019. The following sections describe the information needed in FDEP Form 62-701.900(32).

2.1 Detailed description of how the wastes are to be handled or processed at the facility including any necessary testing required to properly operate the facility

Refer to the information submitted in the October 11, 2019 permit application.

2.2 Process Flow Diagrams for the facility operations which are signed and sealed by a professional engineer (if applicable)

Refer to the process flow diagrams submitted in the October 11, 2019 permit application.

- 2.3 Description of the types of equipment that will be used at the facility Refer to the information submitted in the October 11, 2019 permit application.
- 2.4 Projection of the volume and weights of material intended to be processed of handled at the facility

Refer to the information submitted in the October 11, 2019 permit application.

2.5 Description of any expected air emissions and wastewater discharges from the facility which may be potential pollution sources

Refer to the information submitted in the October 11, 2019 permit application.

2.6 Groundwater monitoring plan which meets the applicable requirements of Rule 62-701.510 and Chapter 62-520, F.A.C. or a description of why a ground water monitoring plan is not applicable to the facility

The J.E.D. Solid Waste Management Facility has an existing approved groundwater monitoring plan (GWMP). No changes to the existing GWMP are anticipated for this project.

2.7 Description of what steps will be taken to prevent discharge of leachate and mixing of leachate with stormwater

Refer to the information submitted in the October 11, 2019 permit application.

3.0 CLOSURE PLAN

Refer to the information submitted in the October 11, 2019 permit application.

4.0 DESCRIPTION OF OPERATIONS

As required by Specific Condition C.8 of the existing RD&D Permit, this section describes the operations of the leachate evaporator system based upon operating records maintained at the facility. Note that the impacts of COVID-19 have impacted the progress of operations as Skagen (the leachate evaporator manufacturer) is a Canadian based company and international travel has been restricted during the global pandemic.

The leachate evaporator began initial startup and testing on June 14, 2020. The leachate evaporator unit has operated for a total of approximately 62 days since June (through the end of September) and is still undergoing initial startup and testing. The total amount of leachate evaporated since the initial startup date is approximately 483,901 gallons. The peak evaporation rate obtained thus far (during startup and testing) was 24,534 gallons per day, which occurred on September 19, 2020. No residual solids have been disposed of during the initial startup and testing time frame.



Signature Page

Don E. Grigg, PE. STATE OF
Florida Profession English Policy 2007 88

Jesse C. Brown, PE

Senior Consultant and Associate

DEG/JCB/ams

Oct 5,2020

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