

June 24, 2020

Delivered by Hand and Email

Mr. Phil Roycraft
Michigan Department of Environment, Great Lakes, and Energy
Materials Management Division
Saginaw Bay District Office
401 Ketchum St, Suite B
Bay City, Michigan 48708

**TRANSMITTAL OF SOLID WASTE DISPOSAL AREA OPERATING LICENSE APPLICATION : JC WEADOCK
COAL ASH DISPOSAL AREA (TYPE III LOW HAZARD INDUSTRIAL WASTE) ; WASTE DATA SYSTEM NUMBER
395457**

Dear Mr. Roycraft,

Enclosed please find an application for the renewal of the operating license for the JC Weadock Solid Waste Disposal Area located in Hampton Township, Bay County, Michigan. The application package includes a check for \$13,00.00 to the State of Michigan as the required fee for renewing the license of a coal ash landfill provided under a separate cover. Additionally, the following items have been included with this submittal:

- License to Operate a Solid Waste Disposal Area Application
 - Facility Area Summary Form
 - Application Fee Worksheet/Table
 - Form A, Financial Assurance Required
 - Facility Site Plan (From Operating License No. 9440)

- Copy of Irrevocable Letter of Credit No. 00332008 issued by Bank One on May 19, 2003
- Copy of latest financial report on the perpetual care fund (updated 10/30/2019)
- Summary of reference documents submitted or modified during previous license period
- Request for Variance for the Revised Final Cover System Design

A copy of Check No. 1201603219 for \$13,000 to the State of Michigan for Coal Combustion Residuals (CCR) License Application fee has also been enclosed with this application form but mailed under a separate cover to PO Box 30657.

The restrictive deed covenant for this facility was previously submitted and is on file with the Bay County Register of Deeds.

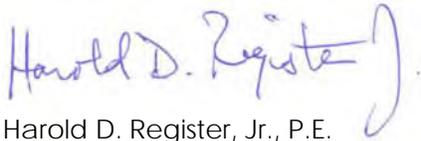


Consumers Energy is also submitting a request for variance with this operating license application from minimum final cover slope of 2% based on the geomembrane lined stormwater ditching as follows:

- | | |
|-------------------|--|
| Perimeter Ditches | No less than 1% Grass Lined Ditches, 1,000 LF Max Flow Path |
| Internal Ditches | No less than 0.5% Concrete Lined Ditches no more than 2,000 LF |
| | No less than 1.0% Grass Lined Ditches no more than 6,000 LF |
| | No more than 6,000 LF of concrete and grassed lined ditches in total |

The narrative request is enclosed referencing the supporting documents and analysis submitted to EGLE on April 03, 2020. Please feel free to contact me with any questions regarding this application or any of the supplemental attachments.

Sincerely,



Harold D. Register, Jr., P.E.

Principal Engineer

Landfill Operations Compliance

Phone: (517) 788-2982

Email: harold.registerjr@cmsenergy.com

cc: Mr. Gary Schwerin, EGLE Saginaw Bay District Office
Ms. Lori Babcock, EGLE Saginaw Bay District Office
Ms. Margie Ring, EGLE Materials Management Division, Lansing
Mr. Jim Arduin, EGLE Materials Management Division, Lansing
Mr. Caleb Batts, Consumers Energy



Michigan Department of Environment, Great Lakes, and Energy

Materials Management Division

APPLICATION IS HEREBY MADE TO THE DIRECTOR, MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY FOR A LICENSE TO OPERATE A SOLID WASTE DISPOSAL AREA AS REQUIRED UNDER THE PROVISIONS OF PART 115, SOLID WASTE MANAGEMENT, OF THE NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION ACT, 1994 PA 451, AS AMENDED. COMPLETION OF THIS FORM IS REQUIRED TO OBTAIN A LICENSE. PROVIDING FALSE INFORMATION MAY RESULT IN CIVIL OR CRIMINAL PENALTIES.

COAL COMBUSTION RESIDUALS (CCR)

LICENSE TO OPERATE A SOLID WASTE DISPOSAL AREA APPLICATION

APPLICANT: PLEASE COMPLETE ALL SECTIONS.

I. FACILITY NAME AND LOCATION				
NAME OF FACILITY JC Weadock Solid Waste Disposal Area			WDS ID NUMBER 395457	
ADDRESS (PHYSICAL LOCATION) 2742 North Weadock Highway		TOWNSHIP Hampton	COUNTY Bay	
CITY Essexville	STATE MI	ZIP CODE 48732-	TELEPHONE (989) 891-3019	
LEGAL NAME OF FACILITY OWNER Consumers Energy Company				
II. OPERATOR / APPLICANT				
LEGAL NAME OF OPERATOR / APPLICANT Consumers Energy Company		MICHIGAN CORPORATE ID NUMBER 021395	TELEPHONE (989) 891-3019	
ADDRESS (MAILING) 2555 North Weadock Highway		CITY Essexville	STATE MI	ZIP CODE 48732
RESPONSIBLE INDIVIDUAL (employed by the operator) Caleb D. Batts		TITLE CCR Operations Lead	TELEPHONE (989) 891-3019	
PERSON PREPARING APPLICATION Harold D. Register, Jr.		TITLE Principal Engineer	TELEPHONE (517)788-2982	
III. PROPERTY OWNER(S) and MINERAL RIGHTS OWNER(S) (List all entities that own a portion of either the property and/or mineral rights)				
NAME OF OWNER(S) Attach separate sheet if necessary Consumers Energy Company		CONTACT PERSON(S) Attach separate sheet if necessary Harold D. Register, Jr.		
TELEPHONE (850)788-2982	ADDRESS 1945 W Parnall Road	CITY Jackson	STATE MI	ZIP CODE 49201
IV. APPLICATION TYPE				
<input type="checkbox"/> First application for a new disposal area <input type="checkbox"/> Renewal of previous activities <input checked="" type="checkbox"/> Renewal with application for additional authorization (Landfills only)				
<input type="checkbox"/> Change in Owner <input type="checkbox"/> Previous License Expired				
V. CONSTRUCTION PERMIT (number(s) and date issued) Construction Permit No. 0260 issued to Consumers Energy, April 21, 1992.				
VI. TYPE OF DISPOSAL AREA				
<input checked="" type="checkbox"/> Coal Ash Landfill <input type="checkbox"/> Coal Ash Surface Impoundment		RENEWAL NEW <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
VII. FEE AND APPLICATION DOCUMENTS (Check all that apply)				
Combined Facility Area Summary and License Application/Annual Fee Worksheet: <input type="checkbox"/> Attached				
Copy of Application Fee check: <input checked="" type="checkbox"/> Attached Amount \$ 13,000				
Construction Certification: <input type="checkbox"/> Attached <input checked="" type="checkbox"/> No new construction				
Declaration of Restrictive Covenant: <input type="checkbox"/> N/A <input type="checkbox"/> Attached <input checked="" type="checkbox"/> Previously submitted Perpetual Care Fund(PCF) Agreement: <input type="checkbox"/> N/A <input type="checkbox"/> Attached <input checked="" type="checkbox"/>				
Previously submitted PCF Financial Statement: <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Attached				
Financial Assurance Documents: <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Attached				
Financial Assurance Forms: <input checked="" type="checkbox"/> A <input type="checkbox"/> D				
Facility Map: <input checked="" type="checkbox"/> Attached				
VIII. TYPE OF WASTE: Same as previously authorized <input checked="" type="checkbox"/> Change or first application: Separate description attached as necessary <input type="checkbox"/>				
IX. SPECIAL CONDITION(S) (Check all that apply) <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Other:				
THE UNDERSIGNED CERTIFY THAT THEY ARE FULLY AUTHORIZED AS A SIGNATORY BY THE PARTY THEY REPRESENT AND THAT THIS INFORMATION AND ALL ATTACHED PAGES ARE CORRECT AND COMPLETE.				
OPERATOR'S SIGNATURE				
TYPED or PRINTED	NAME	TITLE	DATE	
	Harold D. Register, Jr.	Principal Engineer	6/24/2020	
FACILITY OWNER'S SIGNATURE				
TYPED or PRINTED	NAME	TITLE	DATE	
	Harold D. Register, Jr.	Principal Engineer	6/24/2020	
PROPERTY OWNER'S SIGNATURE				

TYPED or PRINTED

NAME

Harold D. Register, Jr.

TITLE

Principal Engineer

DATE

6/24/2020

FACILITY AREA SUMMARY

LEGAL NAME OF FACILITY JC Weadock Solid Waste Disposal Area	WDS ID NUMBER 395457
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DETAILED FACILITY DESCRIPTION			
This format should be used to describe the following individual areas: <i>Area identifier, acreage, date certified closed.</i>			
1. <input checked="" type="checkbox"/> Coal Ash (number of cells/or units)	SUB-TOTAL	292	acres
2. <input type="checkbox"/> Coal Ash Surface Impoundment (number of cells/or units)	SUB-TOTAL		acres
Closed Unit(s). The following Unit(s) are final closed:			
3. <input type="checkbox"/> Coal Ash Landfill (number of cells/or units)	SUB-TOTAL		acres
4. <input type="checkbox"/> Coal Ash Surface Impoundment (number of cells/or units)	SUB-TOTAL		acres
Facility Area NOTE: This area is the entire property and should equal the total of Items 1 - 4 above.		TOTAL	292 acres

LICENSE TO OPERATE APPLICATION FEE WORKSHEET/ANNUAL FEE TABLE

LEGAL NAME OF FACILITY JC Weadock Solid Waste Disposal Area	WDS ID NUMBER 395457
LEGAL NAME OF OPERATOR / APPLICANT: Consumers Energy Company	

WASTE AMOUNT: Remaining Capacity: cu. Yds Air Space Years projected (estimate) 10

Type of Disposal Area/Waste Amount		Annual Fee	
<input type="checkbox"/>	Coal Ash Landfill	\$13,000/unit	\$
<input type="checkbox"/>	Coal Ash Surface Impoundment	\$13,000/unit	\$
ANNUAL FEE CREDIT SUBTOTAL			\$
APPLICATION YEARLY FEE TOTAL (SUBTOTAL - CREDIT SUBTOTAL) Enter here and into Section VII of the License Application Form.			\$
Type of Disposal Area/Waste Amount		License Application Fee	
<input checked="" type="checkbox"/>	Coal Ash Landfill	\$13,000/unit	\$13,000
<input type="checkbox"/>	Coal Ash Surface Impoundment	\$13,000/unit	\$
ANNUAL FEE CREDIT SUBTOTAL			\$
APPLICATION LICENSE FEE TOTAL (SUBTOTAL - CREDIT SUBTOTAL) Enter here and into Section VII of the License Application Form.			\$13,000

Preparer's Signature: Harold D. Register, Jr. 06/24/2020
 TYPED or PRINTED NAME Harold D. Register, Jr. TITLE Principal Engineer DATE 06/24/2020
 Telephone Number(s) Office: 517-788-2982 TITLE Cell: 517-740-0655 Fax: 517-788-2329 E-mail: harold.registerjr@cmsenergy.com

Make check or money order payable to: STATE OF MICHIGAN	REMIT TO: MICHIGAN DEPT. OF ENVIRONMENT, GREAT LAKES, AND ENERGY CASHIER'S OFFICE PO BOX 30657 LANSING, MI 48909-8157
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Return this completed and signed Worksheet and the application fee to the Cashiers Office.

If the proposed disposal area is located in Wayne County, return the remainder of the application documents and a copy of this Worksheet and a copy of the application fee and any attachments to Wayne County, Department of Environment. All other facilities return the remainder of the application documents and a copy of this Worksheet and a copy of the application fee and any attachments directly to the Department of Environment, Great Lakes, and Energy through the Materials Management Division's District Office.

FOR DEPARTMENT USE ONLY MiCars Program Code: CCR Acctg Template: 761RSWCCR	FOR DEPT. CASHIER'S OFFICE ONLY
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**FORM A (CCR ONLY)
FINANCIAL ASSURANCE REQUIRED¹**

LEGAL NAME OF FACILITY JC Weadock Solid Waste Disposal Area	WDS ID NUMBER 395457
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Reason for Submittal:

License Application Annual Financial Assurance Cost Adj Reduction in Cost Estimate Release in Cost Estimate

FACILITY CLOSURE COST ESTIMATE:			
1.	Total Acreage of Units:	292	acres
2.	Year Units Certified Closed:		
3.	Bonding for Units (line 1 x \$20,000.00): <small>Maximum Bond Amount of \$1,000,000 Minimum of \$20,000</small>		\$1,000,000
4.	Total Acreage of Coal Ash Landfill or Coal Ash Impoundment:		acres
5.	Corrective Action Cost Estimate (Form D, line 10):	\$	
6.	Other required Financial Assurance:	\$	
7.	Total Cost Estimate		\$1,000,000

FINANCIAL ASSURANCE PROVIDED:				
13.	Existing Bond(s) to be used during licensing period: <small>(Submit evidence of continuation if applicable)</small>	Amount(s):	Type(s) ² :	Bond Account Numbers
a.	Financial Institution Name(s) <small>(List on separate sheet if needed)</small> Bank One, Letter of Credit No. 00332008	\$1,000,000	Letter of Credit	
b.		\$		
14.	New Bond(s) to this application: Financial Institution Name(s) <small>(List on separate sheet if needed)</small>	Amount(s):	Type(s) ² :	Bond Account Numbers
a.		\$		
b.		\$		
15.	Total of Bonds (lines 13a thru 13b + lines 14a thru 14b):	\$1,000,000		
16.	Current Balance of Perpetual Care Fund: <small>(attach current statement)</small>			
	Financial Institution Name(s) <small>(List on separate sheet if needed)</small>	PCF Account #	PCF Amount(s)	
a.	Westchester Fire Insurance Company	K08691186	\$146,104	
b.			\$	
17.	Total Perpetual Care Fund Balance		\$	
18.	Financial Assurance by-way of a Financial Test <small>(Attach documentation) May not exceed 0.70 x (lines 8+9+10) NOTE: Type III landfills may NOT provide financial assurance using this and should enter 'N/A.'</small>		\$	
19.	Financial Assurance (lines 15 + 17 + 18): <small>(Must be ≥ line 12.)</small>			\$1,146,104
20.	Bond(s) to be Reduced/Released <small>(i.e., will not count toward financial assurance requirement):</small>	Amount(s):	Type(s) ³	Account #(s)
a.	Financial Institution Name(s) <small>(List on separate sheet if needed)</small>	\$		
b.		\$		
21.	Are all units on the same closure schedule? If "No," attach separate summary sheet.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		

Preparer's Signature: Harold D. Register, Jr. DATE: 06/24/2020
TYPED or PRINTED NAME: Harold D. Register, Jr. TITLE: Principal Engineer DATE: 06/24/2020
 Telephone Number(s): Office: 517-788-2982 TITLE: Cell: 517-740-0655 Fax: 517-788-2329 E-mail: harold.registerjr@cmsenergy.com

¹ This form may also be used to request a reduction in the approved cost estimates and corresponding financial assurance.
² Bond type includes surety bond, certificate of deposit, cash bond, irrevocable letter of credit, insurance, trust fund, or escrow account.

FORM D
CORRECTIVE ACTION COST ESTIMATE^{7 8}

LEGAL NAME OF FACILITY	WDS ID NUMBER
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CORRECTIVE ACTION COST ESTIMATE:			
1.	Base Year Corrective Action Cost Estimate: <i>(attach estimate)</i>	\$	
2.	Base Year of Estimate:		
3.	Inflation Index for Current Year:		
4.	Base Year Inflation Index:		
5.	Inflation Adjustment Factor (line 3 ÷ line 4):		
6.	Corrective Action Cost Estimate Adjusted for Inflation (line 1 × line 5):	\$	
CORRECTIVE ACTION PERFORMANCE CREDIT:			
7.	List Duties Performed and Associated Expenditures: <i>(current dollars)</i>		
a.		\$	
b.		\$	
c.		\$	
d.		\$	
e.		\$	
f.		\$	
8.	Total Performance Credit: (lines 7a thru 7f): <i>If none, enter "0."</i>		\$
CORRECTIVE ACTION PERFORMED THROUGH OTHER AUTHORIZATION:			
9.	List Duties Performed and Associated Expenditures: <i>(current dollars)</i>	\$	
REVISED CORRECTIVE ACTION COST			
10.	Current Cost of Corrective Action (lines 6 – 8 – 9): <i>Enter here and on Form A, line 10.</i>		\$

Not APPLICABLE

Preparer's Signature: _____

TYPED or PRINTED	NAME	TITLE	DATE
Telephone Number(s)	Office:	TITLECell:	Fax:
		E-mail:	

⁷ This form may also be used for annually adjusting the financial cost estimates and corresponding amount of financial assurance.
⁸ This form is applicable for Type II Solid Waste Landfills only; Type III Landfills, Transfer Facilities, and Processing Plants need not submit.

Summary of Reference Documents Submitted or Modified During Previous License Period

Alternate Water Quality Monitoring Plan, prepared by Consumers Power Company, dated October 21, 1992.	Still Applicable, no changes.
Construction Verification by Mr. Stephen J. Engers, Consumers Power Company, dated January 14, 1993.	Still Applicable, no changes.
Alternate Groundwater Quality Monitoring Plan, prepared by Consumers Power Company, dated August 22, 1995.	Still Applicable, no changes.
Groundwater Authorization to Discharge, GWE-0005, dated February 1, 2001.	Still Applicable, no changes.
Phase II Workplan for Karn and Weadock, prepared by Natural Resource Technology, dated September 10, 2003.	Still Applicable, no changes.
Request to construct ash silos titled, "Request for Approval under Restrictive Covenant Construction of Fly Ash Storage Silos, Ash Conditioning and Truck Loading Facility, JC Weadock Solid Waste Disposal Area", dated June 23, 2006, and approved on July 14, 2006.	This silo was taken out of service in 2014 and subsequently demolished, so this document is no longer applicable.
Construction revisions titled, "Revision to Wall Cap Detail, JC Weadock Fly Ash Disposal Area Slurry Wall Construction" dated September 30, 2008, received on October 23, 2008, and approved on November 5, 2008.	Still Applicable, no changes.
Construction Drawings titled, "Soil-Bentonite Cutoff Wall-Construction Plans," including (Sheets C-07, C-10, and C-11) prepared by STS/AECOM, dated October 3, 2008, received on October 31, 2008, and approved on November 5, 2008.	Still Applicable, no changes.
Hydrogeological Monitoring Plan, prepared by Natural Resource Technology, dated February 5, 2010.	This monitoring plan was updated and revised as noted below, so this document is no longer applicable.
Report on Dike Slope Stability Analysis, prepared by SME, dated November 23, 2010.	Still Applicable, no changes.
JC Weadock Revised Closure Plan, prepared by AECOM, dated December 15, 2011.	Still Applicable, expect to revise this document during the course of the license application review.
Hydrogeological Monitoring Plan Rev. 2: JC Weadock Solid Waste Disposal Area, dated June 9, 2015.	Still Applicable, expect to revise this document during the course of the license application review.
J.C. Weadock Generating Facility Slurry Wall Vent Closure Construction Documentation Report, prepared by Golder Associates, Inc. dated October 30, 2018	This is a new document that was approved on December 19, 2018
J.C. Weadock Landfill Response Action Plan Submittal, JC Weadock Generating Facility (WDS# 395457), prepared by Consumers Energy dated March 15, 2019	This is a new document that was approved on May 14, 2019

JC Weadock Landfill Compliance Document Summry

Part 115 Reference	RCRA Reference	Document/Requirement	Date of Document	Link/Note
314.11512a(1)(a)(i&ii)	N/A	Approved hydrogeological monitoring program	6/9/2015	JCW Weadock Solid Waste Disposal Area Hydrogeological Monitoring Plan, Rev. 2 is on file with the Department
314.11512a(1)(b)	257.90	Initial Annual Groundwater Report	01/31/2018	https://www.consumersenergy.com/-/media/CE/Documents/sustainability/coal-combustion-residuals/groundwater-report/icw-landfill-groundwater-report-2017.ashx?la=en&hash=1CA77F031B00AE898ABE8DED141E8DD6
314.11512a(1)(b)	257.90	2018 Annual Groundwater Report	01/31/2019	https://www.consumersenergy.com/-/media/CE/Documents/sustainability/coal-combustion-residuals/icw-dry-ash-landfill/2019-JCW-Annual%20Groundwater-Report-Dry-Ash-Landfill.ashx?la=en&hash=005A8F370F4AF4B373AC351699679042
314.11512a(1)(b)	257.90	2019 Annual Groundwater Monitoring Report	01/31/2020	https://www.consumersenergy.com/-/media/CE/Documents/sustainability/coal-combustion-residuals/icw-dry-ash-landfill/10_JCW_Landfill_CCR%202019%20Annual%20GW%20Report_TRC_FINAL.ashx?la=en&hash=68707C34A2DE4579EBCA10FDC07049BD
314.11512a(2)	257.81(c)(1)	Run-on and Run-off control system plan	10/14/2016	https://www.consumersenergy.com/-/media/CE/Documents/sustainability/coal-combustion-residuals/che8318-run-on-run-off.ashx?la=en&hash=0A49A934CC9DDD65B3CD0F266685B0B2
314.11512a(3)	257.82(c)(1)	Inflow Design Flood Control System Plan	N/A	N/A - Not A Coal Ash Impoundment
314.11512a(4)	N/A	Construction Permit and Response Action Plan	4/21/1992	Construction Permit No. 0260 dated April 21, 1992 on file with Department
314.11512a(5)	257.74(a)(3)	Emergency Action Plan	N/A	N/A - Not A Coal Ash Impoundment
314.11519a(1)(a)	N/A	Annual leachate testing	N/A	JC Weadock Landfill has performed annual leachate testing and submitted to MDEQ/EGLE as described in the approved Hydrogeological Monitoring Plan
314.11519a(1)(b)	N/A	Landfill is not a nuisance, doesn't violate Part 31 or 55	N/A	JC Weadock Landfill is compliant with the NPDES permit and has no fugitive dust complaints/issues.
314.11519a(1)(c)	257.83	Annual Landfill Inspection	10/10/2019	https://www.consumersenergy.com/-/media/CE/Documents/sustainability/coal-combustion-residuals/icw/2019_JCW%20Inspection%20Dry%20Ash%20Landfill%20Report%20_FINAL.ashx?la=en&hash=C57B6BEE5635A09E222E801018B7C075
314.11519a(1)(c)	257.83	Annual Landfill Inspection	10/15/2018	https://www.consumersenergy.com/-/media/CE/Documents/sustainability/coal-combustion-residuals/icw-dry-ash-landfill/2018-JCW-Inspection-Dry-Ash-Landfill-Report%20_FINAL%2010-15-18.ashx?la=en&hash=502E854EFFF60F1B37145A13C2FD280A
314.11519a(1)(c)	257.83	Annual Landfill Inspection	10/12/2017	https://www.consumersenergy.com/-/media/CE/Documents/sustainability/coal-combustion-residuals/2017-annual-inspection/icw-dry-ash-landfill-annual-inspection.ashx?la=en&hash=3C0F017C276C3B26AFCA431ACB1D988
314.11519a(1)(c)	257.83	Annual Landfill Inspection	01/15/2016	https://www.consumersenergy.com/-/media/CE/Documents/sustainability/coal-combustion-residuals/icw-Dry%20Ash%20Landfill_Annual%20Inspection%20Report_01-15-16.ashx?la=en&hash=6D2F418DF187938AA388B49D859830E9
314.11519a(1)(d)	257.73(a)(2)	Periodic Hazard Potential Classification Assessment	N/A	N/A - Not A Coal Ash Impoundment
314.11519a(1)(e)	257.73(c)	History Of Construction	N/A	N/A - Not A Coal Ash Impoundment
314.11519a(1)(f)	257.73(d)	Structural Stability Assessment Report	N/A	N/A - Not A Coal Ash Impoundment
314.11519a(1)(g)	257.73(e)	Safety Factor Assessment	N/A	N/A - Not A Coal Ash Impoundment
314.11519a(1)(h)	257.90	2018 Annual Groundwater Report	01/31/2019	https://www.consumersenergy.com/-/media/CE/Documents/sustainability/coal-combustion-residuals/icw-dry-ash-landfill/2019-JCW-Annual%20Groundwater-Report-Dry-Ash-Landfill.ashx?la=en&hash=005A8F370F4AF4B373AC351699679042
314.11519a(1)(i)	257.81	Run-on and Run-off Control System Plan	10/14/2016	https://www.consumersenergy.com/-/media/CE/Documents/sustainability/coal-combustion-residuals/che8318-run-on-run-off.ashx?la=en&hash=0A49A934CC9DDD65B3CD0F266685B0B2
314.11519a(2)(a)	257.80(b)	Fugitive Dust Control Plan	12/3/2018	https://www.consumersenergy.com/-/media/CE/Documents/sustainability/coal-combustion-residuals/dek/2019_DEK_JCW_CCRFugitiveDustControlPlan_rev05.ashx?la=en&hash=8C950D9E62FA70FD632E3BC8BD4CAA47
314.11519a(2)(a)	257.80(c)	Annual Fugitive Dust Report	12/15/2016	https://www.consumersenergy.com/-/media/CE/Documents/sustainability/coal-combustion-residuals/icw/2016_DEK_JCW_AnnualCCRFugitiveDustControlReport.ashx?la=en&hash=B45A8F46F7B213A13ACE5C19F129E0DC
314.11519a(2)(a)	257.80(c)	Annual Fugitive Dust Report	12/1/2017	https://www.consumersenergy.com/-/media/CE/Documents/sustainability/coal-combustion-residuals/icw/2017_DEK_JCW_AnnualCCRFugitiveDustControlReport.ashx?la=en&hash=409BD82F6531FCB9D49F64C97039DBCF
314.11519a(2)(a)	257.80(c)	Annual Fugitive Dust Report	11/30/2018	https://www.consumersenergy.com/-/media/CE/Documents/sustainability/coal-combustion-residuals/icw/2018_DEK_JCW_AnnualCCRFugitiveDustReport.ashx?la=en&hash=54D4B1182FFE0D146A6061F9619C8B67
314.11519a(2)(a)	257.80(c)	Annual Fugitive Dust Report	12/6/2019	https://www.consumersenergy.com/-/media/CE/Documents/sustainability/coal-combustion-residuals/dek/2019_DEK_JCW_AnnualFDRReport.ashx?la=en&hash=0E80AAF4E294DB36625F209CCCD59786
314.11519a(2)(b)	257.105	Operating Record	N/A	Maintained by Consumers Energy
314.11519a(2)(c)	257.107	CCR Rule Compliance Data and Information	N/A	https://www.consumersenergy.com/community/sustainability/environment/waste-management/coal-combustion-residuals#ir-whiting
314.11519a(4)	257.60-64	Location Restriction Certification Report	10/17/2018	https://www.consumersenergy.com/-/media/CE/Documents/sustainability/coal-combustion-residuals/icw-dry-ash-landfill/JC-Weadock-Landfill-Location-Restrictions_10_17_2018.ashx?la=en&hash=06485942270E3EB9002914438DE8D8EE

Variance Request

This variance from final cover design standards is being requested at the time of application for the Solid Waste Operating License renewal and required for revisions in the final closure grades of the JC Weadock Solid Waste Disposal Area to close at minimum grades once DE Karn Units 1&2 permanently cease operation of the boiler in 2023. The revised JC Weadock Closure Plan and variance would be public noticed with the renewed Solid Waste Operating License. Based on the design elements evaluated at the current level of design for Alternative 3 presented in Golder Associates (Golder) Technical Memorandum, "*J.C. Weadock Generating Facility Revised Closure Plan Revision 01, J.C. Weadock Landfill, Bay, County, Michigan, WDS 395457*", dated April 30, 2020 (Alternatives Analysis Report), Golder recommends the following limiting criteria for the variance request:

1) Rule 108(4)(b) final cover slopes; limited to stormwater channel ditching as follows

Perimeter Ditches	No less than 1% Grass Lined Ditches, 1,000 LF Max Flow Path
Internal Ditches	No less than 0.5% Concrete Lined Ditches no more than 2,000 LF No less than 1.0% Grass Lined Ditches no more than 6,000 LF No more than 6,000 LF of concrete and grassed lined ditches in total

Consumers Energy and Golder believe that the requested variances listed above will satisfy the applicable rule requirements as follows:

Perimeter Stormwater Ditches constructed to at least 1% slope perform hydraulically equivalently to 2% sloped grass-lined V-ditch of the same geometry based on the hydraulic analysis summarized in Section 4.4 and included in Appendix D of the Alternatives Analysis Report. This variance request is reasonable to grant because the stormwater ditching system is limited to the perimeter of the landfill where the potential to infiltrate water into the waste mass and potential mass migration from the infiltration is very limited. The perimeter of the landfill is also contained by a soil-bentonite slurry wall that is keyed into the underlying clay confining unit.

Internal concrete lined ditches constructed to no less than 0.5% slope at no more than 2,000 LF and no less than 1.0% sloped grass lined ditching at no more than 6,000 LF (6,000 LF of interior ditching in total) as depicted in Figure 7 of the Alternatives Analysis perform hydraulically equivalent to a 2.0% sloped grass-lined ditch of the same geometry based on the hydraulic analysis summarized in Section 4.4 and included in Appendix D of the Alternatives Analysis Report. This variance request is reasonable for EGLE to grant because the internal stormwater ditching is limited to no more than 2,000 LF of 0.5% concrete lined ditches and 6,000 LF grass-lined ditches (6,000 LF of interior ditching in total) geographically limited to the corridors depicted in Figure 6 of the Alternatives Analysis Report and thus present very limited potential of infiltration water reaching the waste mass.

