Waterford Waterway Management District
Minutes
Wednesday June 19, 2024 6PM
This meeting was held in person at the Waterford Town Hall and online using Zoom

1. Call to Order 6:01pm Commissioners present: Bill McCormick, Alex Abendschein, Luke Francois, Greg Horeth, Grant Horn, Scott Uhler and Dan Schultz
2. Review and act on meeting minutes
    a. Previous Monthly Board Meeting Minutes 5/16/2024 and 5/22/2024
    b. Cmr Schultz motioned to approve minutes. Cmr Horn second. Motion carried 7-0
3. Review and act on Claims-since last meeting Cmr Francois Motion to approve claims. Updated claims report to inland Cmr. McCormick seconded. Motion carried 7-0
4. Correspondence - None
5. Reports
    a. Commission
        i. Chairman – Report attached
            1. Commission positions due for election in September
                a. Commissioners Francois and Horeth
                b. Any Riparian owner may run for election to the board..
        ii. Aquatic Plant Management - Report attached
            1. Harvesting update: Waterway looking well for this time of year. Herbicidal treatment applied week of 6/13. Curly-leaf pondweed started growing early because of the lack of ice, and this weed is dying off because it has grown earlier. Plan on giving the harvesters a break the week of July 4th. The two new harvesters have contributed to more efficient harvesting.
            2. The new trash pump cleaning system is doing a great job cleaning off harvesters weekly.
            3. DNR inspected the harvesters. Cmr. McCormick and Chairman Horeth had a follow up meeting with DNR. The DNR and WWMD is satisfied with the results of the meeting.
        iii. Treasurer's Report – Report attached
            1. Budget 2024/2025 preparation
        iv. Information and Education – Report attached
            1. Commissioners: Remind Cmr. Abendschein ASAP of any permits that need to be put onto website, otherwise information will sit in the shared drive and he will not know to put on website.
            2. Working on live shoot video of harvester.
        v. Legislative
        vi. Special Projects
            1. Waukesha Diversion Chart review
                a. So far we've seen no negative impact to our water levels due to the diversion with plenty of precipitation this year. We continue to track the numbers. Our May numbers show a bit higher than 2021 and 2022. We are building a positive relationship with Bob Anders, the operator of the dam, to be a bit more reactive to low flow situations working within the current dam operating framework.
            2. Village Pier Project (with WWMD)- Report attached
        vii. Navigation Access/Hydraulic Management – Report attached
            1. Quarry review update

a. Prescreening engineering review in progress.

b. Approval of Commission Reports
    i. Cmr. McCormick motioned to approve the commission reports, Alex seconded. Motion carried 7-0.

6. Community Regulatory Reports
    a. Town of Waterford
        i. No report
    b. Village of Waterford
        i. Village Pier Project-Update
            1. The village will hold the drawing for pier applicants July 1st.
            2. Cmr. McCormick requests the Village would extend the resident launch rate to Town residents.
    c. Fox River Commission- meeting next month
    d. C.A.U.S.E.- no report
7. Previous Business
8. New Business
    a. General dialogue: Considering a budget item to remove underwater obstacles in the river.
        i. Draw-down discussion. A possibility for removing rocks, etc. Also, potential for significant savings when combined with dredging. Cmr. Horn will engage Aldridge to determine the feasibility of drawdown dredging. Other districts have dredged for as little as $6/cubic yard using a draw down vs $35/cubic yard for hydraulic dredging.
        ii. Cmr. Uhler will investigate the legality of changing a dredging bid to include a drawdown.
9. Public's opportunity to address the Board
    a. Kenny Boyum 111 Riverside Dr-
        i. It is legal to run down spouts or sump pump to the river.
        ii. Cutters came and then they skipped because it is too shallow.
    b. Gary Hay- Please put lights on buoys by Docs.
    c. Rodger- Please ask Police to watch the jet skis that are going over 50 mph.
10. July's Meeting
    a. Summer meetings on the third Wednesday of the month for June, July and August
    b. July's meeting will be Wednesday July 17th
11. Adjournment
    a. Cmr. Horeth motioned to adjourn. Cmr. McCormick seconded. Motion carried 7-0.
    b. Meeting adjourned at 7:11pm

Waterford Waterway Management District
Minutes
Wednesday July 17, 2024 6PM
This meeting will be held in person at the Waterford Town Hall and online using Zoom

1. Call to Order
2. Review and act on meeting minutes
    a. Previous Monthly Board Meeting Minutes 6/19/2024
3. Review and act on Claims
4. Correspondence
5. Reports
    a. Commission
        i. Chairman's
            1. Commission positions term due for election in September
                a. Commissioners Francois and Horeth
        ii. Aquatic Plant Management
            1. Harvesting update
            2. Herbicidal Treatment Update
        iii. Treasurer's Report
            1. Budget 2024/2025 preparation
        iv. Information and Education
        v. Legislative
        vi. Special Projects
            1. Waukesha Diversion Chart review
            2. Village Pier Project (with WWMD)
        vii. Navigation Access/Hydraulic Management
            1. Quarry review update
    b. Approval of Commission Reports
6. Community Regulatory Reports
    a. Town of Waterford
    b. Village of Waterford
        i. Village Pier Project-Update
    c. Fox River Commission
    d. C.A.U.S.E.
7. Previous Business
8. New Business
    a. Potential "Drawdown" Conversation
9. Public's opportunity to address the Board
10. June's Meeting
    a. Starts the Summer Rotations on the Third Wednesday of the month for June, July and August
    b. August's meeting will be Wednesday August 21st
11. Adjournment

Waterford WWMD is inviting you to a scheduled Zoom meeting. Join Zoom Meeting
https://us06web.zoom.us/j/4791286371?pwd=SeyblS1XpjQFK9zCjZwpfmei7NZVHl.1

Meeting ID: 479 128 6371
Passcode: WWMD2024

Dial by your location
• +1 312 626 6799 US (Chicago)
Meeting ID: 479 128 6371
Passcode: 65974381

Waterford Waterway Management District

Claims Report

All Dates

DATE	TRANSACTION TYPE	NUM	DUE DATE	AMOUNT	OPEN BALANCE
Aquarius Systems					
262-392-2162					
06/19/2024	Bill	224161	07/01/2024	2,914.03	2,914.03
Total for Aquarius Systems				**$2,914.03**	**$2,914.03**
Bill McCormick					
07/01/2024	Bill		07/10/2024	342.71	342.71
Total for Bill McCormick				**$342.71**	**$342.71**
Diana Anderson					
07/16/2024	Bill	106	07/26/2024	528.91	528.91
Total for Diana Anderson				**$528.91**	**$528.91**
Gregory Horeth					
07/16/2024	Bill		08/01/2024	50.00	50.00
Total for Gregory Horeth				**$50.00**	**$50.00**
Inland Lake Harvester, Inc.					
07/03/2024	Bill	4237	07/13/2024	65.00	65.00
Total for Inland Lake Harvester, Inc.				**$65.00**	**$65.00**
QR Code Generator					
06/01/2024	Bill		06/11/2024	119.00	119.00
Total for QR Code Generator				**$119.00**	**$119.00**
TOTAL				**$4,019.65**	**$4,019.65**

Waterford Waterway Management District

Payments Made

June 20 - July 17, 2024

DATE	NUM	VENDOR	AMOUNT
Checking - CSB			
06/21/2024	2036	Stafford Rosenbaum, LLP	-312.00
06/21/2024	2034	Waterford Police Services	-3,000.00
06/21/2024	2030	Diana Anderson	-500.00
06/21/2024	2031	Hey and Associates, Inc.	-1,500.00
06/21/2024	2035	Wisconsin Lake & Pond Resources LLC	-19,730.88
06/21/2024	2033	Midwest Irrigation	-31,910.00
06/21/2024	2032	Inland Lake Harvester, Inc.	-469.32
07/02/2024	2016	Ron Citgo Gas	-1,477.80
Total for Checking - CSB			**$ -58,900.00**

WWMD

Chairman's Report

July 17th, 2024

- **Continued working with Dan and Tom M tracking Dam Levels and Precipitation amount.**
  - **Followed up with Bob Anders to thank him for following the levels and trying to work towards the higher end of the level authorizations during June July and August**
  - **Charts were forwarded to the Town and the Village as well for their records**
- **Call with HA and the DNR to review initial plans for pre-screening for the potential use of the Quarry**
- **Beginning prep for 2024/2025 budgeting process**
  - **Submitted Admin estimates for '24 remaining costs and assumed '25**
- **Responded to Riparian comments regarding weed harvesting and treatment efforts-All fairly standard during this time of year**
- **Posted the required election of commissioner's information in the Waterford Post and on the website which are addressed during the annual meeting**
- **Annual meeting Preparation:**
  - **Started presentation**
  - **Confirmed location at the Lion's Club**
  - **As noted earlier posted the election of commissioners requirements**

APM Chairmans Report

July 17, 2024

By: Bill McCormick

Harvesting:

Mechanical harvesting is going very well, with the main navigation lanes cut back away from the navigation channel markers to make it much safer for boaters, the crew has done an excellent job making our waterway look great. The week of July 4th we gave the crew the week off as we felt we are ahead of schedule and seeing less weeds to harvest. We also gave the crew the week off on July 15th and harvesting will resume the week of July 22nd. At this point in time the committee is considering suspending our harvesting a week early and have the crew clean up the equipment and pull it off the water the week of August 19th.

Herbicide Treatments of Navigation Lanes:

Wisconsin Lakes and Ponds came back to the waterway and applied herbicide to Waterford Lake as well as a few other areas where our mechanical harvesters cannot cut.

WI-DNR Harvester Post Inspection:

After meeting with the WI-DNR we have increased our safety procedures purchasing coast guard approved life vests for all the harvester and barge operators and we have added a throwable device that was missing on one of the harvesters.

Motion: Move that the WWMD reimburse APM Chairman Bill McCormick for the purchase of three life vests in the amount of $316.47.

Motion: Move that the WWMD approve the payment of $1,477.89 to Ron's Citgo for fuel charges for the harvesters and transfer barge that occurred on July 2nd, 2024.

Waterford Waterway Management District

Budget vs. Actuals: FY24 Budget - FY24 P&L

October 2023 - September 2024

	TOTAL			
	ACTUAL	BUDGET	OVER BUDGET	% OF BUDGET
Income				
Grant Income		24,800.00	-24,800.00	
Other		6,000.00	-6,000.00	
Interest Income	7,500.66		7,500.66	
Total Other	**7,500.66**	**6,000.00**	**1,500.66**	**125.01 %**
Special Charge Revenue	370,875.00	370,000.00	875.00	100.24 %
Total Income	**$378,375.66**	**$400,800.00**	**$ -22,424.34**	**94.41 %**
GROSS PROFIT	**$378,375.66**	**$400,800.00**	**$ -22,424.34**	**94.41 %**
Expenses				
Administrative				
Admin Insurance	4,159.00	3,500.00	659.00	118.83 %
Education Registrations		100.00	-100.00	
Meetings		1,500.00	-1,500.00	
Office Supplies	187.99	1,000.00	-812.01	18.80 %
Postage & P.O. Box Fee		125.00	-125.00	
Professional Expense	9,340.00	25,000.00	-15,660.00	37.36 %
Accountant	4,500.00		4,500.00	
Total Professional Expense	**13,840.00**	**25,000.00**	**-11,160.00**	**55.36 %**
Public Safety	3,000.00	6,100.00	-3,100.00	49.18 %
Storage & Misc	495.00	500.00	-5.00	99.00 %
Total Administrative	**21,681.99**	**37,825.00**	**-16,143.01**	**57.32 %**
Aquatic Plant	-2,000.00		-2,000.00	
AIS Treatment	19,730.88	25,000.00	-5,269.12	78.92 %
APM Contingency		10,000.00	-10,000.00	
APM Insurance	4,530.00	6,000.00	-1,470.00	75.50 %
Contingency	2,500.00		2,500.00	
Equipment Maint. & Upgrades	7,291.89	20,000.00	-12,708.11	36.46 %
Fuel	3,959.42	16,800.00	-12,840.58	23.57 %
Labor	29,210.00	92,160.00	-62,950.00	31.69 %
Launch Improvements		20,000.00	-20,000.00	
Navigation Treatments		25,000.00	-25,000.00	
Permitting		5,000.00	-5,000.00	
Storage	3,900.00	3,500.00	400.00	111.43 %
Towing		3,500.00	-3,500.00	
Truck Lease	2,700.00	7,000.00	-4,300.00	38.57 %
Weed Offload Sites		5,000.00	-5,000.00	
Total Aquatic Plant	**71,822.19**	**238,960.00**	**-167,137.81**	**30.06 %**
Contingency		10,000.00	-10,000.00	
Depreciation Expense				
Aquarius HM-620 Harvester Depreciation	26,535.00	26,535.00	0.00	100.00 %
Aquarius TR-34 Trailer Depreciation	2,449.92	2,449.92	0.00	100.00 %
Inland Lakes ILH7-450 Harvester Depreciation	16,099.92	16,099.92	0.00	100.00 %
Trailer Conveyor Depreciation	7,599.96	7,599.96	0.00	100.00 %

	TOTAL			
	ACTUAL	BUDGET	OVER BUDGET	% OF BUDGET
Transfer Barge Depreciation	24,000.00	24,000.00	0.00	100.00 %
Total Depreciation Expense	**76,684.80**	**76,684.80**	**0.00**	**100.00 %**
Dredging/ESR				
Engineering	1,500.00	45,000.00	-43,500.00	3.33 %
Legal	312.00	7,000.00	-6,688.00	4.46 %
Mailings & Administrative		2,300.00	-2,300.00	
Meeting Space Rental		1,000.00	-1,000.00	
Total Dredging/ESR	**1,812.00**	**55,300.00**	**-53,488.00**	**3.28 %**
Finance				
Grant Solicitation		15,000.00	-15,000.00	
Total Finance		**15,000.00**	**-15,000.00**	
Marketing, Info & Education				
Communication Management	705.66	1,000.00	-294.34	70.57 %
Community Events & Sponsorship	108.00	750.00	-642.00	14.40 %
Printed Newsletters	390.00	3,500.00	-3,110.00	11.14 %
Printing Services	805.23	1,000.00	-194.77	80.52 %
Website Hosting/Email Services	504.00	2,000.00	-1,496.00	25.20 %
Total Marketing, Info & Education	**2,512.89**	**8,250.00**	**-5,737.11**	**30.46 %**
Special Projects				
Contingency		10,000.00	-10,000.00	
Library Launch Pier		33,600.00	-33,600.00	
Total Special Projects		**43,600.00**	**-43,600.00**	
Total Expenses	**$174,513.87**	**$485,619.80**	**$ -311,105.93**	**35.94 %**
NET OPERATING INCOME	**$203,861.79**	**$ -84,819.80**	**$288,681.59**	**-240.35 %**
NET INCOME	**$203,861.79**	**$ -84,819.80**	**$288,681.59**	**-240.35 %**

Waterford Waterway Management District

Balance Sheet

As of July 17, 2024

	TOTAL
ASSETS	
Current Assets	
Bank Accounts	
Checking - CSB	1,353.14
Money Market - CSB	547,626.72
Total Bank Accounts	**$548,979.86**
Accounts Receivable	
Accounts Receivable	9,750.00
Total Accounts Receivable	**$9,750.00**
Other Current Assets	
Prepaid Expenses	0.00
Prepaid Inland Marine Insurance	880.50
Prepaid Liability Insurance	886.03
Prepaid Trailer Conv Insurance	252.00
Prepaid Workers Compensation	153.75
Total Prepaid Expenses	**2,172.28**
Total Other Current Assets	**$2,172.28**
Total Current Assets	**$560,902.14**
Fixed Assets	
Aquarius HM-620 Harvester	
Accum Depr - Aquarius HM-620 Harvester	-19,901.25
Asset - Aquarius HM-620 Harvester	265,350.00
Total Aquarius HM-620 Harvester	**245,448.75**
Aquarius TR-34 Trailer	24,500.00
Accum Depr - Aquarius TR-34 Trailer	-1,837.44
Total Aquarius TR-34 Trailer	**22,662.56**
Inland Lakes ILH7-450 Harvester	
Accum Depr - Inland Lakes ILH7-450 Harvester	-15,277.61
Asset - Inland Lakes ILH7-450 Harvester	160,999.99
Total Inland Lakes ILH7-450 Harvester	**145,722.38**
Trailer Conveyor	
Accum Depr - Trailer Conveyor	-24,066.54
Asset - Trailer Conveyor	38,000.00
Total Trailer Conveyor	**13,933.46**
Transfer Barge	
Accum Depr -Transfer Barge	-66,000.00
Asset - Transfer Barge	120,000.00
Total Transfer Barge	**54,000.00**
Total Fixed Assets	**$481,767.15**
TOTAL ASSETS	**$1,042,669.29**
LIABILITIES AND EQUITY	
Liabilities	

	TOTAL
Current Liabilities	
Accounts Payable	
Accounts payable	4,019.65
Total Accounts Payable	**$4,019.65**
Other Current Liabilities	
Current portion of Transfer Barge financing	-2,000.00
Total Other Current Liabilities	**$ -2,000.00**
Total Current Liabilities	**$2,019.65**
Long-Term Liabilities	
Long Term Portion of Transfer Barge Financing	48,000.00
Total Long-Term Liabilities	**$48,000.00**
Total Liabilities	**$50,019.65**
Equity	
Retained Earnings	767,444.37
Net Income	225,205.27
Total Equity	**$992,649.64**
TOTAL LIABILITIES AND EQUITY	**$1,042,669.29**

Waterford Waterway Management District

Profit and Loss by Month

October 2023 - September 2024

	OCT 2023	NOV 2023	DEC 2023	JAN 2024	FEB 2024	MAR 2024	APR 2024	MAY 2024	JUN 2024	JUL 2024	AUG 2024	SEP 2024	TOTAL
Income													
Other													$0.00
Interest Income	259.18	296.68	456.53	652.10	891.87	1,244.96	1,344.37	1,250.66	1,104.31				$7,500.66
Total Other	**259.18**	**296.68**	**456.53**	**652.10**	**891.87**	**1,244.96**	**1,344.37**	**1,250.66**	**1,104.31**				**$7,500.66**
Special Charge Revenue				370,875.00									$370,875.00
Total Income	**$259.18**	**$296.68**	**$456.53**	**$371,527.10**	**$891.87**	**$1,244.96**	**$1,344.37**	**$1,250.66**	**$1,104.31**	**$0.00**	**$0.00**	**$0.00**	**$378,375.66**
GROSS PROFIT	**$259.18**	**$296.68**	**$456.53**	**$371,527.10**	**$891.87**	**$1,244.96**	**$1,344.37**	**$1,250.66**	**$1,104.31**	**$0.00**	**$0.00**	**$0.00**	**$378,375.66**
Expenses													
Administrative													$0.00
Admin Insurance	346.58	346.58	346.58	346.58	346.58	346.58	346.58	346.58	346.58	346.58	346.58	346.62	$4,159.00
Office Supplies		83.95		62.75	12.38					28.91			$187.99
Professional Expense				7,445.00	1,895.00								$9,340.00
Accountant	500.00	500.00	500.00	500.00	500.00	500.00		500.00	500.00	500.00			$4,500.00
Total Professional Expense	**500.00**	**500.00**	**500.00**	**7,945.00**	**2,395.00**	**500.00**		**500.00**	**500.00**	**500.00**			**$13,840.00**
Public Safety								1,500.00	1,500.00				$3,000.00
Storage & Misc				495.00									$495.00
Total Administrative	**846.58**	**930.53**	**846.58**	**8,849.33**	**2,753.96**	**846.58**	**346.58**	**2,346.58**	**2,346.58**	**875.49**	**346.58**	**346.62**	**$21,681.99**
Aquatic Plant									-2,000.00				$ -2,000.00
AIS Treatment									19,730.88				$19,730.88
APM Insurance	377.50	377.50	377.50	377.50	377.50	377.50	377.50	377.50	377.50	377.50	377.50	377.50	$4,530.00
Contingency							2,500.00						$2,500.00
Equipment Maint. & Upgrades						885.83	780.00	1,785.00	3,383.35	457.71			$7,291.89
Fuel									2,481.53	1,477.89			$3,959.42
Labor								15,640.00	13,570.00				$29,210.00
Storage		2,300.00					1,600.00						$3,900.00
Truck Lease								2,700.00					$2,700.00
Total Aquatic Plant	**377.50**	**2,677.50**	**377.50**	**377.50**	**377.50**	**1,263.33**	**5,257.50**	**20,502.50**	**37,543.26**	**2,313.10**	**377.50**	**377.50**	**$71,822.19**
Depreciation Expense													$0.00
Aquarius HM-620 Harvester Depreciation	2,211.25	2,211.25	2,211.25	2,211.25	2,211.25	2,211.25	2,211.25	2,211.25	2,211.25	2,211.25	2,211.25	2,211.25	$26,535.00
Aquarius TR-34 Trailer Depreciation	204.16	204.16	204.16	204.16	204.16	204.16	204.16	204.16	204.16	204.16	204.16	204.16	$2,449.92
Inland Lakes ILH7-450 Harvester Depreciation	1,341.66	1,341.66	1,341.66	1,341.66	1,341.66	1,341.66	1,341.66	1,341.66	1,341.66	1,341.66	1,341.66	1,341.66	$16,099.92
Trailer Conveyor Depreciation	633.33	633.33	633.33	633.33	633.33	633.33	633.33	633.33	633.33	633.33	633.33	633.33	$7,599.96
Transfer Barge Depreciation	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	$24,000.00
Total Depreciation Expense	**6,390.40**	**6,390.40**	**6,390.40**	**6,390.40**	**6,390.40**	**6,390.40**	**6,390.40**	**6,390.40**	**6,390.40**	**6,390.40**	**6,390.40**	**6,390.40**	**$76,684.80**
Dredging/ESR													$0.00
Engineering									1,500.00				$1,500.00
Legal									312.00				$312.00
Total Dredging/ESR									**1,812.00**				**$1,812.00**
Marketing, Info & Education													$0.00
Communication Management				263.40		157.40		45.87	238.99				$705.66
Community Events & Sponsorship				108.00									$108.00
Printed Newsletters							390.00						$390.00
Printing Services								805.23					$805.23
Website Hosting/Email Services	504.00												$504.00
Total Marketing, Info & Education	**504.00**			**371.40**		**157.40**	**390.00**	**851.10**	**238.99**				**$2,512.89**
Total Expenses	**$8,118.48**	**$9,998.43**	**$7,614.48**	**$15,988.63**	**$9,521.86**	**$8,657.71**	**$12,384.48**	**$30,090.58**	**$48,331.23**	**$9,578.99**	**$7,114.48**	**$7,114.52**	**$174,513.87**
NET OPERATING INCOME	**$ -7,859.30**	**$ -9,701.75**	**$ -7,157.95**	**$355,538.47**	**$ -8,629.99**	**$ -7,412.75**	**$ -11,040.11**	**$ -28,839.92**	**$ -47,226.92**	**$ -9,578.99**	**$ -7,114.48**	**$ -7,114.52**	**$203,861.79**
NET INCOME	**$ -7,859.30**	**$ -9,701.75**	**$ -7,157.95**	**$355,538.47**	**$ -8,629.99**	**$ -7,412.75**	**$ -11,040.11**	**$ -28,839.92**	**$ -47,226.92**	**$ -9,578.99**	**$ -7,114.48**	**$ -7,114.52**	**$203,861.79**

Waterford Waterway Management District

Profit and Loss Detail

October 1, 2023 - July 17, 2024

DATE	TRANSACTION TYPE	NUM	NAME	CLASS	MEMO/DESCRIPTION	SPLIT	AMOUNT	BALANCE
Ordinary Income/Expenses								
Income								
Other								
Interest Income								
10/31/2023	Deposit	INTEREST				Checking - CSB	17.45	17.45
10/31/2023	Deposit	INTEREST				Money Market - CSB	241.73	259.18
11/30/2023	Deposit	INTEREST				Checking - CSB	5.02	264.20
11/30/2023	Deposit	INTEREST				Money Market - CSB	291.66	555.86
12/29/2023	Deposit	INTEREST				Money Market - CSB	456.02	1,011.88
12/29/2023	Deposit	INTEREST				Checking - CSB	0.51	1,012.39
01/31/2024	Deposit	INTEREST				Checking - CSB	0.13	1,012.52
01/31/2024	Deposit	INTEREST				Money Market - CSB	651.97	1,664.49
02/29/2024	Deposit	INTEREST				Money Market - CSB	891.28	2,555.77
02/29/2024	Deposit	INTEREST				Checking - CSB	0.59	2,556.36
03/29/2024	Deposit	INTEREST				Money Market - CSB	1,244.24	3,800.60
03/29/2024	Deposit	INTEREST				Checking - CSB	0.72	3,801.32
04/30/2024	Deposit	INTEREST				Checking - CSB	2.96	3,804.28
04/30/2024	Deposit	INTEREST				Money Market - CSB	1,341.41	5,145.69
05/31/2024	Deposit	INTEREST				Checking - CSB	1.59	5,147.28
05/31/2024	Deposit	INTEREST				Money Market - CSB	1,249.07	6,396.35
06/30/2024	Deposit	INTEREST				Checking - CSB	3.31	6,399.66
06/30/2024	Deposit	INTEREST				Money Market - CSB	1,101.00	7,500.66
Total for Interest Income							**$7,500.66**	
Total for Other							**$7,500.66**	
Special Charge Revenue								
01/01/2024	Invoice	1008	Town of Waterford		Special Charge	Accounts Receivable	308,250.00	308,250.00
01/01/2024	Invoice	1009	Village of Waterford		Special Charge	Accounts Receivable	62,625.00	370,875.00
Total for Special Charge Revenue							**$370,875.00**	
Total for Income							**$378,375.66**	
Expenses								
Administrative								
Admin Insurance								
10/31/2023	Journal Entry	FY24-01			Monthly Liability Insurance Expense	-Split-	295.33	295.33
10/31/2023	Journal Entry	FY24-01			Monthly Workers Compensation Expense	-Split-	51.25	346.58
11/30/2023	Journal Entry	FY24-02			Monthly Liability Insurance Expense	-Split-	295.33	641.91
11/30/2023	Journal Entry	FY24-02			Monthly Workers Compensation Expense	-Split-	51.25	693.16
12/31/2023	Journal Entry	FY24-03			Monthly Workers Compensation Expense	-Split-	51.25	744.41
12/31/2023	Journal Entry	FY24-03			Monthly Liability Insurance Expense	-Split-	295.33	1,039.74
01/31/2024	Journal Entry	FY24-04			Monthly Liability Insurance Expense	-Split-	295.33	1,335.07
01/31/2024	Journal Entry	FY24-04			Monthly Workers Compensation Expense	-Split-	51.25	1,386.32
02/29/2024	Journal Entry	FY24-05			Monthly Workers Compensation Expense	-Split-	51.25	1,437.57
02/29/2024	Journal Entry	FY24-05			Monthly Liability Insurance Expense	-Split-	295.33	1,732.90
03/31/2024	Journal Entry	FY24-06			Monthly Liability Insurance Expense	-Split-	295.33	2,028.23
03/31/2024	Journal Entry	FY24-06			Monthly Workers Compensation Expense	-Split-	51.25	2,079.48
04/30/2024	Journal Entry	FY24-07			Monthly Workers Compensation Expense	-Split-	51.25	2,130.73
04/30/2024	Journal Entry	FY24-07			Monthly Liability Insurance Expense	-Split-	295.33	2,426.06
05/31/2024	Journal Entry	FY24-08			Monthly Liability Insurance Expense	-Split-	295.33	2,721.39

DATE	TRANSACTION TYPE	NUM	NAME	CLASS	MEMO/DESCRIPTION	SPLIT	AMOUNT	BALANCE
05/31/2024	Journal Entry	FY24-08			Monthly Workers Compensation Expense	-Split-	51.25	2,772.64
06/30/2024	Journal Entry	FY24-09			Monthly Liability Insurance Expense	-Split-	295.33	3,067.97
06/30/2024	Journal Entry	FY24-09			Monthly Workers Compensation Expense	-Split-	51.25	3,119.22
Total for Admin Insurance							**$3,119.22**	
Office Supplies								
11/02/2023	Expense		EaseUS		EaseUS PDF Editor	Checking - CSB	83.95	83.95
01/05/2024	Bill	G036162808 Invoice Da	Microsoft			Accounts payable	62.75	146.70
02/08/2024	Bill		Gregory Horeth		1099 for 2023	Accounts payable	12.38	159.08
07/16/2024	Bill	106	Diana Anderson		three ring binder and daily dividers apm loads	Accounts payable	28.91	187.99
Total for Office Supplies							**$187.99**	
Professional Expense								
01/05/2024	Bill		Intuit		Quickbook annual membership	Accounts payable	970.00	970.00
01/26/2024	Bill	BT2669423	Baker Tilly Virchow Krause, LLP		FY23 Audit	Accounts payable	6,475.00	7,445.00
02/21/2024	Bill		Fredrikson & Byron, P.A.			Accounts payable	395.00	7,840.00
02/28/2024	Bill	BT2692946	Baker Tilly Virchow Krause, LLP		FY23 audit	Accounts payable	1,500.00	9,340.00
Total for Professional Expense							**$9,340.00**	
Accountant								
10/23/2023	Bill	100	Diana Anderson		Monthly administrator expense	Accounts payable	500.00	500.00
11/28/2023	Bill	101	Diana Anderson		admin work November	Accounts payable	500.00	1,000.00
12/31/2023	Bill	102	Diana Anderson		Bookkeeping and Admin Services	Accounts payable	500.00	1,500.00
01/31/2024	Bill	103	Diana Anderson		January Admin Expense	Accounts payable	500.00	2,000.00
02/29/2024	Bill	2024-02	Diana Anderson			Accounts payable	500.00	2,500.00
03/31/2024	Bill	2024-03	Diana Anderson		March Admin Work	Accounts payable	500.00	3,000.00
05/10/2024	Bill	2024-04	Diana Anderson		April Admin work	Accounts payable	500.00	3,500.00
06/01/2024	Bill		Diana Anderson		May Work	Accounts payable	500.00	4,000.00
07/16/2024	Bill	106	Diana Anderson		June's admin work	Accounts payable	500.00	4,500.00
Total for Accountant							**$4,500.00**	
Total for Professional Expense with sub-accounts							**$13,840.00**	
Public Safety								
05/01/2024	Bill	May2024	Waterford Police Services			Accounts payable	1,500.00	1,500.00
06/01/2024	Bill	june2024	Waterford Police Services			Accounts payable	1,500.00	3,000.00
Total for Public Safety							**$3,000.00**	
Storage & Misc								
01/26/2024	Bill	2401	Your Store All		5x10 unit #19	Accounts payable	495.00	495.00
Total for Storage & Misc							**$495.00**	
Total for Administrative							**$20,642.21**	
Aquatic Plant								
06/05/2024	Deposit	6013	Eagle Lake Management District		refund over payment	Checking - CSB	-2,000.00	-2,000.00
Total for Aquatic Plant							**$ -2,000.00**	
AIS Treatment								
06/18/2024	Bill	INV-24-54620	Wisconsin Lake & Pond Resources LLC			Accounts payable	19,730.88	19,730.88
Total for AIS Treatment							**$19,730.88**	
APM Insurance								
10/31/2023	Journal Entry	FY24-01			Monthly Inland Marine Insurance Expense	-Split-	293.50	293.50
10/31/2023	Journal Entry	FY24-01			Monthly Trailer Conveyor Insurance Expense	-Split-	84.00	377.50
11/30/2023	Journal Entry	FY24-02			Monthly Trailer Conveyor Insurance Expense	-Split-	84.00	461.50
11/30/2023	Journal Entry	FY24-02			Monthly Inland Marine Insurance Expense	-Split-	293.50	755.00
12/31/2023	Journal Entry	FY24-03			Monthly Trailer Conveyor Insurance Expense	-Split-	84.00	839.00
12/31/2023	Journal Entry	FY24-03			Monthly Inland Marine Insurance Expense	-Split-	293.50	1,132.50
01/31/2024	Journal Entry	FY24-04			Monthly Inland Marine Insurance Expense	-Split-	293.50	1,426.00

DATE	TRANSACTION TYPE	NUM	NAME	CLASS	MEMO/DESCRIPTION	SPLIT	AMOUNT	BALANCE
01/31/2024	Journal Entry	FY24-04			Monthly Trailer Conveyor Insurance Expense	-Split-	84.00	1,510.00
02/29/2024	Journal Entry	FY24-05			Monthly Inland Marine Insurance Expense	-Split-	293.50	1,803.50
02/29/2024	Journal Entry	FY24-05			Monthly Trailer Conveyor Insurance Expense	-Split-	84.00	1,887.50
03/31/2024	Journal Entry	FY24-06			Monthly Inland Marine Insurance Expense	-Split-	293.50	2,181.00
03/31/2024	Journal Entry	FY24-06			Monthly Trailer Conveyor Insurance Expense	-Split-	84.00	2,265.00
04/30/2024	Journal Entry	FY24-07			Monthly Trailer Conveyor Insurance Expense	-Split-	84.00	2,349.00
04/30/2024	Journal Entry	FY24-07			Monthly Inland Marine Insurance Expense	-Split-	293.50	2,642.50
05/31/2024	Journal Entry	FY24-08			Monthly Inland Marine Insurance Expense	-Split-	293.50	2,936.00
05/31/2024	Journal Entry	FY24-08			Monthly Trailer Conveyor Insurance Expense	-Split-	84.00	3,020.00
06/30/2024	Journal Entry	FY24-09			Monthly Inland Marine Insurance Expense	-Split-	293.50	3,313.50
06/30/2024	Journal Entry	FY24-09			Monthly Trailer Conveyor Insurance Expense	-Split-	84.00	3,397.50
Total for APM Insurance							**$3,397.50**	
Contingency								
04/01/2024	Bill	2034	Tom Greil Farm		Weed offloading service fee for FY24	Accounts payable	2,500.00	2,500.00
Total for Contingency							**$2,500.00**	
Equipment Maint. & Upgrades								
03/20/2024	Check	7628POS	Inland Lake Harvester, Inc.		Harvester maintenance	Checking - CSB	885.83	885.83
04/30/2024	Bill	4147	Inland Lake Harvester, Inc.		Install Paddle Wheels for the 2024 season	Accounts payable	780.00	1,665.83
05/21/2024	Check	666297	Ray Towing			Checking - CSB	630.00	2,295.83
05/21/2024	Check	664503	Ray Towing			Checking - CSB	1,155.00	3,450.83
06/11/2024	Bill	4207	Inland Lake Harvester, Inc.		Trailer welding	Accounts payable	404.32	3,855.15
06/11/2024	Bill	4209	Inland Lake Harvester, Inc.		LED lights	Accounts payable	65.00	3,920.15
06/19/2024	Bill	224161	Aquarius Systems		Transfer barge	Accounts payable	2,914.03	6,834.18
07/01/2024	Bill		Bill McCormick		life vests	Accounts payable	316.47	7,150.65
07/01/2024	Bill		Bill McCormick		throwable floatation	Accounts payable	26.24	7,176.89
07/03/2024	Bill	4237	Inland Lake Harvester, Inc.		Trailer lights Conveyor Trailer	Accounts payable	65.00	7,241.89
07/16/2024	Bill		Gregory Horeth		Dirt for lot where trees were removed for storage	Accounts payable	50.00	7,291.89
Total for Equipment Maint. & Upgrades							**$7,291.89**	
Fuel								
06/18/2024	Bill		Ron Citgo Gas			Accounts payable	2,481.53	2,481.53
07/02/2024	Check	2016	Ron Citgo Gas		fuel	Checking - CSB	1,477.89	3,959.42
Total for Fuel							**$3,959.42**	
Labor								
05/13/2024	Bill	Invoice-515	Midwest Irrigation		Labor for weed cutting. May 13th-May 31st	Accounts payable	14,214.00	14,214.00
05/13/2024	Bill	Invoice-515	Midwest Irrigation		Labor for equipment launch	Accounts payable	1,426.00	15,640.00
06/17/2024	Bill	Invoice-61524	Midwest Irrigation		Labor for weed cutting. Weeks 6-1-24---6-14-24	Accounts payable	13,570.00	29,210.00
Total for Labor							**$29,210.00**	
Storage								
11/02/2023	Bill		Dan Meier		Harvester storage	Accounts payable	2,300.00	2,300.00
04/18/2024	Bill		Why Knott Leave it to us tree and Stump Removal		Cut down trees where we store harvester	Accounts payable	1,600.00	3,900.00
Total for Storage							**$3,900.00**	
Truck Lease								
05/13/2024	Bill	T124	Midwest Irrigation		Truck lease 5-13-24 through 5-30-23	Accounts payable	2,700.00	2,700.00
Total for Truck Lease							**$2,700.00**	
Total for Aquatic Plant with sub-accounts							**$70,689.69**	
Depreciation Expense								
Aquarius HM-620 Harvester Depreciation								
10/31/2023	Journal Entry	FY24-01			Monthly Aquarius HM-520 Harvester Depreciation Expense	-Split-	2,211.25	2,211.25
11/30/2023	Journal Entry	FY24-02			Monthly Aquarius HM-520 Harvester Depreciation Expense	-Split-	2,211.25	4,422.50
12/31/2023	Journal Entry	FY24-03			Monthly Aquarius HM-520 Harvester	-Split-	2,211.25	6,633.75

DATE	TRANSACTION TYPE	NUM	NAME	CLASS	MEMO/DESCRIPTION	SPLIT	AMOUNT	BALANCE
					Depreciation Expense			
01/31/2024	Journal Entry	FY24-04			Monthly Aquarius HM-520 Harvester Depreciation Expense	-Split-	2,211.25	8,845.00
02/29/2024	Journal Entry	FY24-05			Monthly Aquarius HM-520 Harvester Depreciation Expense	-Split-	2,211.25	11,056.25
03/31/2024	Journal Entry	FY24-06			Monthly Aquarius HM-520 Harvester Depreciation Expense	-Split-	2,211.25	13,267.50
04/30/2024	Journal Entry	FY24-07			Monthly Aquarius HM-520 Harvester Depreciation Expense	-Split-	2,211.25	15,478.75
05/31/2024	Journal Entry	FY24-08			Monthly Aquarius HM-520 Harvester Depreciation Expense	-Split-	2,211.25	17,690.00
06/30/2024	Journal Entry	FY24-09			Monthly Aquarius HM-520 Harvester Depreciation Expense	-Split-	2,211.25	19,901.25
Total for Aquarius HM-620 Harvester Depreciation							**$19,901.25**	
Aquarius TR-34 Trailer Depreciation								
10/31/2023	Journal Entry	FY24-01			Monthly Aquarius TM-34 Trailer Depreciation Expense	-Split-	204.16	204.16
11/30/2023	Journal Entry	FY24-02			Monthly Aquarius TM-34 Trailer Depreciation Expense	-Split-	204.16	408.32
12/31/2023	Journal Entry	FY24-03			Monthly Aquarius TM-34 Trailer Depreciation Expense	-Split-	204.16	612.48
01/31/2024	Journal Entry	FY24-04			Monthly Aquarius TM-34 Trailer Depreciation Expense	-Split-	204.16	816.64
02/29/2024	Journal Entry	FY24-05			Monthly Aquarius TM-34 Trailer Depreciation Expense	-Split-	204.16	1,020.80
03/31/2024	Journal Entry	FY24-06			Monthly Aquarius TM-34 Trailer Depreciation Expense	-Split-	204.16	1,224.96
04/30/2024	Journal Entry	FY24-07			Monthly Aquarius TM-34 Trailer Depreciation Expense	-Split-	204.16	1,429.12
05/31/2024	Journal Entry	FY24-08			Monthly Aquarius TM-34 Trailer Depreciation Expense	-Split-	204.16	1,633.28
06/30/2024	Journal Entry	FY24-09			Monthly Aquarius TM-34 Trailer Depreciation Expense	-Split-	204.16	1,837.44
Total for Aquarius TR-34 Trailer Depreciation							**$1,837.44**	
Inland Lakes ILH7-450 Harvester Depreciation								
10/31/2023	Journal Entry	FY24-01			Monthly Inland Lakes ILH7-450 Harvester Depreciation Expense	-Split-	1,341.66	1,341.66
11/30/2023	Journal Entry	FY24-02			Monthly Inland Lakes ILH7-450 Harvester Depreciation Expense	-Split-	1,341.66	2,683.32
12/31/2023	Journal Entry	FY24-03			Monthly Inland Lakes ILH7-450 Harvester Depreciation Expense	-Split-	1,341.66	4,024.98
01/31/2024	Journal Entry	FY24-04			Monthly Inland Lakes ILH7-450 Harvester Depreciation Expense	-Split-	1,341.66	5,366.64
02/29/2024	Journal Entry	FY24-05			Monthly Inland Lakes ILH7-450 Harvester Depreciation Expense	-Split-	1,341.66	6,708.30
03/31/2024	Journal Entry	FY24-06			Monthly Inland Lakes ILH7-450 Harvester Depreciation Expense	-Split-	1,341.66	8,049.96
04/30/2024	Journal Entry	FY24-07			Monthly Inland Lakes ILH7-450 Harvester Depreciation Expense	-Split-	1,341.66	9,391.62
05/31/2024	Journal Entry	FY24-08			Monthly Inland Lakes ILH7-450 Harvester Depreciation Expense	-Split-	1,341.66	10,733.28
06/30/2024	Journal Entry	FY24-09			Monthly Inland Lakes ILH7-450 Harvester Depreciation Expense	-Split-	1,341.66	12,074.94
Total for Inland Lakes ILH7-450 Harvester Depreciation							**$12,074.94**	
Trailer Conveyor Depreciation								
10/31/2023	Journal Entry	FY24-01			Monthly Trailer Conveyor Depreciation Expense	-Split-	633.33	633.33
11/30/2023	Journal Entry	FY24-02			Monthly Trailer Conveyor Depreciation Expense	-Split-	633.33	1,266.66
12/31/2023	Journal Entry	FY24-03			Monthly Trailer Conveyor Depreciation Expense	-Split-	633.33	1,899.99
01/31/2024	Journal Entry	FY24-04			Monthly Trailer Conveyor Depreciation Expense	-Split-	633.33	2,533.32
02/29/2024	Journal Entry	FY24-05			Monthly Trailer Conveyor Depreciation Expense	-Split-	633.33	3,166.65
03/31/2024	Journal Entry	FY24-06			Monthly Trailer Conveyor Depreciation Expense	-Split-	633.33	3,799.98
04/30/2024	Journal Entry	FY24-07			Monthly Trailer Conveyor Depreciation Expense	-Split-	633.33	4,433.31
05/31/2024	Journal Entry	FY24-08			Monthly Trailer Conveyor Depreciation Expense	-Split-	633.33	5,066.64
06/30/2024	Journal Entry	FY24-09			Monthly Trailer Conveyor Depreciation Expense	-Split-	633.33	5,699.97
Total for Trailer Conveyor Depreciation							**$5,699.97**	

DATE	TRANSACTION TYPE	NUM	NAME	CLASS	MEMO/DESCRIPTION	SPLIT	AMOUNT	BALANCE
Transfer Barge Depreciation								
10/31/2023	Journal Entry	FY24-01			Monthly Transfer Barge Depreciation Expense	-Split-	2,000.00	2,000.00
11/30/2023	Journal Entry	FY24-02			Monthly Transfer Barge Depreciation Expense	-Split-	2,000.00	4,000.00
12/31/2023	Journal Entry	FY24-03			Monthly Transfer Barge Depreciation Expense	-Split-	2,000.00	6,000.00
01/31/2024	Journal Entry	FY24-04			Monthly Transfer Barge Depreciation Expense	-Split-	2,000.00	8,000.00
02/29/2024	Journal Entry	FY24-05			Monthly Transfer Barge Depreciation Expense	-Split-	2,000.00	10,000.00
03/31/2024	Journal Entry	FY24-06			Monthly Transfer Barge Depreciation Expense	-Split-	2,000.00	12,000.00
04/30/2024	Journal Entry	FY24-07			Monthly Transfer Barge Depreciation Expense	-Split-	2,000.00	14,000.00
05/31/2024	Journal Entry	FY24-08			Monthly Transfer Barge Depreciation Expense	-Split-	2,000.00	16,000.00
06/30/2024	Journal Entry	FY24-09			Monthly Transfer Barge Depreciation Expense	-Split-	2,000.00	18,000.00
Total for Transfer Barge Depreciation							**$18,000.00**	
Total for Depreciation Expense							**$57,513.60**	
Dredging/ESR								
Engineering								
06/07/2024	Bill	22-0105 - 18575	Hey and Associates, Inc.		Grant Writing Services	Accounts payable	1,500.00	1,500.00
Total for Engineering							**$1,500.00**	
Legal								
06/11/2024	Bill	1295956	Stafford Rosenbaum, LLP		Dredging legal advice	Accounts payable	312.00	312.00
Total for Legal							**$312.00**	
Total for Dredging/ESR							**$1,812.00**	
Marketing, Info & Education								
Communication Management								
01/26/2024	Bill	67148435854	Constant Contact			Accounts payable	263.40	263.40
03/20/2024	Check	ECH	Zoom Video Communications		zoom meetings	Checking - CSB	157.40	420.80
05/15/2024	Bill	454834	Southern Lakes Newspapers, LLC		chemical treatment	Accounts payable	45.87	466.67
06/01/2024	Bill		QR Code Generator		QR Code	Accounts payable	119.00	585.67
06/26/2024	Check	ECH	Canva		Canva one year	Checking - CSB	119.99	705.66
Total for Communication Management							**$705.66**	
Community Events & Sponsorship								
01/19/2024	Bill		Explore Waterford			Accounts payable	108.00	108.00
Total for Community Events & Sponsorship							**$108.00**	
Printed Newsletters								
04/19/2024	Bill	W0332	J.S. Printing		Boating Ordinances	Accounts payable	390.00	390.00
Total for Printed Newsletters							**$390.00**	
Printing Services								
05/10/2024	Bill	W0367	J.S. Printing		Herbicide post card	Accounts payable	805.23	805.23
Total for Printing Services							**$805.23**	
Website Hosting/Email Services								
10/18/2023	Bill	c913cfaa-3765-4562-a	Microsoft		Microsoft 365 annual renewal	Accounts payable	504.00	504.00
Total for Website Hosting/Email Services							**$504.00**	
Total for Marketing, Info & Education							**$2,512.89**	
Total for Expenses							**$153,170.39**	
Net Income							**$225,205.27**	

Waterford Waterway Management District

General Journal

October 1, 2023 - July 17, 2024

DATE	TRANSACTION TYPE	NUM	NAME	MEMO/DESCRIPTION	ACCOUNT	DEBIT	CREDIT
10/31/2023	Journal Entry	FY24-01		Monthly Liability Insurance Expense	Administrative:Admin Insurance	$295.33	
				Monthly Liability Insurance Expense	Prepaid Expenses:Prepaid Liability Insurance		$295.33
				Monthly Workers Compensation Expense	Administrative:Admin Insurance	$51.25	
				Monthly Workers Compensation Expense	Prepaid Expenses:Prepaid Workers Compensation		$51.25
				Monthly Inland Marine Insurance Expense	Aquatic Plant:APM Insurance	$293.50	
				Monthly Inland Marine Insurance Expense	Prepaid Expenses:Prepaid Inland Marine Insurance		$293.50
				Monthly Trailer Conveyor Insurance Expense	Aquatic Plant:APM Insurance	$84.00	
				Monthly Trailer Conveyor Insurance Expense	Prepaid Expenses:Prepaid Trailer Conv Insurance		$84.00
				Monthly Trailer Conveyor Depreciation Expense	Depreciation Expense:Trailer Conveyor Depreciation	$633.33	
				Monthly Trailer Conveyor Depreciation Expense	Trailer Conveyor:Accum Depr - Trailer Conveyor		$633.33
				Monthly Transfer Barge Depreciation Expense	Depreciation Expense:Transfer Barge Depreciation	$2,000.00	
				Monthly Transfer Barge Depreciation Expense	Transfer Barge:Accum Depr -Transfer Barge		$2,000.00
				Monthly Inland Lakes ILH7-450 Harvester Depreciation Expense	Depreciation Expense:Inland Lakes ILH7-450 Harvester Depreciation	$1,341.66	
				Monthly Inland Lakes ILH7-450 Harvester Depreciation Expense	Inland Lakes ILH7-450 Harvester:Accum Depr - Inland Lakes ILH7-450 Harvester		$1,341.66
				Monthly Aquarius HM-520 Harvester Depreciation Expense	Depreciation Expense:Aquarius HM-620 Harvester Depreciation	$2,211.25	
				Monthly Aquarius HM-520 Harvester Depreciation Expense	Aquarius HM-620 Harvester:Accum Depr - Aquarius HM-620 Harvester		$2,211.25
				Monthly Aquarius TM-34 Trailer Depreciation Expense	Depreciation Expense:Aquarius TR-34 Trailer Depreciation	$204.16	
				Monthly Aquarius TM-34 Trailer Depreciation Expense	Aquarius TR-34 Trailer:Accum Depr - Aquarius TR-34 Trailer		$204.16
						$7,114.48	**$7,114.48**
11/30/2023	Journal Entry	FY24-02		Monthly Liability Insurance Expense	Administrative:Admin Insurance	$295.33	
				Monthly Liability Insurance Expense	Prepaid Expenses:Prepaid Liability Insurance		$295.33
				Monthly Workers Compensation Expense	Administrative:Admin Insurance	$51.25	
				Monthly Workers	Prepaid Expenses:Prepaid Workers		$51.25

DATE	TRANSACTION TYPE	NUM	NAME	MEMO/DESCRIPTION	ACCOUNT	DEBIT	CREDIT
				Compensation Expense	Compensation		
				Monthly Inland Marine Insurance Expense	Aquatic Plant:APM Insurance	$293.50	
				Monthly Inland Marine Insurance Expense	Prepaid Expenses:Prepaid Inland Marine Insurance		$293.50
				Monthly Trailer Conveyor Insurance Expense	Aquatic Plant:APM Insurance	$84.00	
				Monthly Trailer Conveyor Insurance Expense	Prepaid Expenses:Prepaid Trailer Conv Insurance		$84.00
				Monthly Trailer Conveyor Depreciation Expense	Depreciation Expense:Trailer Conveyor Depreciation	$633.33	
				Monthly Trailer Conveyor Depreciation Expense	Trailer Conveyor:Accum Depr - Trailer Conveyor		$633.33
				Monthly Transfer Barge Depreciation Expense	Depreciation Expense:Transfer Barge Depreciation	$2,000.00	
				Monthly Transfer Barge Depreciation Expense	Transfer Barge:Accum Depr -Transfer Barge		$2,000.00
				Monthly Inland Lakes ILH7-450 Harvester Depreciation Expense	Depreciation Expense:Inland Lakes ILH7-450 Harvester Depreciation	$1,341.66	
				Monthly Inland Lakes ILH7-450 Harvester Depreciation Expense	Inland Lakes ILH7-450 Harvester:Accum Depr - Inland Lakes ILH7-450 Harvester		$1,341.66
				Monthly Aquarius HM-520 Harvester Depreciation Expense	Depreciation Expense:Aquarius HM-620 Harvester Depreciation	$2,211.25	
				Monthly Aquarius HM-520 Harvester Depreciation Expense	Aquarius HM-620 Harvester:Accum Depr - Aquarius HM-620 Harvester		$2,211.25
				Monthly Aquarius TM-34 Trailer Depreciation Expense	Depreciation Expense:Aquarius TR-34 Trailer Depreciation	$204.16	
				Monthly Aquarius TM-34 Trailer Depreciation Expense	Aquarius TR-34 Trailer:Accum Depr - Aquarius TR-34 Trailer		$204.16
						$7,114.48	**$7,114.48**
12/31/2023	Journal Entry	FY24-03		Monthly Liability Insurance Expense	Administrative:Admin Insurance	$295.33	
				Monthly Liability Insurance Expense	Prepaid Expenses:Prepaid Liability Insurance		$295.33
				Monthly Workers Compensation Expense	Administrative:Admin Insurance	$51.25	
				Monthly Workers Compensation Expense	Prepaid Expenses:Prepaid Workers Compensation		$51.25
				Monthly Inland Marine Insurance Expense	Aquatic Plant:APM Insurance	$293.50	
				Monthly Inland Marine Insurance Expense	Prepaid Expenses:Prepaid Inland Marine Insurance		$293.50
				Monthly Trailer Conveyor Insurance Expense	Aquatic Plant:APM Insurance	$84.00	
				Monthly Trailer Conveyor Insurance Expense	Prepaid Expenses:Prepaid Trailer Conv Insurance		$84.00
				Monthly Trailer Conveyor Depreciation Expense	Depreciation Expense:Trailer Conveyor Depreciation	$633.33	
				Monthly Trailer Conveyor Depreciation Expense	Trailer Conveyor:Accum Depr - Trailer Conveyor		$633.33

DATE	TRANSACTION TYPE	NUM	NAME	MEMO/DESCRIPTION	ACCOUNT	DEBIT	CREDIT
				Monthly Transfer Barge Depreciation Expense	Depreciation Expense:Transfer Barge Depreciation	$2,000.00	
				Monthly Transfer Barge Depreciation Expense	Transfer Barge:Accum Depr -Transfer Barge		$2,000.00
				Monthly Inland Lakes ILH7-450 Harvester Depreciation Expense	Depreciation Expense:Inland Lakes ILH7-450 Harvester Depreciation	$1,341.66	
				Monthly Inland Lakes ILH7-450 Harvester Depreciation Expense	Inland Lakes ILH7-450 Harvester:Accum Depr - Inland Lakes ILH7-450 Harvester		$1,341.66
				Monthly Aquarius HM-520 Harvester Depreciation Expense	Depreciation Expense:Aquarius HM-620 Harvester Depreciation	$2,211.25	
				Monthly Aquarius HM-520 Harvester Depreciation Expense	Aquarius HM-620 Harvester:Accum Depr - Aquarius HM-620 Harvester		$2,211.25
				Monthly Aquarius TM-34 Trailer Depreciation Expense	Depreciation Expense:Aquarius TR-34 Trailer Depreciation	$204.16	
				Monthly Aquarius TM-34 Trailer Depreciation Expense	Aquarius TR-34 Trailer:Accum Depr - Aquarius TR-34 Trailer		$204.16
						$7,114.48	**$7,114.48**
01/31/2024	Journal Entry	FY24-04		Monthly Liability Insurance Expense	Administrative:Admin Insurance	$295.33	
				Monthly Liability Insurance Expense	Prepaid Expenses:Prepaid Liability Insurance		$295.33
				Monthly Workers Compensation Expense	Administrative:Admin Insurance	$51.25	
				Monthly Workers Compensation Expense	Prepaid Expenses:Prepaid Workers Compensation		$51.25
				Monthly Inland Marine Insurance Expense	Aquatic Plant:APM Insurance	$293.50	
				Monthly Inland Marine Insurance Expense	Prepaid Expenses:Prepaid Inland Marine Insurance		$293.50
				Monthly Trailer Conveyor Insurance Expense	Aquatic Plant:APM Insurance	$84.00	
				Monthly Trailer Conveyor Insurance Expense	Prepaid Expenses:Prepaid Trailer Conv Insurance		$84.00
				Monthly Trailer Conveyor Depreciation Expense	Depreciation Expense:Trailer Conveyor Depreciation	$633.33	
				Monthly Trailer Conveyor Depreciation Expense	Trailer Conveyor:Accum Depr - Trailer Conveyor		$633.33
				Monthly Transfer Barge Depreciation Expense	Depreciation Expense:Transfer Barge Depreciation	$2,000.00	
				Monthly Transfer Barge Depreciation Expense	Transfer Barge:Accum Depr -Transfer Barge		$2,000.00
				Monthly Inland Lakes ILH7-450 Harvester Depreciation Expense	Depreciation Expense:Inland Lakes ILH7-450 Harvester Depreciation	$1,341.66	
				Monthly Inland Lakes ILH7-450 Harvester Depreciation Expense	Inland Lakes ILH7-450 Harvester:Accum Depr - Inland Lakes ILH7-450 Harvester		$1,341.66
				Monthly Aquarius HM-520 Harvester Depreciation Expense	Depreciation Expense:Aquarius HM-620 Harvester Depreciation	$2,211.25	

DATE	TRANSACTION TYPE	NUM	NAME	MEMO/DESCRIPTION	ACCOUNT	DEBIT	CREDIT
				Monthly Aquarius HM-520 Harvester Depreciation Expense	Aquarius HM-620 Harvester:Accum Depr - Aquarius HM-620 Harvester		$2,211.25
				Monthly Aquarius TM-34 Trailer Depreciation Expense	Depreciation Expense:Aquarius TR-34 Trailer Depreciation	$204.16	
				Monthly Aquarius TM-34 Trailer Depreciation Expense	Aquarius TR-34 Trailer:Accum Depr - Aquarius TR-34 Trailer		$204.16
						$7,114.48	**$7,114.48**
02/29/2024	Journal Entry	FY24-05		Monthly Liability Insurance Expense	Administrative:Admin Insurance	$295.33	
				Monthly Liability Insurance Expense	Prepaid Expenses:Prepaid Liability Insurance		$295.33
				Monthly Workers Compensation Expense	Administrative:Admin Insurance	$51.25	
				Monthly Workers Compensation Expense	Prepaid Expenses:Prepaid Workers Compensation		$51.25
				Monthly Inland Marine Insurance Expense	Aquatic Plant:APM Insurance	$293.50	
				Monthly Inland Marine Insurance Expense	Prepaid Expenses:Prepaid Inland Marine Insurance		$293.50
				Monthly Trailer Conveyor Insurance Expense	Aquatic Plant:APM Insurance	$84.00	
				Monthly Trailer Conveyor Insurance Expense	Prepaid Expenses:Prepaid Trailer Conv Insurance		$84.00
				Monthly Trailer Conveyor Depreciation Expense	Depreciation Expense:Trailer Conveyor Depreciation	$633.33	
				Monthly Trailer Conveyor Depreciation Expense	Trailer Conveyor:Accum Depr - Trailer Conveyor		$633.33
				Monthly Transfer Barge Depreciation Expense	Depreciation Expense:Transfer Barge Depreciation	$2,000.00	
				Monthly Transfer Barge Depreciation Expense	Transfer Barge:Accum Depr -Transfer Barge		$2,000.00
				Monthly Inland Lakes ILH7-450 Harvester Depreciation Expense	Depreciation Expense:Inland Lakes ILH7-450 Harvester Depreciation	$1,341.66	
				Monthly Inland Lakes ILH7-450 Harvester Depreciation Expense	Inland Lakes ILH7-450 Harvester:Accum Depr - Inland Lakes ILH7-450 Harvester		$1,341.66
				Monthly Aquarius HM-520 Harvester Depreciation Expense	Depreciation Expense:Aquarius HM-620 Harvester Depreciation	$2,211.25	
				Monthly Aquarius HM-520 Harvester Depreciation Expense	Aquarius HM-620 Harvester:Accum Depr - Aquarius HM-620 Harvester		$2,211.25
				Monthly Aquarius TM-34 Trailer Depreciation Expense	Depreciation Expense:Aquarius TR-34 Trailer Depreciation	$204.16	
				Monthly Aquarius TM-34 Trailer Depreciation Expense	Aquarius TR-34 Trailer:Accum Depr - Aquarius TR-34 Trailer		$204.16
						$7,114.48	**$7,114.48**
03/31/2024	Journal Entry	FY24-06		Monthly Liability Insurance Expense	Administrative:Admin Insurance	$295.33	
				Monthly Liability Insurance Expense	Prepaid Expenses:Prepaid Liability Insurance		$295.33

DATE	TRANSACTION TYPE	NUM	NAME	MEMO/DESCRIPTION	ACCOUNT	DEBIT	CREDIT
				Monthly Workers Compensation Expense	Administrative:Admin Insurance	$51.25	
				Monthly Workers Compensation Expense	Prepaid Expenses:Prepaid Workers Compensation		$51.25
				Monthly Inland Marine Insurance Expense	Aquatic Plant:APM Insurance	$293.50	
				Monthly Inland Marine Insurance Expense	Prepaid Expenses:Prepaid Inland Marine Insurance		$293.50
				Monthly Trailer Conveyor Insurance Expense	Aquatic Plant:APM Insurance	$84.00	
				Monthly Trailer Conveyor Insurance Expense	Prepaid Expenses:Prepaid Trailer Conv Insurance		$84.00
				Monthly Trailer Conveyor Depreciation Expense	Depreciation Expense:Trailer Conveyor Depreciation	$633.33	
				Monthly Trailer Conveyor Depreciation Expense	Trailer Conveyor:Accum Depr - Trailer Conveyor		$633.33
				Monthly Transfer Barge Depreciation Expense	Depreciation Expense:Transfer Barge Depreciation	$2,000.00	
				Monthly Transfer Barge Depreciation Expense	Transfer Barge:Accum Depr -Transfer Barge		$2,000.00
				Monthly Inland Lakes ILH7-450 Harvester Depreciation Expense	Depreciation Expense:Inland Lakes ILH7-450 Harvester Depreciation	$1,341.66	
				Monthly Inland Lakes ILH7-450 Harvester Depreciation Expense	Inland Lakes ILH7-450 Harvester:Accum Depr - Inland Lakes ILH7-450 Harvester		$1,341.66
				Monthly Aquarius HM-520 Harvester Depreciation Expense	Depreciation Expense:Aquarius HM-620 Harvester Depreciation	$2,211.25	
				Monthly Aquarius HM-520 Harvester Depreciation Expense	Aquarius HM-620 Harvester:Accum Depr - Aquarius HM-620 Harvester		$2,211.25
				Monthly Aquarius TM-34 Trailer Depreciation Expense	Depreciation Expense:Aquarius TR-34 Trailer Depreciation	$204.16	
				Monthly Aquarius TM-34 Trailer Depreciation Expense	Aquarius TR-34 Trailer:Accum Depr - Aquarius TR-34 Trailer		$204.16
						$7,114.48	**$7,114.48**
04/30/2024	Journal Entry	FY24-07		Monthly Liability Insurance Expense	Administrative:Admin Insurance	$295.33	
				Monthly Liability Insurance Expense	Prepaid Expenses:Prepaid Liability Insurance		$295.33
				Monthly Workers Compensation Expense	Administrative:Admin Insurance	$51.25	
				Monthly Workers Compensation Expense	Prepaid Expenses:Prepaid Workers Compensation		$51.25
				Monthly Inland Marine Insurance Expense	Aquatic Plant:APM Insurance	$293.50	
				Monthly Inland Marine Insurance Expense	Prepaid Expenses:Prepaid Inland Marine Insurance		$293.50
				Monthly Trailer Conveyor Insurance Expense	Aquatic Plant:APM Insurance	$84.00	
				Monthly Trailer Conveyor Insurance Expense	Prepaid Expenses:Prepaid Trailer Conv Insurance		$84.00
				Monthly Trailer Conveyor	Depreciation Expense:Trailer	$633.33	

DATE	TRANSACTION TYPE	NUM	NAME	MEMO/DESCRIPTION	ACCOUNT	DEBIT	CREDIT
				Depreciation Expense	Conveyor Depreciation		
				Monthly Trailer Conveyor Depreciation Expense	Trailer Conveyor:Accum Depr - Trailer Conveyor		$633.33
				Monthly Transfer Barge Depreciation Expense	Depreciation Expense:Transfer Barge Depreciation	$2,000.00	
				Monthly Transfer Barge Depreciation Expense	Transfer Barge:Accum Depr -Transfer Barge		$2,000.00
				Monthly Inland Lakes ILH7-450 Harvester Depreciation Expense	Depreciation Expense:Inland Lakes ILH7-450 Harvester Depreciation	$1,341.66	
				Monthly Inland Lakes ILH7-450 Harvester Depreciation Expense	Inland Lakes ILH7-450 Harvester:Accum Depr - Inland Lakes ILH7-450 Harvester		$1,341.66
				Monthly Aquarius HM-520 Harvester Depreciation Expense	Depreciation Expense:Aquarius HM-620 Harvester Depreciation	$2,211.25	
				Monthly Aquarius HM-520 Harvester Depreciation Expense	Aquarius HM-620 Harvester:Accum Depr - Aquarius HM-620 Harvester		$2,211.25
				Monthly Aquarius TM-34 Trailer Depreciation Expense	Depreciation Expense:Aquarius TR-34 Trailer Depreciation	$204.16	
				Monthly Aquarius TM-34 Trailer Depreciation Expense	Aquarius TR-34 Trailer:Accum Depr - Aquarius TR-34 Trailer		$204.16
						$7,114.48	**$7,114.48**
05/31/2024	Journal Entry	FY24-08		Monthly Liability Insurance Expense	Administrative:Admin Insurance	$295.33	
				Monthly Liability Insurance Expense	Prepaid Expenses:Prepaid Liability Insurance		$295.33
				Monthly Workers Compensation Expense	Administrative:Admin Insurance	$51.25	
				Monthly Workers Compensation Expense	Prepaid Expenses:Prepaid Workers Compensation		$51.25
				Monthly Inland Marine Insurance Expense	Aquatic Plant:APM Insurance	$293.50	
				Monthly Inland Marine Insurance Expense	Prepaid Expenses:Prepaid Inland Marine Insurance		$293.50
				Monthly Trailer Conveyor Insurance Expense	Aquatic Plant:APM Insurance	$84.00	
				Monthly Trailer Conveyor Insurance Expense	Prepaid Expenses:Prepaid Trailer Conv Insurance		$84.00
				Monthly Trailer Conveyor Depreciation Expense	Depreciation Expense:Trailer Conveyor Depreciation	$633.33	
				Monthly Trailer Conveyor Depreciation Expense	Trailer Conveyor:Accum Depr - Trailer Conveyor		$633.33
				Monthly Transfer Barge Depreciation Expense	Depreciation Expense:Transfer Barge Depreciation	$2,000.00	
				Monthly Transfer Barge Depreciation Expense	Transfer Barge:Accum Depr -Transfer Barge		$2,000.00
				Monthly Inland Lakes ILH7-450 Harvester Depreciation Expense	Depreciation Expense:Inland Lakes ILH7-450 Harvester Depreciation	$1,341.66	
				Monthly Inland Lakes ILH7-450 Harvester Depreciation Expense	Inland Lakes ILH7-450 Harvester:Accum Depr - Inland Lakes ILH7-450 Harvester		$1,341.66

DATE	TRANSACTION TYPE	NUM	NAME	MEMO/DESCRIPTION	ACCOUNT	DEBIT	CREDIT
				Monthly Aquarius HM-520 Harvester Depreciation Expense	Depreciation Expense:Aquarius HM-620 Harvester Depreciation	$2,211.25	
				Monthly Aquarius HM-520 Harvester Depreciation Expense	Aquarius HM-620 Harvester:Accum Depr - Aquarius HM-620 Harvester		$2,211.25
				Monthly Aquarius TM-34 Trailer Depreciation Expense	Depreciation Expense:Aquarius TR-34 Trailer Depreciation	$204.16	
				Monthly Aquarius TM-34 Trailer Depreciation Expense	Aquarius TR-34 Trailer:Accum Depr - Aquarius TR-34 Trailer		$204.16
						$7,114.48	**$7,114.48**
06/30/2024	Journal Entry	FY24-09		Monthly Liability Insurance Expense	Administrative:Admin Insurance	$295.33	
				Monthly Liability Insurance Expense	Prepaid Expenses:Prepaid Liability Insurance		$295.33
				Monthly Workers Compensation Expense	Administrative:Admin Insurance	$51.25	
				Monthly Workers Compensation Expense	Prepaid Expenses:Prepaid Workers Compensation		$51.25
				Monthly Inland Marine Insurance Expense	Aquatic Plant:APM Insurance	$293.50	
				Monthly Inland Marine Insurance Expense	Prepaid Expenses:Prepaid Inland Marine Insurance		$293.50
				Monthly Trailer Conveyor Insurance Expense	Aquatic Plant:APM Insurance	$84.00	
				Monthly Trailer Conveyor Insurance Expense	Prepaid Expenses:Prepaid Trailer Conv Insurance		$84.00
				Monthly Trailer Conveyor Depreciation Expense	Depreciation Expense:Trailer Conveyor Depreciation	$633.33	
				Monthly Trailer Conveyor Depreciation Expense	Trailer Conveyor:Accum Depr - Trailer Conveyor		$633.33
				Monthly Transfer Barge Depreciation Expense	Depreciation Expense:Transfer Barge Depreciation	$2,000.00	
				Monthly Transfer Barge Depreciation Expense	Transfer Barge:Accum Depr -Transfer Barge		$2,000.00
				Monthly Inland Lakes ILH7-450 Harvester Depreciation Expense	Depreciation Expense:Inland Lakes ILH7-450 Harvester Depreciation	$1,341.66	
				Monthly Inland Lakes ILH7-450 Harvester Depreciation Expense	Inland Lakes ILH7-450 Harvester:Accum Depr - Inland Lakes ILH7-450 Harvester		$1,341.66
				Monthly Aquarius HM-520 Harvester Depreciation Expense	Depreciation Expense:Aquarius HM-620 Harvester Depreciation	$2,211.25	
				Monthly Aquarius HM-520 Harvester Depreciation Expense	Aquarius HM-620 Harvester:Accum Depr - Aquarius HM-620 Harvester		$2,211.25
				Monthly Aquarius TM-34 Trailer Depreciation Expense	Depreciation Expense:Aquarius TR-34 Trailer Depreciation	$204.16	
				Monthly Aquarius TM-34 Trailer Depreciation Expense	Aquarius TR-34 Trailer:Accum Depr - Aquarius TR-34 Trailer		$204.16
						$7,114.48	**$7,114.48**
TOTAL						**$64,030.32**	**$64,030.32**

7/17/2024 Treasurer's Report

Prepared on Monday, July 15, 2024
Submitted by Luke Francois

Financial Reports

Attached are the following financial reports:

Fiscal Year 2024

- Profit & Loss vs. Budget Statement – Fiscal Year to Date
- Balance Sheet – As of meeting date
- Profit & Loss by Month – Fiscal Year to Date
- Profit & Loss Detail – Fiscal Year to Date
- General Journal Entries – Fiscal Year to Date
- Bank Statements and Reconciliation Reports

Old Business

FY25 Budget

An updated draft of the budget is complete and has been shared with all the commissioners. Please review the estimated remaining actual amounts and confirm that they are accurate. We will do a final review and vote in the August meeting.

Budget Timeline

Mid-June	~~Initial committee budgets submitted to Treasurer~~
End of June	~~First complete draft of budget compiled by Treasurer~~
July	**First Review by Treasurer**
August	Final review and approval at 8/21 meeting

Liability, Auto, Inland Marine, and Public Officials Insurance Coverage

I completed the questionnaire for our insurance renewal, which will take effect on 10/1/2023. I plan to renew with the same coverage we had this year with a few changes for the new equipment, see details of our FY23 policy and the changes I am requesting below.

Please review the information and let me know if you have any questions or concerns. I will share the full FY24 policy proposal with you all when I get it, but they don't usually send it until late August and there is not a lot of time to review or discuss before we need to vote on it at the August meeting. I can share the full FY23 policy documents with anyone who is interested or has detailed questions.

Government Crime Coverage

The crime policy includes any crime, including internal crimes like embezzlement, up to $10,000. We also have purchased an additional $240,000 of coverage on the treasurer position.

SCHEDULE OF CRIME COVERAGE

Insuring Agreement	Limit of Insurance	Deductible Amount
Employee Theft ☒ Includes Faithful Performance	$10,000 per Loss	$ 250 per Loss
Forgery or Alteration	$10,000 per Occurrence	$ 250 per Occurrence
Inside the Premises – Theft of Money & Securities	$10,000 per Occurrence	$ 250 per Occurrence
Inside the Premises – Robbery/Safe Burglary	$5,000 per Occurrence	$ 250 per Occurrence
Outside the Premises	$10,000 per Occurrence	$ 250 per Occurrence
Computer and Funds Transfer Fraud	$20,000 per Occurrence	$ 250 per Occurrence
Money Orders	$10,000 per Occurrence	$ 250 per Occurrence
Fraudulent Impersonation	$10,000 per Occurrence	$ 250 per Occurrence

Inland Marine

SCHEDULE OF COVERAGES

Description	Limit	Deductible
Coverage A Blanket Tools and Equipment	Not Covered	
Coverage B * See definition below Scheduled Equipment	See Schedule	See Schedule
Coverage C Blanket Emergency Services Equipment	Not Covered	

* Coverage B - Scheduled Equipment Definition

The insurer will pay for direct physical loss or damage caused by or resulting from any "covered cause of loss" to equipment owned by the WWMD that is specifically listed in the Declarations.

SCHEDULED EQUIPMENT

Actual Cash Value = ACV Replacement Cost = RC

Item Description	Serial Number	Limit	Deductible	Valuation
2017 AQUARIUS T-45 TRNSPRT BRG	UR514	$222,000	$1,000	RC

NOTE: RC = replacement cost

We will add the following inland marine equipment:

Manufacturer	Year	Model	Limit	Deductible
Aquarius Systems	2023	HM-520 Aquatic Plant Harvester	$265,350	$1,000
Inland Lake Harvesters, Inc.	2023	ILH7-450 Aquatic Weed Harvester	$161,000	$1,000

Rental Limit Increase

I have asked them to remove the following increased limit coverage as we are not renting or borrowing any of the equipment in FY24.

RENTED OR BORROWED EQUIPMENT
INCREASED LIMIT

This endorsement modifies insurance provi[illegible] the following:

INLAND MARINE COVERAGE PART

S[illegible]EDULE

Increased Limit: $250,000

Auto Coverage

Vehicle # 1

Insured's #:

Insured Entity:

Year: 2018
Make: ILH ILHTC CONVEYOR TRAILER
Model: ILHTC CONVEYOR TRAILER
V.I.N.: ILH122018002TC
Valuation: Actual Cash Value

Use:
Class Code: 681990
State: WI
Territory: 110

Coverages:	Limit of Insurance	Deductible
Covered Autos Liability (combined single limit)	$ 1,000,000	
Personal Injury Protection (PIP)		
Added Personal Injury Protection		
Property Protection Insurance (MI only)		
Auto Medical Payments	$ 10,000	
Medical Exp. And Income Loss Benefits (VA only)		
Uninsured Motorists (UM)	$ 1,000,000	
Underinsured Motorists (UIM)	$ 1,000,000	
Physical Damage – Comprehensive	ACV	1,000
Physical Damage – Specified Causes of Loss		
Physical Damage – Collision	ACV	1,000
Physical Damage – Towing and Labor		
Other Auto Coverages		
Total:		

We will add the trailer for the Aquarius cutter with the same limits and deductible:

Manufacturer	Year	Model	Limit	Deductible
Aquarius Systems	2023	TM-34 Standard Trailer	$24,500	$1,000

General Liability

LIMITS OF INSURANCE	
Each Occurrence	$1,000,000
Damage to Premises Rented to You	$1,000,000
Medical Expense	$10,000
Personal and Advertising Injury	$1,000,000
General Aggregate	$3,000,000
Products – Completed Operations Aggregate	$3,000,000

Public Officials and Management Liability

LIMITS OF INSURANCE		
Aggregate Limit	$3,000,000	Coverage A and B Combined
Coverage A	$1,000,000	Each Wrongful Act or Offense
Coverage B	$10,000	Each Action for Injunctive Relief
Coverage A Deductible	$0	Each Wrongful Act or Offense
Retroactive Date: None		

COMMUNITY STATE BANK

1500 Main Street, Union Grove, WI 53182

RETURN SERVICE REQUESTED

WATERFORD WATERWAY
MANAGEMENT DISTRICT
415 N MILWAUKEE ST
WATERFORD WI 53185-4434

Statement Ending 06/28/2024

WATERFORD WATERWAY

Account Number: [redacted]

Managing Your Accounts

MAIN OFFICE	COMMUNITY STATE BANK
MAILING ADDRESS	1500 MAIN ST UNION GROVE, WI 53182
ONLINE	CSB.BANK
CUSTOMER SUPPORT	262.878.3763

Payments and transfers are credited on the same business day they are made. Community State Bank's business days consist of Monday-Friday. Saturdays, Sundays and Federal Holidays are not considered business days. Payments and transfers initiated on a business day will be processed on the same business day until the cutoff hour of 4:59 p.m. Payments and transfers initiated after 4:59 p.m. on business days or on non-business days will be processed the next business day.

Summary of Accounts

Managing your accounts has never been easier. You can open a new account, make changes to your existing accounts, pay bills, sign up for account alerts, and manage your account using CSB Online Banking.

Visit us online:**CSB.bank** or scan the mobile code using your smartphone.

Account Type	Account Number	Ending Balance
MUNI CKING W/INT	[redacted]	$60,253.23

MUNI CKING W/INT-[redacted]

Account Summary

Date	Description	Amount
06/01/2024	**Beginning Balance**	**$5,851.44**
	3 Credit(s) This Period	$57,003.31
	2 Debit(s) This Period	$2,601.52
06/28/2024	**Ending Balance**	**$60,253.23**

Interest Summary

Description	Amount
Interest Earned From 06/01/2024 Through 06/28/2024	
Annual Percentage Yield Earned	0.20%
Interest Days	28
Interest Earned	$3.31
Interest Paid This Period	$3.31
Interest Paid Year-to-Date	$9.30
Average Ledger Balance	$21,574.74

Account Activity

Post Date	Description	Debits	Credits	Balance
06/01/2024	**Beginning Balance**			**$5,851.44**
06/06/2024	DEPOSIT		$2,000.00	$7,851.44
06/11/2024	CHECK # 2015	$2,481.53		$5,369.91
06/20/2024	777484 PURCHASE CANVA* I04172-37 CAMDEN DE 03422008 777484	$119.99		$5,249.92
06/21/2024	June Claims Transfer		$55,000.00	$60,249.92
06/28/2024	INTEREST		$3.31	$60,253.23
06/28/2024	**Ending Balance**			**$60,253.23**

Checks Cleared

Check #	Date	Amount
2015	06/11/2024	$2,481.53

* Indicates skipped check number

Daily Balances

Date	Amount	Date	Amount	Date	Amount
06/06/2024	$7,851.44	06/20/2024	$5,249.92	06/28/2024	$60,253.23
06/11/2024	$5,369.91	06/21/2024	$60,249.92		

Overdraft and Returned Item Fees

	Total for this period	Total year-to-date
Total Overdraft Fees	$0.00	$0.00
Total Returned Item Fees	$0.00	$0.00

Waterford Waterway Management District

Checking - CSB, Period Ending 06/30/2024

RECONCILIATION REPORT

Reconciled on: 07/08/2024

Reconciled by: Diana Anderson

Any changes made to transactions after this date aren't included in this report.

Summary USD

Statement beginning balance	5,851.44
Interest earned	3.31
Checks and payments cleared (2)	-2,601.52
Deposits and other credits cleared (2)	57,000.00
Statement ending balance	60,253.23
Uncleared transactions as of 06/30/2024	-3,812.00
Register balance as of 06/30/2024	56,441.23

Details

Checks and payments cleared (2)

DATE	TYPE	REF NO.	PAYEE	AMOUNT (USD)
06/07/2024	Bill Payment	2015	Ron Citgo Gas	-2,481.53
06/26/2024	Check	ECH	Canva	-119.99
Total				-2,601.52

Deposits and other credits cleared (2)

DATE	TYPE	REF NO.	PAYEE	AMOUNT (USD)
06/05/2024	Deposit		Eagle Lake Management District	2,000.00
06/30/2024	Transfer			55,000.00
Total				57,000.00

Additional Information

Uncleared checks and payments as of 06/30/2024

DATE	TYPE	REF NO.	PAYEE	AMOUNT (USD)
06/21/2024	Bill Payment	2017	Waterford Police Services	-3,000.00
06/21/2024	Bill Payment	2016	Stafford Rosenbaum, LLP	-312.00
06/21/2024	Bill Payment	2018	Diana Anderson	-500.00
Total				-3,812.00

COMMUNITY STATE BANK

1500 Main Street, Union Grove, WI 53182

RETURN SERVICE REQUESTED

WATERFORD WATERWAY
MANAGEMENT DISTRICT
415 N MILWAUKEE ST
WATERFORD WI 53185-4434

Statement Ending 06/28/2024

WATERFORD WATERWAY

Account Number [redacted]

Managing Your Accounts

MAIN OFFICE	COMMUNITY STATE BANK
MAILING ADDRESS	1500 MAIN ST UNION GROVE, WI 53182
ONLINE	CSB.BANK
CUSTOMER SUPPORT	262.878.3763

Payments and transfers are credited on the same business day they are made. Community State Bank's business days consist of Monday-Friday. Saturdays, Sundays and Federal Holidays are not considered business days. Payments and transfers initiated on a business day will be processed on the same business day until the cutoff hour of 4:59 p.m. Payments and transfers initiated after 4:59 p.m. on business days or on non-business days will be processed the next business day.

Summary of Accounts

Managing your accounts has never been easier. You can open a new account, make changes to your existing accounts, pay bills, sign up for account alerts, and manage your account using CSB Online Banking.

Visit us online:**CSB.bank** or scan the mobile code using your smartphone.

Account Type	Account Number	Ending Balance
MUNICIPAL MMIA	[redacted]	$547,626.72

MUNICIPAL MMIA [redacted]

Account Summary

Date	Description	Amount
06/01/2024	**Beginning Balance**	**$601,525.72**
	1 Credit(s) This Period	$1,101.00
	1 Debit(s) This Period	$55,000.00
06/28/2024	**Ending Balance**	**$547,626.72**

Interest Summary

Description	Amount
Interest Earned From 06/01/2024 Through 06/28/2024	
Annual Percentage Yield Earned	2.48%
Interest Days	28
Interest Earned	$1,101.00
Interest Paid This Period	$1,101.00
Interest Paid Year-to-Date	$6,478.97
Average Ledger Balance	$585,811.43

Account Activity

Post Date	Description	Debits	Credits	Balance
06/01/2024	**Beginning Balance**			**$601,525.72**
06/21/2024	June Claims Transfer	$55,000.00		$546,525.72
06/28/2024	INTEREST		$1,101.00	$547,626.72
06/28/2024	**Ending Balance**			**$547,626.72**

Daily Balances

Date	Amount	Date	Amount
06/21/2024	$546,525.72	06/28/2024	$547,626.72

Overdraft and Returned Item Fees

	Total for this period	Total year-to-date
Total Overdraft Fees	$0.00	$0.00
Total Returned Item Fees	$0.00	$0.00

Waterford Waterway Management District

Money Market - CSB, Period Ending 06/30/2024

RECONCILIATION REPORT

Reconciled on: 07/14/2024

Reconciled by: Diana Anderson

Any changes made to transactions after this date aren't included in this report.

Summary USD

Statement beginning balance	601,525.72
Interest earned	1,101.00
Checks and payments cleared (1)	-55,000.00
Deposits and other credits cleared (0)	0.00
Statement ending balance	547,626.72
Register balance as of 06/30/2024	547,626.72

Details

Checks and payments cleared (1)

DATE	TYPE	REF NO.	PAYEE	AMOUNT (USD)
06/30/2024	Transfer			-55,000.00
Total				-55,000.00

WWMD

July 2024 Report

SPECIAL PROJECTS COMMITTEE

Active

Working on Clean Waters/Clean Boats options for next year. In contact with DNR.

Working on taking over/transitioning the ongoing water sampling/testing coordinated with the DNR by Greg and Sue Dement.

Working on contacting neighboring lake districts and associations to set up group email for sharing information/resources.

Working on initial contacts with DNR to gather information regarding improved fishing habitat/structure and fish stocking efforts common to lake districts and/or associations.

Pending

- Draft rules of order for our meetings – pending consideration.
- Draft FAQ for Commissioner reference and/or posting on our website regarding our general operations – pending consideration.
- Website update (water testing information, stormwater/rain garden practices/resources)

WWMD
July 2024 Report

LEGISLATIVE COMMITTEE

No relevant updates.

Luke Francois

From: Dan Schultz
Sent: Tuesday, July 16, 2024 8:02 PM
To: Greg Horeth; Grant Horn; Bill McCormick; Alex Abendschein; Luke Francois; Scott Uhler
Subject: Library Pier Project Report

The second round RFP for the joint WWMD/Village pier project closed on July 12. Only one bid was received from Glen Fern Construction in the amount of $61,460. We had budgeted $33,600 based on an estimate from QSP Utilities, that we received and were required to submit with our DNR grant paperwork. This was a bid on the high side, at my request, so as to not lose out on any 50% of DNR funding and so that we didn't find ourselves in a position of not enough funds in the budget to finish the project. The Village DPW met on July 15 and discussed the RFP, and decided not to move forward with the project without additional funding from the WWMD. I am not going to ask for significant additional funding for this project. My speculation as to why the bid came in so high is because the first RFP received no bids. Secondly, the timeframe to complete the job was October 31 and most construction firms do not have time in their schedule. The contractor from whom I received the initial estimate stated his schedule was booked and he could not submit a bid. After talking with the head of the Village DPW, we thought we could put it out for RFP again, this time with a date of completion into next summer. I had a conversation with QSP utilities and he indicated that he would bid on a project with that completion timeframe and would be close to the initial budget, with some tweaks due to current material costs. The DNR funding is valid as long as the project is completed by June 30, 2026. For now, I would like to keep the project alive and ask the Village to reissue the RFP with a completion date of sometime in the summer of 2025.

Dan Schultz
Waterford Waterway Management District
Secretary
414-915-8320

Luke Francois

From: Grant Horn
Sent: Tuesday, July 16, 2024 7:36 PM
To: Greg Horeth; Alex Abendschein; Bill McCormick; Dan Schultz; Scott Uhler; Luke Francois; Diana Anderson
Subject: ESR Report
Attachments: Quarry Site Disposal Evaluation Memo _Combined_071624.pdf; p267601coll4_1274.pdf

Good evening commissioners,

Following our last meeting the ESR Committee approved the prescreening of the quarry by Geosyntec as a disposal site for our dredged sediment. Geosyntec began screening the following week and was on site at the quarry with Aldridge a week later. They completed the process on July 16th, prior to this meeting as expected.

The results of the screening tell us that the quarry is highly unlikely able to be used as a landfill site. This means we could not pump sediment directly into the quarry as an open pit and leave material in place when dried. There are too many exceptions that the DNR would need to make, including exceptions for 15 private wells within 1,200 feet of the landfill, a navigable body of water within 1,000 feet, groundwater level separation distance of greater than 10 feet, and not having a fine grained soil in our pit. In addition, Geosyntec states that the open pit area would hold only 14,500 cubic yards. The cost to pursue this method, if granted exceptions by the DNR, would be in excess of $3 million dollars, which does not include any dredging.

It does however still potentially work as a disposal site for at least 50,000 cubic yards in phase one using geotubes. The tubes would be stacked to four rows high, each 24' in height. Whether the tubes or dried sediment can remain in place after the sediment has dried is yet to be determined by the DNR. Geosyntec is recommending pursing the Geotube drying method and moving forward with permitting. They have provided estimated costs for the site, including liners, geotubes, site monitoring and construction. These costs are estimated to be $670,000. These costs would only be incurred after dredging is approved - these are not engineering costs needed prior to permitting. Geosyntec's prescreening report is attached.

Additionally, we had asked Geosyntec to calculate what additional sediment sampling (for ammonia and other hazardous materials) may cost, if the DNR determines that our 2013 samples are no longer able to be used. We are figuring that 40 samples would be necessary, at a cost of approximately $30,000. This cost is important to us now as it would potentially need to be performed as part of the permitting process and would need to happen before any dredging occurs and before a permit could be issued.

At this point, I feel we need to determine what we will be able to do with the sediment in the geotube bags - if it can remain in place, and how much this site would be able to hold overall, what the grading and landscape of the site might look like with 100,000 cubic yards or even 150,000 cubic yards. We also need to work harder to find an entity that may want the sediment and haul it away for us if required by the DNR or if necessary to leave the landscape of the site in a condition that would be acceptable to the village. I will address this with Hey&Associates as well as Geosyntec.

Grant Horn
Commissioner
Waterford Waterway Management District
C: 262.599.4766
esr@waterfordwwmd.com

Geosyntec consultants

1420 Kensington Road, Suite 103
Oak Brook, Illinois 60523
PH 630.203.3340
FAX 630.203.3341
www.geosyntec.com

Memorandum

Date:	July 16, 2024
To:	Grant Horn – Waterford Waterway Management District (WWMD) Commissioner
From:	David Kein, Megan Martz and Brian Valleskey – Geosyntec Consultants, Inc. (Geosyntec)
Subject:	Quarry Site Disposal Evaluation Memo

PROJECT BACKGROUND

The Waterford Waterway Management District (WWMD) is evaluating the possibility of utilizing a former quarry located at 123 River Rd (Site) as the site for the ultimate disposal of impoundment/river bottom sediments from the Fox River. This project is in association with the ongoing efforts of the WWMD to dredge portions of the Fox River. The WWMD has initiated the Individual Permit (IP) process, reference #IP-SE-2022-52- 00389 for the removal and placement of up to 150,000 CY± of sediment. Upon placing such material, the former quarry would be reclassified as a landfill as defined under WI State Statutes Section 503 (provided in Appendix A). Geosyntec has evaluated the feasibility of this approach relative to the landfill siting criteria and economical aspects of the potential project, and the results of that evaluation are provided herein.

Landfilling Evaluation

Due to the expected volume of dredged material, a landfill capable of handling the total volume would qualify as an "Intermediate Size Construction and Demolition Waste Landfill". Landfills must comply with all the applicable locational criteria. In addition to locational criteria, the landfill must meet detailed design and operating requirements. Geosyntec has identified the following locational, design, and operating requirements that would pose significant regulatory challenges for the former quarry site:

- Within 1000 feet of any navigable lake, pond or flowage
    - The westernmost portion of the quarry is approximately 330 ft from the water.
    - The location criterion for rivers in a minimum distance of 300 ft.

    - WDNR clarification would be needed regarding whether this waterway would qualify as a river or a flowage.
- Within 1,200 feet of any public or private water supply wells.
    - Per Wisconsin DNR well construction reports, approximately 15 private water supply wells would fall within 1,200 feet of the Site.
    - Would require an exemption from WDNR.
- The separation distance between the seasonal high groundwater table and the bottom of the clay liner shall be at least 10 feet.
    - The bottom of quarry is at approximate elevation 770 ft msl whereas the adjacent Fox River elevation is at approximate elevation 771 ft msl. It is reasonable to assume that the groundwater table will be within 10 feet of the bottom of the landfill even at its lowest seasonal elevation.
    - Would require an exemption from WDNR.
- The landfill shall be located in a fine-grained soil environment.
    - The USGS soil characterizations of the site are "Gravel" and "Casco-Rodman Complex". These soils are classified as hydrologic types A and B and are free draining. These soils would not qualify as the required fine-grained environment.
    - Would require an exemption from WDNR.
- The landfill may not accept waste containing free liquids.
    - Dredged sediment may need to be de-watered before placement.
    - Accordingly, any removed liquids would require a disposal plan.

Additionally, utilizing the most recent publicly available existing contours of the Site from 2010, the volume of airspace within the quarry is approximately 14,500 cubic yards, which is ~10% of the expected eventual disposal volume for the project. Geosyntec personnel visited the Site on 19 June 2024 and confirmed that the available contours match the existing Site conditions. It was also noted that there was evidence of mixed dumping, most notably asphalt, concrete and brush. No evidence of hazardous or chemical based refuse was visually observed but cannot be ruled out.

Possible Exemptions

Each of the previously listed significant regulatory challenges would need to be addressed with the WDNR. A formal exemption proposal would need to be submitted to the WDNR demonstrating how the proposed engineered solution (e.g. double bottom liner system due to high groundwater and coarse-grained environment) would be protective of human health and the environment.

Similarly, in order to remove typical landfill design requirements that are likely not necessary for a dredging fill site (such as liner installation, landfill gas collection system, landfill gas monitoring wells, leachate collection systems, and long-term site monitoring), a low-hazardous exemption would need to be submitted to and approved by WDNR.

There is no guarantee that any of these possible exemptions would be approved by WDNR or that obtaining a low-hazard exemption would negate the need for a liner or monitoring.

Cost Estimates

In the event that WWMD choose to move forward with the landfilling approach at its current undersized capacity, and request exemptions from WDNR, Geosyntec provided a high-level cost estimate (and timeline) summary below. All costs are approximate and subject to significant project-specific changes.

Table 1: Cost Estimate (cost assumes facility size is not increased)

Intermediate Size Construction and Demolition Waste Landfill			
Requirement	Cost Estimate	Timeline	Notes
Public Notifications	$ 5,000	1 week	
draft to department			
local newspaper			
nearby landowners			with 1/4 mile
townships			within 1200 ft
Plan of Operation	$ 190,000	32 weeks	
field investigation	$ 60,000	2 weeks	5 borings, 3 GW wells, 25 ft below subbase
lab analyses	$ 10,000	4 weeks	
geotechnical report	$ 20,000	3 weeks	
Permitting	$ 60,000	15 weeks	
design and construction plans	$ 30,000	6 weeks	liner, leachate collection, final cover
O&M plan	$ 10,000	2 weeks	
Construction Labor, Materials, Equipment	$ 600,000		liner, geocomposite, piping, etc.
Construction Engineering Support	$ 120,000	21 weeks	
labor and expenses	$ 80,000	15 weeks	
as-built report	$ 20,000	3 weeks	
CQA testing	$ 20,000	3 weeks	soil density, piping, liner
Operations/Filling	$ 135,000	13 weeks	$3,000 per day for 45 days
Post Closure O&M	$ 400,000	40 years	$10,000 per year
Environmental Monitoring	$ 200,000	30 years	$5,000 per year
Inspections	$ 10,000		subject to change
Total	**$ 1,660,000**		

SUMMARY

Geosyntec recommends not pursuing this Site as a possible landfilling location due to the following reasons:

- Number and type of locational and design criterion that would require exemptions;
- Inadequate air space available for filling compared to desired disposal volume; and
- Cost of construction.

It is recommended that WWMD continue to follow the State of Wisconsin Approval Process for Dredging. Useful documents such as Publication No. PUB - FH - 061 – 2004, (February, 2004) provided in Appendix B in conjunction with other regulatory documents already in possession. WDNR will determine what permits and approvals are necessary based on the dredged materials analytical results and provide options for disposal locations (existing landfills, land spreading, etc.)

Alternative Site Use

Alternatively, the site may function more appropriately as a general bag site for dewatering. Based on a preliminary estimate of 50,000 CY of dredge (phase 1) with assumed dewatering volume of 50%, geotube bags may be laid out on a slightly regraded quarry bottom to accommodate the necessary grade suitable for placement. Rather than rely on the development and costs needed to design and construct a liner, monitoring system, or rely on a low hazard exemption, allow the geotube to function as the entire system underlain with an appropriate barrier and return water system.

The site can be minimally configured to favor a stacked geotube design as shown and indicated below:

The conceptual idea utilizes 30' X 150' geotube footprint (tubes would be 60' circumference). The total necessary lay down area would then be 210' X 150' with dedicated operating space along the perimeter to support tie downs and maintenance during dewatering operations. Stacked 4 rows high utilizing 20 tubes total reaching an approximate height max of 24'.
Consider the costs below:

Cost for site design for pumping and dewatering in open quarry (assumed low hazard exemption):

- Upfront field monitoring and evaluation $90,000
- Site design and permitting $100,000
- Liner Construction and monitoring $850,000
- Facility upsizing to reach capacity $2,100,00
- *Estimated Opinion of Cost* *$3,140,000*

Cost for site design and dewatering in geotubes:

- Upfront field monitoring, DNR coordination $10,000
- Site design and permitting $90,000
- Liner design and monitoring (geotubes) $220,000
- Site construction $350,000
- *Estimated Opinion of Cost* *$670,000*

Once dredging commences, the dewatered sediment can be held within the tubes for an agreed amount of time until further decisions can be made regarding material fate (placement, sale, or removal), which may still be under evaluation by WDNR. These processes would still need to be reviewed and approved by WDNR to validate the approach.

While the site may not be usable as a pumping and disposal facility, it can still have value to the WWMD if WDNR agree with the approach. Please let us know if you have any questions.

Best Regards,

Brian Valleskey, CFM, CLP
Senior Professional
Geosyntec Consultants

APPENDIX A
WDNR CHAPTER NR 503

Chapter NR 503

ONE TIME DISPOSAL LANDFILLS, SMALL SIZE CONSTRUCTION AND DEMOLITION WASTE LANDFILLS, AND INTERMEDIATE SIZE CONSTRUCTION AND DEMOLITION WASTE LANDFILLS

Note: Corrections made under s. 13.93 (2m) (b) 7., Stats., Register, August, 1997, No. 500.

NR 503.01 Purpose. The purpose of this chapter is to help ensure that efficient, nuisance−free and environmentally accepted solid waste management procedures are practiced in this state and to outline the requirements regarding approval and operational requirements for one time disposal, small size construction and demolition waste landfills, and intermediate size construction and demolition waste landfills. This chapter is adopted under s. 227.11, Stats., and ch. 289, Stats.

History: Cr. Register, June, 1996, No. 486, eff. 7−1−96.

NR 503.02 Applicability. (1) Except as otherwise provided, this chapter applies to all one time disposal landfills, small size construction and demolition waste landfills, and intermediate size construction and demolition waste landfills. This chapter does not apply to hazardous waste facilities as defined in s. 291.01 (8), Stats., and regulated under chs. NR 660 to 679; metallic mining operations for nonferrous minerals as defined in s. 293.01 (9), Stats., and regulated under ch. NR 182; and metallic mining operations for ferrous minerals as defined in s. 295.41 (26), Stats., including mining wastes and mining waste sites as defined in s. 295.41 (30) and (31), Stats., and regulated under subch. III of ch. 295, Stats. Construction and demolition landfills which have a design capacity greater than 250,000 cubic yards are regulated under chs. NR 500 and 504 to 538.

(2) This chapter does not apply to the design, construction or operation of industrial wastewater facilities, sewerage systems and waterworks treating liquid wastes approved under s. 281.41, Stats., or permitted under ch. 283, Stats., nor to facilities used solely for the disposal of liquid municipal or industrial wastes which have been approved under s. 281.41, Stats., or permitted under ch. 283, Stats., except for facilities used for the disposal of solid waste.

History: Cr. Register, June, 1996, No. 486, eff. 7−1−96; corrections in (1) made under s. 13.92 (4) (b) 7., Stats., Register February 2010 No. 650; CR 13−057: am. (1) Register July 2015 No. 715, eff. 8−1−15.

NR 503.03 Definitions. The terms used in this chapter are defined in s. NR 500.03.

Note: Section NR 500.03 (50) defines "construction and demolition waste" to mean solid waste resulting from the construction, demolition or razing of buildings, roads and other structures.

Note: Construction and demolition waste typically consists of concrete, bricks, bituminous concrete, wood, glass, masonry, roofing, siding and plaster, alone or in combinations. It does not include waste paints, solvents, sealers, adhesives or similar materials.

Note: Section NR 500.03 (117) defines "intermediate size construction and demolition waste landfill" to mean a landfill with a design capacity of at least 50,000 cubic yards but no more than 250,000 cubic yards and used for the disposal of only construction and demolition wastes.

Note: Section NR 500.03 (158) defines "one−time disposal" to mean the disposal of no more than 10,000 cubic yards of approved types of agricultural or demolition solid waste on a one−time basis over a project life of not more than 6 months. Examples are the disposal of concrete, brick, stone, asphalt, wood, trees, logs, brush and material from demolished buildings.

Note: Section NR 500.03 (213) defines "small size construction and demolition waste landfill" to mean a landfill with a design capacity of 50,000 cubic yards or less and used for the disposal of only construction and demolition wastes.

History: Cr. Register, June, 1996, No. 486, eff. 7−1−96.

NR 503.04 Locational criteria and performance standards. (1) GENERAL. An applicant for an approval of a new landfill or approval of an expansion of an existing landfill regulated under this chapter shall demonstrate to the department that the proposed landfill will comply with all of the applicable locational criteria of this section for which no exemption has been granted. Exemptions to sub. (2) (a), (b), (d), (e), (f) and (g) may be granted only upon demonstration by the applicant of circumstances which warrant an exemption. An exemption from compliance with sub. (2) (c) may not be granted.

(2) LOCATIONAL CRITERIA. No person may establish, construct, operate, maintain or permit the use of property for any landfill regulated under this chapter where waste handling and disposal activities occur within the following areas:

(a) Within 1,000 feet of any navigable lake, pond or flowage.

(b) Within 300 feet of any navigable river or stream.

(c) Within a floodplain.

(d) Within 1,000 feet of the nearest edge of the right−of−way of any state trunk highway, interstate or federal−aid primary highway or the boundary of any public park or state natural area under ss. 23.27 (1) and 23.28 (1), Stats., unless the landfill is screened by natural objects, plantings, fences or other appropriate means so that it is not visible from the highway, park or state natural area.

(e) Within 10,000 feet of any airport runway end designed for or planned to be designed for and used by turbojet aircraft or within 5,000 feet of any airport runway end designed for and used only by piston type aircraft or within other areas where a substantial bird hazard to aircraft would be created. This criterion is applicable only when the landfill will be used for handling putrescible waste outside of an enclosed building.

(f) Within 1,200 feet of any public or private water supply well.

(g) Within 100 feet of the landfill property boundary.

(3) PERFORMANCE STANDARDS. No person may establish, construct, operate, maintain or permit the use of property for any landfill regulated under this chapter within an area where there is a reasonable probability that the landfill will cause:

(a) A significant adverse impact on wetlands as provided in ch. NR 103.

(b) A take of an endangered or threatened species or other activity prohibited under s. 29.604, Stats.

(c) A detrimental effect on any surface water.

(d) A detrimental effect on groundwater quality or an effect resulting in or exacerbating attainment or exceedance of any preventive action limit or enforcement standard at a point of standards application as defined in ch. NR 140. For the purposes of design, the point of standards application is defined by s. NR 140.22 (1).

(e) The migration and concentration of explosive gases in any landfill structures, excluding any leachate collection system or gas control or recovery system components or in the soils or air at or beyond the landfill property boundary in excess of 25% of the lower explosive limit for the gases at any time.

(f) The emission of any hazardous air contaminant exceeding the limitations for those substances contained in s. NR 445.07.

History: Cr. Register, June, 1996, No. 486, eff. 7–1–96; CR 05–020: am. (2) (d) and (3) (b) Register January 2006 No. 601, eff. 2–1–06; correction in (3) (f) made under s. 13.92 (4) (b) 7., Stats., Register April 2017 No. 736.

NR 503.05 Licensing exemption. No person may construct, operate or maintain a one time disposal landfill for agricultural or construction and demolition waste, a small size construction and demolition waste landfill, or an intermediate size construction and demolition waste landfill unless the person has obtained a written plan approval from the department, except as otherwise provided in s. NR 500.08. Facilities approved under this chapter are exempt from the licensing requirements of ch. 289, Stats.

History: Cr. Register, June, 1996, No. 486, eff. 7–1–96.

NR 503.06 Affidavit of site registry. Unless otherwise specified, no person may operate or maintain a landfill regulated under this chapter unless the person has submitted on form 4400–067 proof that a notation of the existence of the landfill has been recorded in the office of the register of deeds in each county in which a portion of the landfill is located. Landfills which were in existence prior to July 1, 1996, and continue to operate after this date shall submit an affidavit of site registry within 90 days after July 1, 1996.

Note: This form may be obtained from the department of natural resources, bureau of waste management, 101 S. Webster Street, P.O. Box 7921, Madison, WI 53707–7921, (608) 266–2111, waste.management@dnr.state.wi.us.

History: Cr. Register, June, 1996, No. 486, eff. 7–1–96; CR 05–020: am. Register January 2006 No. 601, eff. 2–1–06.

NR 503.07 Initial site inspection. (1) INSPECTION REQUEST. Any person intending to establish a new landfill or an expansion of an existing landfill regulated under this chapter shall submit a written request to the department for an initial site inspection for the purpose of evaluating compliance with the applicable locational criteria and performance standards of s. NR 503.04.

(2) SUBMITTAL REQUIREMENTS FOR INSPECTION REQUEST. Any person submitting a request to the department to perform an initial site inspection shall comply with all requirements of this section and s. NR 500.05 (5) to (8).

Note: One copy of the information required by this section shall be submitted to the department's field office responsible for the area in which the facility is proposed to be located and one copy shall be submitted to the department's bureau of waste management in Madison.

(3) DEPARTMENT RESPONSE. The department shall conduct an initial site inspection within 22 business days of receipt of the request and the information required in this section. Follow up inspections may be necessary depending on the season to identify any obscured features of the proposed property such as wetlands. The department shall render a preliminary opinion regarding the suitability of the site location and identify any additional studies or information that must be submitted to determine if a proposed landfill or soil borrow source complies with the applicable locational criteria and performance standards of s. NR 503.04 within 22 business days of completing the inspection. A favorable evaluation under this section does not guarantee a favorable initial site report opinion.

(4) CONTENTS OF INSPECTION REQUEST FOR A PROPOSED SOLID WASTE LANDFILL. An initial site inspection request for a proposed new landfill or an expansion of an existing landfill regulated under this chapter shall include the following:

(a) A cover letter identifying the applicant and authorized contact, type of landfill and operation being proposed, property ownership, location by quarter – quarter section and present land use.

(b) Identification of any known potential impacts to endangered and threatened species in accordance with s. 29.604 (4), Stats., and the federal endangered species act or historical, scientific or archeological areas in accordance with s. 44.40, Stats., including any prior studies or surveys conducted at the proposed site.

(d) An enlarged 7.5 minute USGS map or other base map having a minimum scale of 1″ = 500 feet. Map scale and contour intervals shall be revised when necessary to sufficiently show relief, surface waters, floodplains, existing land use conditions and all water supply wells and residences located within one mile of the property boundaries of the proposed landfill.

(e) A preliminary identification of all potential conflicts with the locational criteria and performance standards specified in s. NR 503.04.

History: Cr. Register, June, 1996, No. 486, eff. 7–1–96; CR 05–020: am. (1), r. and recr. (4) (b), r. (4) (c) and (5) Register January 2006 No. 601, eff. 2–1–06.

NR 503.08 One time disposal landfill. (1) PLAN OF OPERATION REQUIREMENTS. Any person intending to establish a one time disposal landfill shall submit a plan of operation to the department which contains a description of the need for the landfill and the potential environmental impacts. The proposal shall address the alternatives considered, including reuse, recycling and disposal at a licensed solid waste landfill, the reasons why other economically feasible alternatives are not available, and the potential environmental impacts. The department may deny an application for a one time disposal landfill if other reasonable alternatives are available. No person may establish, construct, operate or maintain a one time disposal landfill prior to obtaining approval from the department of a plan of operation. The plan of operation shall contain all of the following information unless the department waives specific requirements in writing. The department may require any additional information if it determines that the information is necessary to complete the review of the project.

(a) The general information requirements of s. NR 503.07 (2).

(b) Name, address and telephone number of landfill owner and operator.

(c) Total acreage of property and landfill.

(d) Landfill life, capacity, types and sources of material to be disposed.

(e) The following geotechnical information based upon 2 test pits or borings per acre installed at a minimum of 10 feet below the base of the disposal area:

1. Depth to groundwater if within 10 feet of the base of the disposal facility.

2. Boring logs identifying USCS classification of each major soil unit encountered during installation of the soil borings or test pits. The department may require representative samples be taken and analyzed for grain size distribution.

(f) Alternatives to the proposed landfill which may be available such as licensed landfills, transfer facilities, recycling facilities or other licensed processing facilities. If reasonable alternatives are available, then the applicant shall provide adequate justification why the alternatives are not feasible.

(2) DESIGN AND OPERATIONAL REQUIREMENTS. No person may construct, operate or maintain a one time disposal landfill except in conformance with the following minimum requirements and with the terms and conditions of the plan approval for the landfill:

(a) The landfill life may not exceed 6 months.

(b) The design capacity of the landfill may not exceed 10,000 cubic yards.

(c) The landfill shall be operated, maintained and closed in a nuisance–free manner. Screening shall be provided from all residences within 1/4 mile unless this requirement is waived in writing by the department.

(d) A minimum 10−foot separation distance from the base of the landfill to the water table or bedrock shall be maintained unless the disposal facility is in a clay soil environment.

(e) Access to the landfill shall be restricted through the use of fencing or other means approved by the department.

(3) WASTE SCREENING PLAN. The department may require development and implementation of a waste screening plan to prevent the disposal of waste material not approved for a one time disposal landfill.

(4) ENVIRONMENTAL MONITORING. The department may require installation of groundwater and leachate monitoring wells or other devices, groundwater and leachate quality sampling and analysis programs, gas monitoring and provisions to protect against detrimental effects of leachate and gas migration from any one time disposal landfill.

(5) CLOSURE REQUIREMENTS. Any person who operates or maintains a one time disposal landfill, or who permits the use of property for that purpose shall close the landfill within 6 months after disposal begins in the following manner:

(a) The entire area previously used for disposal purposes shall be covered with at least 2 feet of compacted earth sloped adequately to allow storm water runoff. A specific soil type may be required by the department for this 2−foot layer. Fine grain soils shall be utilized to minimize infiltration unless this requirement is waived in writing by the department. Top slopes shall be no less than 2%. Side slopes shall be no steeper than 33%.

(b) Storm water shall be diverted to limit the potential for erosion and sedimentation. Wherever possible, storm water shall be diverted around previously filled areas. Where it is necessary to divert drainage over previously filled areas, the department may require that drainage be conveyed by clay lined drainage swales having a minimum thickness of 2 feet.

(c) The finished surface of the filled area shall be covered with a minimum of 6 inches of topsoil.

(d) Seeding, fertilizing and mulching of the finished surface shall be accomplished in accordance with the landfill's final use. The seed type and amount of fertilizer shall be selected depending on the type and quality of topsoil and compatibility with native vegetation.

(e) Following closure of the one time disposal landfill, the landfill shall be inspected and maintained by the owner or operator.

(6) EXPANSIONS. Any person who wishes to expand an existing one time disposal landfill shall comply with all provisions of this section. The department shall interpret expansions to include any new landfill within 1/4 mile of an existing landfill. The combined design capacity of the original one time disposal landfill and all subsequent expansions may not exceed 10,000 cubic yards. The department may deny any request for an expansion if, in the department's opinion, the disposal of additional waste may result in a detrimental effect on surface or groundwater or cause or exacerbate an attainment or exceedance of any standard in ch. NR 140. The local geology, hydrogeology and topography shall be considered in this decision.

History: Cr. Register, June, 1996, No. 486, eff. 7−1−96.

NR 503.09 Small size construction and demolition waste landfills. (1) PUBLIC NOTICE. The applicant for a small size construction and demolition waste landfill shall publish a public notice in the local newspaper and send written notification to residents within 1200 feet of the proposed landfill footprint. The notice and notification shall identify the applicant's name, business address and phone number; the location, design capacity, and anticipated operational life of the proposed landfill; and the name, address and telephone number of the department representative to whom public comments may be submitted orally or in writing. Copies of both the proposed public notice and the notification to residents shall be provided to the department office located in the region of the proposed landfill prior to submission to the newspaper for publication. Documentation that the public notice and resident notification requirements were met shall be provided in the plan of operation under this subsection.

(2) PLAN OF OPERATION REQUIREMENTS. No person may establish, construct, operate or maintain a small size construction and demolition waste landfill prior to obtaining approval from the department of a plan of operation. Any person intending to establish or construct a small size construction and demolition waste landfill for disposal of no more than 50,000 cubic yards of material shall submit a plan of operation to the department for approval which contains the information specified in this subsection unless the department waives specific requirements in writing. The proposal shall address the alternatives considered, including reuse, recycling and disposal at a licensed solid waste landfill, the reasons why other economically feasible alternatives are not available, and the potential environmental impacts that may occur. The department may require the submittal of any additional information, if it determines that the information is necessary to complete the review of the project. At a minimum, the following information shall be included in the plan of operation:

(a) General landfill information which identifies the project title; name, address and telephone number of the primary contact persons and consultants; present property owner; proposed landfill owner and operator; landfill location by quarter−quarter section; total acreage of property and landfill; proposed landfill life and disposal capacity; estimated types, quantities and sources of waste to be disposed; anticipated covering frequency; equipment to be used; and mode of operation.

(b) Geotechnical information shall be obtained by drilling a minimum of 5 soil borings which extend to 25 feet below the anticipated landfill base grade or to bedrock, whichever is less unless an alternative geotechnical program is approved by the department in writing. The borings shall be distributed on a grid pattern throughout the area. A minimum of 3 representative samples shall be taken from each major soil layer encountered during installation of the borings and shall be analyzed for grain size distribution and classified according to the unified soil classification system.

(c) Water table observation wells shall be installed to adequately define the water table surface and hydraulic gradients. At a minimum, 3 water table observation wells shall be installed. The well locations shall be chosen in an effort to place one well upgradient and the other 2 downgradient at the proposed landfill.

(d) The results of the subsurface investigations shall be summarized using a series of geologic sections which connect the soil borings performed. Each section shall show present topography, borings, wells, major soil layers, water table and bedrock.

(e) Topographic survey information shall be displayed on a plan sheet showing the proposed fill area, property boundaries, proposed landfill boundaries, soil borings performed and wells installed. The minimum scale shall be 1″ = 200′ with a maximum contour interval of 5 feet. This map may consist of a blow−up of a USGS map, with supplemental information added as appropriate. Drainage patterns shall be shown. In addition, the plan sheet shall show all roads adjacent to or near the proposed landfill, and all homes, water supply wells, floodplains, and wetlands or water courses within 1/4 mile of the landfill.

(f) A topographic plan sheet showing the proposed base grades and the sequence of filling shall be prepared. A contour interval of 2 feet shall be used and all drainage patterns shown.

(g) A topographic plan sheet showing the proposed final grades shall be prepared.

(h) Cross−sections, both north−south and east−west, shall be drawn through the fill area delineating present topography, soils information, groundwater, base grades and final contours. This information may be shown on the geologic cross−sections required in par. (d) if clarity is not compromised.

(i) An environmental monitoring plan shall be proposed which, at a minimum, complies with the requirements of sub. (6).

(j) An appendix shall be prepared which includes all raw data such as boring logs, soil tests, well construction data and water level measurements; a plat map of the area; a soil conservation service soil map and interpretation and references.

(3) WASTE SCREENING PLAN. (a) The owner or operator of a small size construction and demolition waste landfill shall develop and submit to the department for approval a waste screening and handling plan that contains the following:

1. Identification of items that may not be accepted by the landfill.

2. Procedures for limiting waste which is not approved for disposal from entering the landfill.

3. Procedures for inspecting waste loads.

4. Procedures for handling and disposing of screened items.

5. Procedures for enforcement of the waste screening requirements.

(b) The owner or operator of a small size construction and demolition waste landfill which began initial operation prior to July 1, 1996, shall submit a waste screening and handling plan to the department no later than 3 months after July 1, 1996, for approval. Small size construction and demolition waste landfills which did not begin operation prior to July 1, 1996, may not accept waste until a waste screening plan is approved in writing by the department.

(4) DESIGN AND OPERATIONAL REQUIREMENTS. Any person operating a small size construction and demolition waste landfill shall meet the following operational requirements, and comply with the terms and conditions of the plan approval for the landfill.

(a) The landfill shall be operated, maintained and closed in a nuisance−free manner. Screening shall be provided from all residences within 1/4 mile of the waste handling areas unless this requirement is waived in writing by the department.

(b) A minimum 10−foot separation distance from the base of the landfill to the water table or bedrock shall be maintained unless the disposal facility is in a clay soil environment.

(c) Access to the landfill shall be restricted through the use of fencing or other means if approved by the department.

(d) The landfill shall be operated by personnel who meet the operator certification requirements established under ch. NR 524.

(5) CONSTRUCTION DOCUMENTATION REPORT. The department may require the owner or operator to submit a construction documentation report for any small size construction and demolition waste landfill. When a documentation report is required it shall be prepared in accordance with the department's plan approval and s. NR 500.05. Operation of the landfill may not begin until the report is approved in writing by the department.

(6) ENVIRONMENTAL MONITORING. The owner or operator of a landfill approved under this section shall establish an environmental monitoring program under this subsection. The department may require installation of additional monitoring devices, additions to the groundwater sampling and analysis programs, gas and leachate monitoring and provisions to protect against the detrimental effects of leachate and gas migration. At a minimum, the monitoring program shall include the following:

(a) Water table observation wells shall be installed to adequately define the water table, hydraulic gradients and groundwater quality. At a minimum, 3 water table observation wells shall be installed. The well locations shall be chosen in an effort to place one well upgradient and the other 2 downgradient at the proposed landfill.

(b) Baseline water quality shall be established at all monitoring wells for all the parameters listed in Table 1.

(c) A minimum of 2 samples with at least 30 days between sampling rounds, shall be collected and analyzed and the results shall be submitted with the proposal for constructing the small demolition landfill. Two additional samples, with at least 30 days between sampling rounds, shall be collected and analyzed for any parameters listed in Table 1 which exceeded preventive action limits established in Table 1 of NR 140 during either of the first 2 rounds.

(d) If additional samples are required under par. (c), the results of the 2 additional samples shall be submitted in the construction documentation report for the small demolition landfill.

(e) Collection, handling and analysis of samples shall be performed in accordance with ss. NR 507.16 and 507.17.

Table 1
Groundwater Sampling For Small Size Construction & Demolition Waste Landfills

Parameters for Detection and Baseline Groundwater Sampling	Parameters for Baseline Groundwater Sampling Only
Field Conductivity	Arsenic
Field pH	Barium
Alkalinity	Cadmium
Chloride	Chromium
COD	Cyanide
Hardness	Lead
Sulfate	Manganese
Groundwater elevation	Mercury
	Selenium
	Zinc
	VOCs

(f) Detection groundwater monitoring shall be established at each monitoring well. Detection monitoring shall begin following the first acceptance of waste. Each well shall be sampled semi−annually and tested for the parameters listed in column 1 of Table 1 unless otherwise approved in writing by the department. All test results shall be submitted to the department in accordance with ch. NR 507.

(7) CLOSURE REQUIREMENTS. Any person who operates or maintains a small size construction and demolition waste landfill, or who permits the use of property for such purposes shall close the landfill within 90 days after disposal ends or when the design capacity is reached, whichever occurs first, in accordance with the approved plan of operation and the following:

(a) The entire area previously used for disposal purposes shall be covered with at least 2 feet of compacted earth sloped adequately to allow storm water runoff. A specific soil type may be required by the department for this 2−foot layer. Fine grain soils shall be utilized to minimize infiltration unless this requirement is waived in writing by the department. Top slopes shall be no less than 2%. Side slopes shall be no steeper than 33%.

(b) Storm water shall be diverted to limit the potential for erosion and sedimentation. Wherever possible, storm water shall be diverted around previously filled areas. Where it is necessary to divert drainage over previously filled areas, the department may require that drainage be conveyed by clay lined drainage swales having a minimum thickness of 2 feet.

(c) The finished surface of the filled area shall be covered with a minimum of 6 inches of topsoil.

(d) Seeding, fertilizing and mulching of the finished surface shall be accomplished in accordance with the landfill's final use. The seed type and amount of fertilizer shall be selected depending

on the type and quality of topsoil and compatibility with native vegetation.

(e) Following closure of a small size construction and demolition waste landfill, the landfill shall be inspected and maintained by the owner or operator.

(8) EXPANSIONS. Except as provided under s. NR 503.10 (8) (b), any person who wishes to expand an existing small size construction and demolition waste landfill shall comply with all provisions of this section. The department shall interpret expansions to include the establishment of any new landfill within 1/4 mile of an existing landfill regulated under this chapter. In no case may the combined design capacity of the original small size construction and demolition waste landfill and all subsequent expansions exceed 50,000 cubic yards. The department may deny any request for an expansion, if in the department's opinion, the disposal of additional waste may result in a detrimental effect on surface or groundwater or cause or exacerbate an attainment or exceedance of any standard in ch. NR 140. The local geology, hydrology, hydrogeology and typography shall be considered in this decision.

(9) INSPECTION FEES. (a) The department may specify in any approval that critical construction steps of a landfill be inspected by the department. The owner or operator shall pay a construction inspection fee of $500.00 per inspection to the department at the time of submittal of a construction documentation report or as specified in the plan approval. A maximum of 4 inspections per major phase of construction may be required.

(b) The owner or operator of a small size construction and demolition waste landfill which begins operation after July 1, 1996, shall pay an operation inspection fee to the department in accordance with ch. NR 520 Table 3, prior to beginning initial operation and annually on October 1st of each year. The owner or operator of a small size construction and demolition landfill which was in operation prior to July 1, 1996, and continues to operate after July 1, 1996, shall pay an operation inspection fee to the department in accordance with ch. NR 520 Table 3, within 90 days after July 1, 1996, and annually on October 1st of each year.

(10) FINANCIAL RESPONSIBILITY FOR CLOSURE AND LONG TERM CARE. The department may require that the owner or operator of a landfill approved in accordance with this section provide proof of financial responsibility for closure and long term care of the landfill using methods listed in s. NR 520.06.

(a) The owner or operator of a landfill required to provide financial responsibility in accordance with this section shall submit prior to beginning disposal operations and annually thereafter for the period of active landfill life, proof of financial responsibility to ensure compliance with the closure requirements of the approved report.

(b) The owner or operator of a landfill required to provide financial responsibility in accordance with this section shall provide proof of financial responsibility for the long−term care of the landfill for 40 years after landfill closure. An owner responsible for long−term care shall submit prior to beginning disposal operations and annually thereafter for the period of active landfill life, proof of financial responsibility to ensure compliance with the long−term care requirements of the approved plan of operation.

(c) Any person acquiring rights of ownership, possession or operation of a landfill approved in accordance with this section shall be subject to all requirements of the plan of operation for the landfill and shall provide any required proof of financial responsibility to the department in accordance with ch. NR 520. The previous owner shall maintain proof of financial responsibility until the person acquiring ownership, possession or operation of the landfill obtains department approval of proof of financial responsibility.

History: Cr. Register, June, 1996, No. 486, eff. 7−1−96; am. (3) (a), Register, August, 1997, No. 500, eff. 9−1−97; CR 05−020: renum. (1) to (9) to be (2) to (10) and am. (6) (f), cr. (1) Register January 2006 No. 601, eff. 2−1−06; correction in (2) (i) made under s. 13.93 (2m) (b) 7., Stats., Register January 2006 No. 601.

NR 503.10 Intermediate size construction and demolition waste landfills. (1) PUBLIC NOTIFICATION REQUIREMENTS. No person may establish or construct an intermediate size construction and demolition waste landfill for disposal of more than 50,000 cubic yards but no more than 250,000 cubic yards of material after July 1, 1996, unless the following requirements have been met.

(a) The applicant shall publish a public notice in the local newspaper which identifies the applicant's name, business address and phone number; the location, design capacity, and anticipated operational life of the proposed landfill; and the name, address and telephone number of the department representative to whom public comments may be submitted orally or in writing. A copy of the proposed public notice shall be provided to the department office located in the area of the proposed landfill prior to submission to the newspaper for publication.

(b) The applicant shall provide a press release to the local newspaper which includes the information required in par. (a) as well as a description of the proposed operation.

(c) The applicant shall provide individual letters of notification to all landowners and residents located within 1/4 mile of the proposed limits of filling which includes the information required in par. (a). This requirement may be satisfied by local zoning notification procedures if all landowners and residents within 1/4 mile are contacted.

(d) The applicant shall provide a letter of notification to the clerk of all townships and municipalities in which the landfill is to be located and all townships and municipalities located within 1200 feet of the proposed waste limits which includes the information required in par. (a).

(e) All of the requirements in this subsection shall be satisfied prior to submitting a plan of operation under sub. (2). Documentation that the requirements have been met shall be provided in the plan of operation.

(2) PLAN OF OPERATION REQUIREMENTS. No person may establish, construct, operate or maintain an intermediate size construction and demolition waste landfill prior to receiving approval from the department of a plan of operation. Any person intending to establish or construct an intermediate size construction and demolition waste landfill shall submit a plan of operation to the department for approval which contains the information specified in this subsection. The proposal shall address the alternatives considered, including reuse, recycling and disposal at a licensed solid waste landfill, the reasons why other economically feasible alternatives are not available, and the potential environmental impacts that may occur. The report shall adequately characterize site conditions and contain the complete plans and specifications necessary for construction, operation, monitoring, closing and long−term care of the landfill. These plans as approved by the department shall be used for the day−to−day construction, operation and closure of the landfill and shall be presented in a manner that is clear and understandable. The department shall either approve or disapprove the report in writing within 90 days after submission of a complete report. Any proposed changes to the approved report shall be submitted to and approved by the department in writing prior to implementation.

(a) The report shall identify the project title; name, address and phone number of the primary contacts including the proposed landfill's owner and operator and any consultants; present property owner; proposed landfill location by quarter−quarter section; total acreage of the property and proposed limits of filling; proposed landfill life and design capacity; anticipated waste sources, types and characteristics; anticipated volumes of each major waste stream and any seasonal fluctuations taking into account waste reduction, reuse, recycling; anticipated cover frequency; mode of operation; anticipated sub−base, base and final grades; and documentation demonstrating that the requirements of sub. (1) have been satisfied.

(b) The report shall include a discussion of land uses at the proposed landfill location and within at least one mile of the anticipated limits of filling and waste handling areas. A thorough discussion of land uses which may have an impact on the suitability of the property for waste disposal or on groundwater quality shall be included. The report shall address all areas where land use may affect or be affected by the proposed new landfill or a proposed expansion to an existing landfill. The discussions shall be supplemented with land use maps. At a minimum, the report shall specifically address the following items:

1. Landowners whose property is contiguous to the proposed landfill's property boundaries, and all residences within 1/4 mile of the anticipated limits of filling, shall be identified and located on a map. This information may be presented on a plat map unless sufficient detail cannot be shown. However, any changes in ownership shown on the plat map shall be noted.

2. A discussion of land use zoning shall be included. Particular attention shall be given to areas where zoning variances will be required, where agricultural impact statements may be required, or where floodplain, conservancy, shoreland or wetland zoning is designated. A copy of any zoning variances that have been granted or conditions that have been imposed shall be included in the report.

3. A description of the current land uses shall be included. Particular emphasis shall be put on the discussion of known recreational, historical, archaeological, state and local natural areas; national, state and county forest lands; and critical habitat.

4. The existing or proposed transportation routes and access roads including any weight restrictions shall be delineated.

Note: Limits of filling is defined in s. NR 500.03 (127).

(c) The report shall include a discussion of the regional setting of the proposed landfill to provide a basis for comparison and interpretation of information obtained through field investigations. This discussion may be limited to information available from publications such as a hydrologic investigations atlas, water supply papers, informational circulars and technical bulletins published by the Wisconsin geological and natural history survey, the United States geological survey and the natural resources conservation service. The regional setting to be discussed is the area which may affect or be affected by the proposed landfill. At a minimum, the report shall consider the area within one mile of the anticipated limits of filling. The discussions shall be supplemented with available regional bedrock and glacial geology maps, USGS topographic maps, NRCS soil maps and regional water table maps. Specifically, the following items shall be discussed:

1. The existing topography including predominant topographic features.

2. The surface water drainage patterns and significant hydrologic features such as surface waters, springs, surface water drainage basins, divides and wetlands.

3. The origin, nature and distribution of bedrock; the origin, texture, thickness and distribution of the unconsolidated units; and the texture and classification of the surficial soils.

4. The depth to groundwater, groundwater flow directions, groundwater divides and aquifers and identification of the aquifers used by public and private wells.

5. Information on groundwater and surface water quality which is available from the USGS, WGNHS, DNR, UW–Extension and regional planning commissions.

(d) The applicant shall perform field investigations to define the subsurface soils, depth to bedrock, type of bedrock, depth to groundwater and groundwater flow direction at the proposed landfill's location. The results of this investigation shall be described in the narrative section of the report. All raw data collected for borings, well construction and borehole abandonment shall be submitted on forms in accordance with s. NR 507.14 (5). All raw data for laboratory tests and water level measurements shall be included in the report appendix. At a minimum, the investigations specified in subds. 1. to 4. shall be performed unless an alternative geotechnical investigation program is approved by the department in writing before the geotechnical investigation program for the report is initiated. Documentation of any alternative geotechnical investigation approved by the department and justification for any reductions to the requirements in this section shall be included in the report. At a minimum, the field investigation shall include the following:

1. As specified in Table 2, borings shall be drilled in 5 separate locations for the first 20 or less acres of the anticipated limits of filling and one additional boring shall be drilled for each additional 10 or less acres. All borings shall be extended a minimum of 25 feet below the anticipated sub–base grade. If the boring is located outside the anticipated limits of filling, the applicable sub–base grade is the elevation of the bottom of the anticipated liner system nearest to the borehole. The borings shall be distributed on a grid pattern across the proposed site location and the anticipated limits of filling. All borings shall be located in or within 300 feet of the anticipated limits of filling. Samples shall be collected and retained and boring logs shall be prepared in accordance with s. NR 507.05 (2) and (3). Borings not converted to wells shall be abandoned in accordance with ss. NR 141.25 and 507.08.

2. As specified in Table 2, wells shall be installed to adequately define the depth to groundwater and in a configuration that allows groundwater flow direction to be determined.

a. At a minimum, 3 water table observation wells shall be installed for the first 20 or less acres of the anticipated limits of filling and one additional water table observation well shall be installed for each additional 10 or less acres. Based on existing information, the observation wells shall be constructed such that the water table intersects the well screen at all times during the year.

b. At a minimum, in a fine–grained soil environment for each 20 or less acres of the anticipated limits of filling, a piezometer shall be installed adjacent to a water table observation well to create a well nest.

Note: A fine–grained soil environment is defined in s. NR 500.03 (86).

c. All wells shall be located no more than 300 feet from the proposed limits of filling and be designed, installed, developed and documented in accordance with ch. NR 141 and ss. NR 507.06, 507.07 and 507.08. Alternative methods of well design and installation which achieve comparable results shall be approved by the department prior to well construction.

3. A professional geologist or qualified technician who is directly supervised by a professional geologist shall observe and direct the drilling of all borings and the installation, development and abandonment of all wells. The professional geologist or qualified technician who is directly supervised by a professional geologist shall also visually describe and classify all geologic samples.

Table 2
Minimum Number of Required Borings & Wells

Non–Fine–Grained Soil Environments			
Piezometers	Observation wells	Borings	Area
–	3	5	First 20 or less acres
–	1	1	Each additional 10 or less acres
Fine–Grained Soil Environments			
Piezometers	Observation wells	Borings	Area
–	3	5	First 20 or less acres
–	1	1	Each additional 10 or less acres
1	–	–	Each 20 or less acres

4. Laboratory and field analyses conducted to identify the specific geologic and hydrogeologic conditions at the proposed landfill's location shall:

a. Include testing a minimum of one representative sample from each major soil unit encountered. Each representative sample shall be analyzed for grain–size distribution using mechanical and hydrometer methods and Atterberg limits as appropriate for the particular type of material and be classified according to the unified soil classification system.

Note: A major soil unit is defined in s. NR 500.03 (138).

b. All available groundwater or surface water quality data which has been obtained from sampling at the proposed landfill location shall be submitted in the report. Any environmental monitoring data included in the report shall be submitted electronically.

(e) Unless an alternative size is approved by the department, the results of the subsurface investigations shall be presented on 24 inch x 36 inch plan sheets as follows:

1. A topographic map of the area within 1/4 mile of the anticipated limits of filling shall be submitted showing the anticipated limits of filling, property boundaries, homes, buildings, cultural features, water supply wells, and the location of soil borings and wells. For a proposed contiguous, horizontal or vertical expansion of an existing landfill, the topographic map shall also include the location of all borings and wells for the existing landfill. The base map may consist of an enlarged 7.5 minute USGS map or other map having a minimum scale of 1″= 500′ with contour intervals sufficient to show relief.

2. Geologic cross–sections shall be submitted. For a proposed contiguous, horizontal or vertical expansion of an existing landfill, all borings and wells for the existing landfill shall be included on the geologic cross–sections. Where more than one interpretation can be reasonably made when evaluating heterogeneities within the unconsolidated deposits, assume that the heterogeneities are continuous. The following information shall be presented on the geologic cross–sections:

a. A dashed line or question mark for inferred lithostratigraphic boundaries, a number or symbol to label major soil units and a key containing a description of the soil units.

b. The anticipated sub–base, base and final grades for the proposed landfill.

c. All boring logs, the USCS classifications and the geologic origin for each major soil unit.

d. Well construction details shown to scale including the well screen and filter pack length, the location of the upper and lower seals, and stabilized water level elevations measured on the same day. When 2 or more water table observation wells are presented on a cross–section, a line representing the water table elevation shall be drawn. The date the measurements were taken shall be specified in the key.

3. A water table contour map shall be submitted. The map shall be based on stabilized water levels recorded on the same day from all observation wells installed at the proposed landfill's location and show the wells and the measured water level at each well. For a proposed contiguous, horizontal or vertical expansion of an existing landfill, the water table contour map shall include the water table observation wells and measured water table elevations at each well for the existing landfill. The topographic map shall be used as a base map. If more than one set of water levels has been taken, the water table contours shall be based on the set of data which indicates the highest water table. Any observed variations in flow direction shall be discussed in the narrative of the report. Inferred contours made beyond the extent of the well field shall be shown with dashed lines.

(f) The report shall include an analysis of the results from the sub–surface investigations, regional geotechnical information, land use information, and include a discussion of the following items:

1. The potential for the proposed landfill to meet the locational criteria and performance standards in s. NR 503.04.

2. A discussion of the geologic environment including those factors which may affect the development, design or operation of the proposed landfill.

3. For a proposed contiguous, horizontal or vertical expansion of an existing landfill, the compliance status and performance of the existing landfill shall be evaluated.

(g) The report shall contain a set of engineering plans which are drawn in accordance with ss. NR 500.05 (6) and 504.07 to 504.11 and the following requirements. Engineering plans shall be drawn on standard 24 inch by 36 inch plan sheets. If landfill details cannot be shown on standard plan sheets at a 1:100 scale, the engineering plans may be drawn on 30 inch by 42 inch plan sheets. All plan sheets except the title sheet, existing conditions sheet, cross–sections and details sheets shall utilize the existing conditions sheet as a base map. For complex plans, existing conditions within the landfill area may be shown by lighter lines or may be eliminated. At a minimum, the engineering plans shall include the following:

1. A title sheet shall be included indicating the project title, who prepared the plans, the date the plans were prepared, the applicant for whom the plans were prepared, a table of contents, a map showing the location of the landfill within the county or multi–county area, the location of the county or multi–county area within the state and the area to be served.

2. An existing conditions plan shall be included consisting of a detailed topographic map of the proposed landfill and all areas within 1,200 feet of the proposed limits of filling prior to development. The minimum scale shall be 1″ = 200 feet with a maximum 2 foot contour interval. The contour interval selected shall be sufficiently small to clearly show surface water flow patterns within

and around the landfill. All elevations shall be related to USGS datum. The plan shall identify and define the following:

a. Surface waters including intermittent and ephemeral streams and wetlands.

b. Property boundaries, the proposed landfill boundary and the proposed limits of filling.

c. A north arrow, landfill survey grid, a formula for converting grid locations to the state plane coordinate system and the locations of all existing and proposed survey monuments.

d. Residential and commercial structures and other buildings.

e. Locations of all soil borings, all existing and abandoned groundwater monitoring wells, all public and private water supply wells and the general locations of all known septic system drain fields within 1,000 feet of the landfill area or within 500 feet of any monitoring well.

f. The locations of all other landfills, and all other solid waste facilities for the processing, storage or composting of solid wastes.

g. Utility lines, underground pipelines and electrical lines, access control and other constructed topographic and drainage features.

3. Plan sheets shall be included which depict the sub−base grades, all sub−base appurtenances such as lysimeters or drain pipes and the base grades.

4. Separate plan sheets shall be included to depict the overall landfill area and the limits of liner construction and filling. The plan sheets shall depict the layout and slope of the liner system and leachate collection system including pipes, sumps, riser pipes on interior sideslopes, manholes, trenches, berms, lift stations, permanent storm water control structures, pipe cleanouts and other pertinent structures. Invert elevations shall be provided at any changes in grade for all leachate and groundwater collection and transfer systems.

5. A series of phasing plan sheets shall be included to show landfill development through time. The location of peripheral features such as support buildings, access roads, drainage ditches, sedimentation basins, any other storm water management features, and screening berms shall be indicated on this plan. At a minimum, a separate plan sheet shall be provided for initial construction and for each subsequent phase of development or new area where substantial construction is to be performed. These subsequent phasing plan sheets shall present the final filling surfaces in the previous phases of development; the limits of clearing, grubbing and topsoil removal; the base grades of the new phase of filling; the anticipated surface contours of soil stockpiles at the time depicted on the plan sheet; and storm water management features. Each plan shall include a list of construction items and quantities necessary to prepare the phase of development indicated on the plan.

6. Plan sheets shall be included which depict the features to be constructed for storm water management at the time of initial construction, during phased development, and after closure of the landfill. Plan sheets shall include the locations of sediment basins, drainage ditches, auxiliary sediment traps, and the anticipated extent of cleared ground and stockpiles during each major phase of landfill development. Plan sheets shall include a list of anticipated actions and materials needed for sediment and erosion control.

7. A final topography plan sheet shall be included to indicate the appearance of the entire landfill following closure including surface water drainage features and the location of gas vents and all other penetrations of the final cover.

8. A landfill monitoring plan shall be included to show the location of the design management zone as determined under s. NR 140.22 (3) and all devices for the monitoring of leachate quality and quantity, unsaturated zone water quality and flow rate, groundwater quality, surface water quality, gas production, gas migration and surface settlement.

9. A long−term care plan sheet shall be included showing the topography of the landfill following closure. This plan shall list those items anticipated to be performed during the period of long−term care including the proposed schedule for monitoring and maintenance of the landfill. This information may be included on the final topography plan sheet if clarity is not compromised or reference may be made to the appropriate section of the operations manual and design report.

10. A minimum of 2 cross−sections drawn perpendicular and parallel to the landfill baseline through the major dimensions of the landfill shall be included. These cross−sections shall be drawn on the cross−section plans required under sub. (2) (e) 2. The location of the cross−sections shall be illustrated by a reduced scale plan view on each cross−section. Each combined engineering and geologic cross−section shall show:

a. Existing grades.

b. Sub−base, base, top of leachate collection blanket grades and final grades.

c. Soil borings and monitoring wells which the section passes through or is adjacent to.

d. Soil and bedrock types. For clarity, a number or symbol shall be used to label major soil units instead of extensive shading.

e. Stabilized water table contours.

f. Leachate collection and monitoring systems.

g. Gas venting or extraction and monitoring systems.

h. Limits of waste filling.

i. Erosion, storm water and sediment control structures.

j. Access roads and ramps on the perimeter of the disposal area and within the active fill area.

k. The filling sequence or phasing interfaces, and other landfill features.

11. Cross sections shall be included to illustrate all important construction features of the liner, final cover, lysimeters, leachate collection trenches and sumps, liner penetrations, sideslope risers, piping systems for gas and gas condensate and drainage systems for storm water.

12. Detailed plan view sheets shall be included for header lines or drain lines outside the limits of filling, with notations of pipe slope and intersection elevations with appurtenances such as manholes, lift stations and collection tanks.

13. Drawings showing details and typical sections shall be included for storm water control structures; access roads; fencing; final cover and base liner systems; leachate and gas control systems such as pipe bedding, manholes, transfer lines, force mains and storage tanks; leachate transfer lines which extend through the liner; groundwater and unsaturated zone monitoring devices; and buildings. This plan sheet shall include all other construction details such as leachate and waste containment berms between subsequent phases of development.

(h) The report shall contain an operations manual and design section which shall comply with ss. NR 500.05 and 504.05 to 504.11 and, at a minimum, shall contain the following information:

1. A discussion of the considerations and rationale behind design of the discretionary aspects of the major engineering features which are not explicitly required by state or federal regulations. This shall include base grade configuration and relationship to subsurface conditions, liner design, phases of landfill development and closure, traffic routing, storm water management, erosion, and sediment control measures, gas ventilation systems, final cover systems and monitoring systems. Specific attention shall be given to sidewall penetrations, sideslope riser and sump areas, and piping located outside of the limits of filling. In addressing each of the items in this subdivision, the report shall

indicate how the anticipated waste types and characteristics influenced the chosen design.

2. A discussion of initial preparations and construction methods relating to clearing and grubbing, topsoil stripping and other excavations; soil storage and visual screening development; storm water control features; base liner and granular drainage layers; leachate collection and gas venting systems; access roads and entrance area screening and fencing; environmental monitoring device installation and other special design features.

3. A description of storm water management at the time of initial construction, during phased development and after closure of the landfill. The report shall include narrative demonstrating compliance with s. NR 504.09. The report shall describe in detail temporary and permanent erosion and sediment control measures and indicate how these measures will accomplish the concepts in s. NR 504.09 (1) (b). The report shall include the specifications for design of sediment basins, culverts, drainage ditches, auxiliary sediment traps, and the anticipated extent of cleared ground and stockpiles during each major phase of landfill development. The report shall include a list of anticipated actions and materials needed for sediment and erosion control. The report shall describe a maintenance and follow−up program designed to meet the concepts in s. NR 504.09 (1) (b). The report shall include schedules for the following activities: cleaning sediment basins and ditches; seeding and stabilization of stockpiles and drainage channels; and topsoiling, seeding and stabilization of disturbed areas and areas affected by erosion.

4. Specifications for the proposed gradations of soil materials and the proposed size of the perforations used in the leachate collection system piping. The report shall include an analysis of the pipe and soil materials to demonstrate whether the gradation of sand and gravel and the pipe opening sizes are stable and self−filtering. The report shall describe the use of filter layers or other mechanisms used to maintain the porosity in the leachate collection blanket, collection trenches and sumps.

5. A description of the daily landfill operations including a discussion of the timetable for the construction of each phase of liner or final cover; waste types accepted or excluded; typical waste handling techniques and methods for handling unusual waste types; hours of operation; traffic routing; storm water management; sediment and erosion control; windy, wet and cold weather disposal operations; fire protection equipment; anticipated staffing requirements; methods for vector, dust and odor control; daily cleanup; leachate removal during hours of operation as well as nights, weekends and holidays; direction of filling; salvaging; record keeping; and parking for visitors, users and employees. The report shall describe any limitations or operational practices necessary due to the presence of other open or closed landfills, processing facilities, storage facilities, composting facilities or any other solid waste facilities located on the same property.

6. A description of landfill operations and the development of subsequent phases. This discussion shall define the critical stage of waste disposal for each phase as it relates to the start of construction of subsequent phases. The scheduling of future construction shall take into account the length of the construction season, limitations imposed by weather and season, and the capacity remaining in existing phases such that an orderly transition is maintained. The report shall describe the anticipated construction in each phase for storm water management, monitoring, abandonment of fill areas, and the installation and maintenance of gas and leachate control structures.

7. A description of the waste inspection and rejection procedures, including use of the inspection pad for dumping and inspecting all incoming waste, actions to be taken to reject unacceptable waste, and movement of non−salvageable material from the pad to the landfill. The report shall also describe the procedures for identifying salvageable material and moving it from the inspection pad to the adjacent salvageable material storage area, and schedules for removing salvageable material to markets.

8. A description of landfill operations, actions taken when phases of the landfill reach waste final grades, and closure of phases at waste final grades. The report shall include a discussion of the anticipated sequence of the required events for closure of the landfill and a discussion of those actions necessary to prepare the landfill for long−term care and final use.

9. A proposed long−term care schedule describing the procedures to be utilized for the inspection and maintenance of cover vegetation; storm water control structures; waste or ground surface settlement or siltation; erosion damage; gas and leachate control features; gas, leachate and groundwater monitoring; and other long−term care needs. The report shall include a final use plan for the landfill.

10. Specifications for construction, operation and closure of the landfill. These specifications shall include detailed instructions to the operator and any contractors for all aspects of construction and operation. References to specifications on the plan sheets shall be described. This may include information such as tank manufacturer installation instructions and pump performance criteria, materials and construction methods for sideslope risers, sidewall penetrations, sump areas and all piping located outside the limits of filling.

11. An explanation of all design calculations to facilitate department review and provide the necessary information on financial responsibility for closure and long−term care of the landfill. The report shall include a discussion of all calculations, such as waste to cover balance computations, base liner and final covering soils materials needs related to available borrow soil volumes, stockpile sizing estimates, shear resistance calculations for geosynthetic materials and soil layers, design of the storm water management system, infiltration and leachate collection and leakage volumes. All calculations shall be summarized with the detailed equations presented in the appendix of the report. References to the appropriate plan sheets, from which variables are obtained for these calculations shall be included in these summaries.

12. A detailed analysis in accordance with ch. NR 520 shall be made of the costs associated with closure of the landfill and of performing each year of long−term care. All assumptions used in developing the cost estimates shall be listed, including sources of the cost estimates and rationale for the selected cost factors. The anticipated operating life and replacement schedule of all engineering design features shall be addressed and reflected in the cost estimates. The proposed methods of establishing proof of financial responsibility for closure and long−term care under ch. NR 520 shall also be specified.

13. An appendix shall be included which lists the references used and includes any additional data not previously presented, supplemental design calculations, material specifications, operating agreements and any miscellaneous agreements such as easements, documents related to long−term care funding and other appropriate information. At a minimum, the appendix of the report shall include the following written agreements:

a. A draft leachate treatment agreement.

b. A signed clay procurement agreement or option for acquisition of the borrow source property for the volumes necessary to construct and close the first major phase of the landfill.

14. Proposed environmental monitoring plan which, at a minimum, complies with the requirements of sub. (7).

(3) DESIGN REQUIREMENTS. Intermediate size construction and demolition waste landfills shall be designed to contain and collect leachate to the maximum practical extent. This shall be accomplished by designing the landfill to meet the standards contained in the applicable portions of this subsection unless the

department approves an alternate design which provides equal or greater protection.

(a) If the applicant does not complete construction of the first major phase of the landfill within 2 years from the date of the report approval, the applicant shall reapply to the department for approval to construct the landfill. The department may require additional conditions of approval and require redesign of the landfill in accordance with state−of−the−art design criteria.

(b) Except as provided in par. (c), all landfills regulated under this section shall be designed with a clay liner which meets the following requirements:

1. Soil for a clay liner shall meet the following specifications:

a. A minimum of 50% by weight which passes the 200 sieve.

b. A saturated hydraulic conductivity of $1x10^{-7}$ cm/sec or less, when compacted to required moisture contents and densities based on the modified Proctor method, standard Proctor method, or a department−approved line of optimums method.

c. An average liquid limit of 25% or greater with no values less than 20%.

d. An average plasticity index of 12% or greater with no values less than 10%.

2. The separation distance between the seasonal high groundwater table and the bottom of the clay liner shall be at least 10 feet except for zone−of−saturation landfills.

3. The separation distance between the competent bedrock surface and the bottom of the clay liner shall be at least 10 feet.

4. The slope of the clay liner surface toward the leachate collection lines shall be at least 2%.

5. The minimum thickness of the clay liner at all locations shall be 3 feet.

6. The clay liner shall be constructed in the following manner:

a. All clay layers in the liner shall be constructed in lift heights no greater than 6 inches after compaction using footed compaction equipment having feet at least as long as the loose lift height. As needed, clay shall be disked or otherwise mechanically processed prior to compaction to break up clods and allow for moisture content adjustment. Clod size shall be no greater than 4 inches.

b. A sufficient number of passes of the compaction equipment shall be made over each lift of clay to ensure complete remolding of the clay.

c. All clay shall be compacted to 90% modified or 95% standard Proctor density at a moisture content at least 2% wet of optimum if using the modified Proctor method and wet of optimum if using the standard Proctor method, based on the characteristics of the appropriate Proctor curve for the clay being placed. As clay placement proceeds, the minimum density and moisture content targets shall be adjusted as necessary. The department may approve alternate methods of determining the quality of clay placement.

7. The slope of the interior sidewalls of a landfill may not exceed 3 horizontal to one vertical nor be less than 5 horizontal to one vertical.

8. The clay liner in adjacent phases shall be keyed together to form a continuous clay seal. This shall be accomplished by excavating steps along the edge of the existing lined phase and overlapping the lifts of clay being placed for the liner of the new phase with the steps in the existing clay liner. A minimum of 4 steps shall be included, with the total width of the spliced area measuring a minimum of 15 feet.

(c) All landfills regulated under this section which are proposed with base grades beneath the groundwater table shall meet the following requirements:

1. The landfill shall be located in a fine−grained soil environment.

Note: Fine grained soil environment is defined in s. NR 500.03 (86).

2. The landfill shall meet the requirements in par. (b) 1., 3., 4., 5., 6., 7. and 8.

3. An analysis shall be performed of the effect which groundwater flow may have on uplift of the liner. The analysis shall evaluate the effect of an underdrain or other dewatering system.

(d) All landfills regulated under this section shall be designed with leachate collection systems which incorporate the following design features:

1. A leachate collection system shall be included in each horizontal phase of the landfill. This system shall be designed to route leachate to the perimeter of the landfill in the most direct manner possible and limit the average leachate head level on the liner to one foot or less. The piping layout shall be such that leachate flows no more than 130 feet across the base of the liner before encountering a perforated leachate collection pipe.

2. The minimum slope on all leachate collection pipes at the base of the landfill shall be a constant 0.5%. The department strongly recommends that greater pipe slopes be utilized whenever possible.

3. The minimum diameter of all leachate collection or transfer pipes shall be 6 inches. Schedule 80 PVC pipe or an approved substitute shall be used.

4. Leachate collection trenches for clay liners shall be designed as rectangular trenches. A geotextile shall be used to line the base and sidewalls of all leachate collection trenches and shall be placed directly over the clay liner. The geotextile shall have a minimum weight of 12 oz/yd^2, and may not be overlapped over the top of the trench.

5. The bedding material utilized in backfilling the leachate collection pipe trenches shall have a uniformity coefficient of less than 4, a maximum particle diameter of 1 1/2 inches, a maximum of 5% of the material which passes the number 4 sieve and consist of rounded to subangular gravel. A minimum depth of 4 inches of gravel shall be placed in the trenches prior to installation of the leachate pipes. The backfill shall also be placed so that a minimum of 6 inches of material exists above the top of the pipe and within the trenches. An additional 6 inches of material shall be mounded above the trench. In cases where the particle size of the drainage blanket is significantly less than the collection trench bedding, a properly designed graded soil filter or geotextile shall be utilized to minimize the migration of the drainage blanket material into the collection trenches. Limestone and dolomite may not be used in the leachate collection system unless no other suitable material is reasonably available.

6. The sizing of sand, gravel, geotextiles and pipe openings shall be analyzed for control of piping of soil materials. The gradation of sand and gravel, the apparent opening size of geotextiles and the pipe opening sizes shall be selected to achieve a stable and self−filtering structure under all conditions of leachate flow.

7. All leachate collection lines shall have cleanout access points installed on both ends of each line and may not exceed 1,200 feet from the end of one cleanout to the toe of the opposite slope.

8. Leachate lines, manholes and other engineering structures may not penetrate the liner in the vertical direction. Leachate transfer lines may penetrate the liner in the horizontal direction only. The number of liner penetrations shall be kept to a minimum.

9. Any leachate line that penetrates a clay liner shall have a 3 foot by 3 foot anti−seep collar placed around it. A minimum of 3 feet of compacted clay, as measured from the pipe, shall be placed around the collar in all directions.

10. All leachate lines transporting leachate out of the landfill shall be constructed with valves so the flow of leachate can be controlled. The valves shall be compatible with the leachate and be capable of being operated from the ground surface.

11. All leachate transfer lines located outside of the clay lined area shall be designed to assure groundwater protection through the use of double−cased pipe or by using another approved secondary containment method. All leachate transfer line piping shall be pressure tested prior to use. Unless otherwise approved by the department, the upslope end of the secondary pipe shall be sealed and the downslope end shall be open to allow any collected liquid to flow into the manhole.

12. All leachate transfer lines, manholes, lift stations and other structures which transfer or store leachate outside the limits of waste shall be designed as shallow as practical and located far enough from the limits of filling so that excavations associated with repair of these devices would not infringe on the landfill cover system or sidewall liner. Each of these devices shall be constructed above the seasonal high groundwater table unless it is not technically feasible to do so and the design meets the requirements of subd. 11.

13. Leachate collection tanks and manholes shall be designed with a secondary containment system to prevent the discharge of leachate to ground and surface waters in the event of a leak or spill. Means shall be provided to monitor the tank and manholes within the secondary containment system unless other means for leak detection are approved by the department.

14. All leachate collection tanks shall be designed to contain the volume of leachate which is generated by the landfill over a 4 day period and to withstand the soil and liquid loads that will be encountered during installation and use. The installation of the tanks shall follow the recommendations of the consultant and manufacturer.

15. Measures shall be proposed to prevent accidental discharges at the leachate loadout station from entering groundwater or surface water. Unless an alternate method is approved by the department, the leachate loading station shall be paved with a concrete or asphalt pad and sloped to a catch basin to direct all spills back into the leachate holding tank.

16. All manholes and enclosed structures for leachate and gas control systems shall be designed to allow for proper venting and access control.

17. All control systems such as pumps, valves and meters shall be designed to be operated from the ground surface.

18. All leachate and groundwater collection systems shall be designed to accurately monitor the volume of liquid removed by the system.

19. A minimum one foot thick granular drainage blanket shall be placed on top of the clay−lined base and sidewalls. The granular drainage blanket shall contain no more than 5% material by weight which passes the number 200 sieve, have a uniformity coefficient of less than 4 for gravel soils and less than 6 for sandy soils, and a hydraulic conductivity which is greater than or equal to $1x10^{-2}$ cm/sec at the anticipated field density.

20. All major horizontal clay lined phases above the saturated zone shall be designed with a collection basin lysimeter to monitor the unsaturated zone.

(e) All landfills regulated under this section shall be designed with final cover systems to minimize leachate generation by limiting the amount of percolation through the cap system, reduce landfill maintenance by stabilizing the final surface through design of compatible slopes and establishment of vegetation, account for differential settlement and other stresses on the capping layer, minimize the climatic effects of freeze−thaw and desiccation on the clay capping layer of the final cover system, and provide removal of leachate and venting of gas from those landfills which accept wastes with a high moisture content or which readily biodegrade. Unless it is established to the satisfaction of the department that portions of the final cover system are not needed, all new landfills and expansions of existing landfills regulated under this section shall be designed with a final cover system meeting the following requirements.

1. A minimum 6 inch thick grading layer shall be designed over the final waste elevation to attain the required slope and provide for a stable base for subsequent system components. Daily and intermediate cover may be used for this purpose.

2. A minimum 2 foot thick clay cap shall be designed to provide a low hydraulic conductivity barrier to percolation. Clay used for this layer shall meet the specifications in par. (b) 1. The clay capping layer shall be constructed in accordance with s. NR 504.06 (2) (f).

3. A minimum 2.5 foot thick drainage and rooting zone layer shall be designed above the clay capping layer. This layer shall include a rooting zone to provide additional rooting depth for vegetation and to protect the clay capping layer from freeze−thaw damage and other environmental effects. It shall also include a drainage layer as specified in subd. 4. to allow for the drainage of liquid infiltrating through the cap. Soils available on or near the proposed landfill property may be proposed for the rooting zone layer. This layer may not be densely compacted.

4. A drainage layer shall be designed immediately above the clay capping layer. The drainage layer shall consist of a minimum of one foot of sand with a minimum hydraulic conductivity of $1x10^{-3}$ cm/sec or a geosynthetic drain layer of equivalent or greater transmissivity. A perimeter drain pipe shall be placed at the low end of all final cover sideslopes. The drain pipe shall be surrounded by a minimum of 6 inches of gravel or sand with a minimum hydraulic conductivity of $1x10^{-2}$ cm/sec. A series of outlets at spacings no further than every 200 feet shall be designed around the perimeter. Modeling which supports the proposal of a different spacing may be submitted to the department.

5. A minimum of 6 inches of topsoil shall be designed over the drainage and rooting zone layer to support the proposed vegetation. Fertilizer and lime shall be added in accordance with section 630, 2003 edition of the Wisconsin department of transportation standard specifications for highway and structure construction and the 2004 supplemental specifications in order to establish a thick vegetative growth.

6. The seed type and amount of fertilizer applied shall be proposed depending on the type and quality of topsoil and compatibility with both native vegetation and the final use. Unless otherwise approved by the department in writing, seed mixtures and application rates shall be in accordance with section 630, 2003 edition of the Wisconsin department of transportation standard specifications for highway and structure construction and the 2004 supplemental specifications. Application rates for fertilizer and mulch shall also be specified.

Note: Copies of 2003 edition of the Wisconsin department of transportation standard specifications for highway and structure construction and any annual supplemental specifications are available at http://www.dot.wisconsin.gov/business/engrserv/procedures.htm or can be obtained from the department of natural resources, bureau of waste management, 101 S. Webster Street, P.O. Box 7921, Madison, WI 53707−7921, (608) 266−2111, waste.management@dnr.state.wi.us. Copies are also available for inspection at the offices of the legislative reference bureau and the secretary of state.

7. The proposed final use shall be compatible with protection of the final cover system.

8. The landfill shall be designed with a system which allows gas venting from the entire landfill surface unless the landfill will utilize an active gas recovery system. An analysis shall be performed to determine the spacing needed between gas venting trenches for an effective system. The system shall be designed with a continuous layer below the capping layer which allows surficial venting from the waste final surface. This layer may be part of the grading layer required in subd. 1. if the specifications in this subdivision are met. This layer shall consist of a minimum of one foot of granular soil with a minimum hydraulic conductivity of $1x10^{-3}$ cm/sec, a series of flexible, perforated pipes connected to

a series of outlets. A minimum of one gas monitoring well shall be located on each side of the landfill. The wells shall be constructed in accordance with s. NR 507.11.

(f) All landfills regulated under this section shall be designed with storm water drainage ditches, structures and sedimentation basins designed to control rainfall runoff and limit entrained sediment from reaching surface water bodies. At a minimum, the storm water control system shall comply the following:

1. All landfills shall incorporate the following concepts in the design of both temporary and permanent erosion and sediment control measures:

a. Grading and construction shall be scheduled to minimize soil exposure.

b. Existing vegetation shall be retained whenever feasible.

c. Disturbed areas shall be vegetated and mulched.

d. Runoff shall be diverted away from disturbed areas and active fill areas.

e. Runoff velocities shall be minimized.

f. Drainageways and outlets shall be prepared to handle concentrated or increased runoff.

g. Sediment shall be trapped on site.

h. Runoff control structures shall be inspected and maintained.

2. Storm water drainage ditches, structures and sedimentation basins shall be designed to be constructed during the initial stages of construction.

3. All temporary and permanent storm water drainage ditches, swales, conveyance channels, channel linings, outlet protections, culverts and other storm water control structures shall be designed using a 25 year, time of concentration storm event to determine peak flow rates. The design calculations shall each be performed for the period in the landfill's development where the combination of surface conditions and contributing acreage would result in the greatest runoff volume.

4. Temporary and permanent sediment control measures shall be designed to settle 0.015 mm size particles for all storms up to and including the 25 year, 6–hour storm event. The surface area for sediment basins shall be calculated using the average rainfall intensity over the 25 year, 6–hour storm event for the landfill. Principal spillway, emergency spillway and outlet protection for sediment basins shall be designed to pass a 25 year, time of concentration storm event. Emergency spillways for sedimentation basins shall be designed to pass a 100 year, time of concentration storm event. The design of the dewatering structures for sediment basins shall be selected such that the basin is dewatered in no less than 3 days. An analysis shall be performed to document compliance with this requirement. The design calculations shall be performed for the period in the landfill's development where the combination of surface conditions and contributing acreage would result in the greatest runoff volume.

5. Storm water shall be diverted away from the active fill area of the landfill and any borrow areas to a sedimentation control structure. The design calculations shall be performed for the period in the landfill's development where the combination of surface conditions and contributing acreage would result in the greatest runoff volume.

6. Containment berms placed around active fill areas shall be designed to control and collect the liquid volume resulting from the 25 year, 24–hour storm event. The design shall consider the volume of liquid generated from active fill areas which shall include areas with exposed solid waste or areas with waste covered by daily cover. Storm water in contact with active fill areas shall be handled and treated as leachate in accordance with ch. NR 506.

7. Storm water drainage ditches, structures and sedimentation basins shall discharge along existing drainage patterns capable of accepting the anticipated flow volume. An analysis shall be performed to determine the amount and velocity of runoff prior to landfill development and to document compliance with this requirement.

8. Storm water diversion and construction at a landfill shall be designed to minimize impacts on adjacent property, such as erosion, sedimentation and flooding.

Note: Design of storm water management features shall include consideration of other applicable requirements of the department. Requirements include, but are not limited to, ch. NR 103, and permits required by ch. 30, Stats.

(g) All landfills regulated under this section shall be designed with an inspection pad and storage areas for salvageable material as follows:

1. The inspection pad shall be located outside of the landfill's lined area. It shall consist of a permanent, all weather surface which is not readily permeable. The surface of the pad shall be concrete, asphalt or an alternative material approved by the department.

2. The pad shall be designed to be of sufficient size to allow dumping of waste material directly from waste hauling vehicles and prevent delaying subsequent trucks waiting to dump loads.

3. Storage areas for salvageable material shall be designed adjacent to or in close proximity to the inspection pad. At a minimum, storage areas shall be designated for clean soil, broken concrete and pavement, and clean wood.

4. The department may require the construction of storage pads and storm water control structures for the salvageable material storage areas.

(h) All landfills regulated under this section shall be designed to meet the following requirements:

1. A method of controlling any dust or windblown debris shall be included in the landfill design. The factors which will be considered by the department when evaluating alternative provisions for controlling dust and windblown debris include the remoteness of the landfill, natural screening, windbreaks and waste types.

2. All access roads which are used by over the highway vehicles shall be designed with a maximum grade no greater than 10%. The intersection of the landfill access road with an existing highway shall be designed to provide sufficient sight distance and minimum interference with traffic on the highway.

3. The landfill shall be designed so that final grades in each phase are reached as soon as possible, and the open area used for waste filling is minimized.

4. The final slopes shall be equal to or greater than 5%, but may not exceed 25%.

5. A minimum of 2 leachate head wells shall be proposed for each major horizontal phase of the landfill unless otherwise approved by the department.

6. All landfills shall be designed with properly protected permanent benchmarks for horizontal and vertical control. Elevations shall be tied to USGS datum and horizontal control shall be referenced to the property boundary.

(4) OPERATIONAL REQUIREMENTS. No person may operate or maintain a new or existing landfill under this section except in conformance with the approved plan of operation and the following minimum requirements:

(a) Daily operations shall be in conformance with the following:

1. Daily disposal of solid waste shall be confined to as small an area as practical.

2. Provisions shall be made to confine windblown material within the active disposal area.

3. At the conclusion of each day of operation, all windblown material shall be collected and properly disposed of in the active area in accordance with the provisions of this subsection unless the operator establishes, to the satisfaction of the department, that all windblown material cannot be collected using reasonable efforts because of conditions beyond the control of the operator,

and windblown material which can be collected using a reasonable effort has been collected and properly disposed and nuisance conditions do not exist.

4. Unless otherwise directed by the department, all waste shall be compacted, at a minimum, on a daily basis. The department may require that waste be completely covered at the end of each operating day with a compacted layer of at least 6 inches of soil or other material approved in writing by the department.

5. Unless otherwise approved by the department in writing, any portion of a landfill which has been used for solid waste disposal but may not receive additional solid waste for a period exceeding 6 months shall be covered with one foot of fine grained intermediate cover. A specific soil type may be specified by the department for this one foot layer. The intermediate cover shall be compacted and adequately sloped to allow storm water runoff. The slopes shall be no less than 5% and no greater than 33%. The department may require that intermediate slopes be vegetated depending on the length of time they will remain open.

6. Access to the landfill shall be restricted through the use of fencing, natural barriers or other methods approved in writing by the department.

7. Effective means shall be taken to limit access to the active disposal area to minimize exposure of the public to hazards.

8. Effective means shall be taken to control birds, flies, rodents, deer and other animals.

9. Equipment shall be available on−site to control accidental fires and arrangements shall be made with the local fire protection agency to acquire its services when needed.

10. A facility manager or certified site operator as required in s. NR 524.05 shall be present at the landfill during all hours of operation as defined in s. NR 524.03 (3). A list of names of certified operators and certified facility managers shall be maintained at the landfill in accordance with s. NR 506.17.

11. A gate shall be provided at the entrance to the operation and it shall be kept locked when an operator is not on duty.

12. The gate area shall be policed at the beginning of each day of operation to remove any solid waste which has been placed there during periods when the landfill was closed.

13. A sign acceptable to the department shall be posted at the entrance of any landfill operated for public use which indicates the landfill name, the hours of operation, waste types accepted, penalty for unauthorized use, necessary safety precautions and any other pertinent information.

14. The landfill shall be surrounded with rapidly growing trees, shrubbery, fencing, berms or other appropriate means to screen it from the surrounding area and to provide a wind break.

15. Fugitive dust shall be controlled in accordance with s. NR 415.04 from all areas of the landfill.

16. Provisions shall be made for back−up equipment in the event of operating equipment breakdown.

17. A minimum separation distance of 100 feet shall be maintained between the limits of solid waste filling and adjacent property. The department may require additional separation distance if necessary to provide for vehicle access, drainage, monitoring, gas migration control, separation to adjacent homes or other landfill development factors.

18. All topsoil within the landfill construction limits shall be salvaged and stored within the property boundaries for use in landfill closure. All stockpiled soil material which is not anticipated to be used within 6 months shall be seeded.

19. All access roads to the active area of the operation shall be of all−weather construction and shall be maintained in good condition.

(b) All areas of the landfill property, including areas of temporary disturbance, with the potential for off−site migration of sediment shall be designed, constructed, operated and maintained according to the applicable requirements of s. NR 503.09 (4), and technical standards developed under subch. V of ch. NR 151, which include the following:

1. Storm water shall be diverted away from the working area and areas already filled with solid waste.

2. Storm water from upslope areas shall be diverted around disturbed areas to minimize erosion, entrained sediment and the amount of water contacting the disturbed area.

3. The size and duration of disturbances shall be minimized, to the extent practicable, to minimize off−site sediment migration.

4. While the site is disturbed, temporary measures shall be used to trap sediment and off−site sediment migration. This could include gravel breaks or the equivalent to minimize the transport of sediment off−site.

5. Runoff channels shall be protected to prevent scour and erosion that generates sediment.

Note: The technical standards developed by the Wisconsin department of natural resources, runoff management program are available at http://dnr.wi.gov/topic/stormwater/standards/ or can be obtained from the department of natural resources, bureau of waste management, 101 S. Webster Street, P.O. Box 7921, Madison, WI 53707−7921, (608) 266−2111, waste.management@dnr.state.wi.us. Copies are also available for inspection at the offices of the legislative reference bureau and the secretary of state.

(c) Storm water drainage ditches, structures and sedimentation basins shall be cleaned and maintained so that they properly control storm water and limit entrained sediment in accordance with approved engineering designs. The department may waive this requirement on a case−by−case basis for existing landfills.

(d) All areas of the landfill which do not contain solid waste and are planned for vegetative cover shall be topsoiled, seeded and mulched as soon as practical, but no later than 90 days after completion of construction or by October 15, whichever is earlier and, if construction is completed after September 15, no later than June 15 of the following year. This includes, but is not limited to, the landfill entrance, drainage ditches and surrounding areas. Erosion control measures shall be placed within 30 days after completion of construction. The seed type and amount of fertilizer applied shall be selected according to the type and quality of topsoil, its compatibility with native vegetation, and the final use. Unless otherwise approved by the department in writing, seed mixtures and sowing rates shall be those specified for right−of−ways according to section 630, 2003 edition of the Wisconsin department of transportation standard specifications for highway and structure construction and the 2004 supplemental specifications.

Note: The 2003 edition of the Wisconsin department of transportation standard specifications for highway and structure construction and any annual supplemental specifications are available at http://www.dot.wisconsin.gov/business/engrserv/procedures.htm or can be obtained from the department of natural resources, bureau of waste management, 101 S. Webster Street, P.O. Box 7921, Madison, WI 53707−7921, (608) 266−2111, waste.management@dnr.state.wi.us. Copies are also available for inspection at the offices of the legislative reference bureau and the secretary of state.

(e) Disposal of solid waste shall begin at the edge of each phase. Solid waste shall be pushed out over the granular blanket. Vehicles may not be driven directly on the granular blanket. Disposal operations shall be conducted as follows:

1. Except for portions of the sideslope greater than 10 feet above the base liner, a layer of solid waste at least 4 feet thick or an adequate amount of other frost protection material shall be placed over the granular blanket in all portions of the lined area prior to December 1st of the year following the year the clay liner was constructed. After this date, solid waste may not be placed on any portion of the liner or lower 10 feet of the sideslope not covered with a 4−foot thick layer of solid waste or other adequate frost protection material. Those portions of the liner or lower 10 feet of sideslope not covered with a 4−foot thick layer of solid waste or other frost protection material by this date shall be investigated for effects from freeze−thaw as specified by the department and shall be repaired and recertified during the next construction sea-

son, prior to waste placement. The requirements of this paragraph may be waived by the department.

2. To provide for maximum compaction after the initial 4–foot lift of waste is placed, each single layer of solid waste shall be spread and compacted in 2–foot layers. An alternative plan for compaction of waste may be approved by the department.

(f) Effective means shall be utilized to prevent the migration of explosive gases generated by the waste fill. At no time may the concentration of explosive gases in any landfill structure, excluding the leachate collection system or gas control system components exceed 25% of the lower explosive limit for those gases. At no time shall the concentration of explosive gases in the soils or air within 200 feet of or beyond the landfill property boundary exceed the lower explosive limit for those gases. The department may require that the concentration of explosive gases not exceed the detectable levels for that gas at the landfill property boundary.

(g) Leachate shall be removed from all collection tanks, manholes, lift stations, sumps or other structures used for leachate storage as it is produced, including hours when the landfill is closed, such as overnight and weekends. Leachate shall be managed as follows:

1. All leachate removed from a leachate collection system shall be disposed of at a wastewater treatment facility approved by the department and capable of accepting the leachate in accordance with the requirements of its WPDES permit. The landfill owner or operator shall immediately notify the department of any change in the availability of the designated wastewater treatment facility to accept or dispose of the leachate removed from the landfill. Waste may not be accepted at the landfill unless leachate is being managed in accordance with the landfill's approved plan of operation and the requirements of this section.

2. Any liquid which comes in contact with waste or accumulates in a portion of the landfill where active waste disposal operations are occurring shall be handled as leachate and properly treated as specified in subd. 1. unless otherwise approved by the department in writing.

3. All leachate collection lines shall be cleaned with a water jet cleanout device with a maximum pressure of 10,000 pounds per square inch immediately after construction, and annually thereafter.

(h) Documentation for soil borrow sources shall comply with the requirements of s. NR 504.075.

(i) For all landfills that do not have a department–approved plan for phased development and closure, by October 15th of each year, all areas that are at final grades shall be capped, topsoiled and seeded unless otherwise approved by the department.

(j) Any person who maintains or operates a landfill, or who permits use of property for that purpose shall, when the fill area or portion thereof reaches final grade, or when the department determines that closure is required, cease to accept solid waste and close the landfill or portion thereof in accordance with the plan approval issued by the department and the following minimum practices unless otherwise approved by the department in writing:

1. At least 120 days prior to closing the landfill, the owner or operator shall notify the department in writing of the intent to close the landfill and the expected date of closure. Prior to department notification, the owner or operator shall notify all users of the landfill of the intent to close the landfill so that alternative disposal options can be arranged.

2. Signs shall be posted at all points of access to the landfill at least 30 days prior to closure indicating the date of closure and alternative disposal landfills. Landfills which are operated by and serve only a single waste generator and are not open to the public are exempt from this provision.

3. Notice of the upcoming closure shall be published in a local newspaper at least 30 days prior to closure and a copy of the notice shall be provided to the department within 10 days after the date of publication. Landfills which are operated by and serve only a single waste generator and are not open to the public are exempt from this provision.

4. Within 10 days after ceasing to accept solid waste, the owner or operator shall restrict access by the use of gates, fencing or other appropriate means to insure against further use of the landfill. If the final use allows access, access shall be restricted until closure has been completed and approved by the department.

5. Closure activities shall begin within 30 days after ceasing to accept solid waste.

6. Within 180 days after ceasing to accept solid waste or, if solid waste disposal operations terminate after September 15, by June 15 of the following year, the owner or operator shall complete seeding, fertilizing and mulching of the finished surface. The seed type and amount of fertilizer applied shall be selected depending on the type and quality of topsoil and compatibility with both native vegetation and the final use. Unless otherwise approved by the department in writing, seed mixtures and sowing rates shall be those specified for right–of–ways according to section 630, 2003 edition of the Wisconsin department of transportation standard specifications for highway and structure construction and the 2004 supplemental specifications.

Note: The 2003 edition of the Wisconsin department of transportation standard specifications for highway and structure construction and any annual supplemental specifications are available at http://www.dot.wisconsin.gov/business/engrserv/procedures.htm or can be obtained from the department of natural resources, bureau of waste management, 101 S. Webster Street, P.O. Box 7921, Madison, WI 53707–7921, (608) 266–2111, waste.management@dnr.state.wi.us. Copies are also available for inspection at the offices of the legislative reference bureau and the secretary of state.

(k) The owner or operator of the landfill shall maintain the final cover. Repairs to the final cover shall be made as soon as possible after damage to the cap occurs. The following activities are prohibited at solid waste disposal facilities which are no longer in operation unless specifically approved by the department in writing:

1. Use of the waste disposal area for agricultural purposes.

2. Establishment or construction of any buildings over the waste disposal area.

3. Excavation of the final cover or any waste materials.

(L) An owner or operator of a landfill may not accept waste containing free liquids.

(m) Owners and operators of landfills shall implement a program at the landfill for detecting and preventing the disposal of waste not specifically approved for acceptance. The program shall include the following:

1. Inspections shall be made of every incoming load of solid waste unless the owner or operator receives approval in writing from the department to take other steps to insure that incoming loads do not contain wastes not specifically approved for acceptance.

2. Landfill personnel shall be trained in accordance with ch. NR 524 to recognize waste not approved for acceptance.

3. Each load of waste shall be dumped on a permanent inspection pad which is located outside of the waste fill area. Material which is salvageable may be moved to approved storage areas located adjacent to the inspection pad. The remaining material shall be inspected by the certified facility manager or site operator and all material which is approved for disposal at the landfill shall be moved to the active disposal area on the same day on which it is received.

4. Waste which is not approved for acceptance at the landfill shall be rejected. The waste shall be reloaded in the vehicle which delivered the waste or placed in a waste container such as a roll off box or dumpster. This material shall be handled in accordance with all applicable regulations including but not limited to those relating to the transportation, storage, treatment and disposal of the rejected material.

5. If waste not approved for disposal is discovered and is suspected of being hazardous or containing PCB's at a concentration of 50 ppm or greater, the owner or operator of the landfill shall notify the department's district or area solid waste or hazardous waste management specialist in writing within 2 days.

(n) The owner or operator of a landfill shall maintain a written operating record at the landfill during the operating life and 40 year long term care period of the landfill. The department may approve an alternate location for maintaining the record. The record shall contain information on all landfill locational criteria restrictions, inspection records, training procedures, notification procedures, plan approvals, closure and post closure plans and financial responsibility, and all demonstrations, certifications, findings, monitoring, testing, and analytical data required under chs. NR 500 to 538. Tonnage information shall be submitted to the department in accordance with s. NR 520.14. Load inspection records shall be maintained for a minimum of 3 years. The operating record shall be made available to the department upon request.

(o) The department may deny, suspend or revoke the approval of a landfill for failure to pay fees required under ch. 289, Stats., or for grievous and continuous failure to comply with the approved plan of operation or to comply with any requirement of chs. NR 500 to 538. Any failure to comply with any requirement or condition on 5 or more days within any 30 successive calendar days and which consists of action or inaction which may cause pollution as defined in s. 281.01 (10), Stats., or which may otherwise create nuisance conditions, is a grievous and continuous failure to comply with the requirement or condition.

(5) CONSTRUCTION REQUIREMENTS. A report documenting all aspects of construction shall be prepared for the initial construction of the landfill; the construction of all subsequent phases or portions thereof; the construction of any storm water, groundwater, leachate or gas control structures; the implementation of remedial actions; and the closure of each major disposal area. Approval of a report which documents the construction of any portion of the base of a landfill shall be obtained from the department prior to initiating disposal operations in the newly established area, unless the department does not respond within 60 days after receiving a complete submittal, along with the appropriate review and construction inspection fees specified in ch. NR 520. Construction and closure of all landfills shall comply with the following:

(a) A registered professional engineer or qualified technician who is directly supervised by a professional engineer shall be continuously on−site throughout the construction and performing quality assurance duties relating to the following: placement and testing of the clay component of the liner and cover systems, manhole and tank installation, and burying piping prior to covering. The department may require that a registered professional engineer be present during other critical construction activities.

(b) Substitution of personnel under par. (a) shall only occur due to substandard performance, vacations or uncontrollable circumstances such as injury, illness, employee termination or resignation. Where justified by the size of the construction project, multiple registered professional engineers or qualified technicians may be deployed concurrently.

(c) A certification section shall be included as the first section of any construction documentation report prepared for the construction or closure of a portion of a landfill and shall include the following:

1. The signed certification statement contained in s. NR 500.05 (4) as well as the seal of all registered professional engineers who either performed quality assurance work on the project or supervised qualified technicians who did so.

2. A table clearly identifying each registered professional engineer and qualified technician who performed quality assurance during the construction; which aspects of construction each person provided on site quality assurance for; the number of days each was present at the landfill; and the total hours each spent at the site. The table shall also clearly identify the registered professional engineer supervising each qualified technician.

3. A second table identifying who prepared each portion of the construction documentation report including both narrative and plan sheets.

4. Separate signed statements by the professional engineers identified in subd. 2. certifying to the best of their knowledge, information and belief that the construction, of each item identified as follows, was accomplished in conformance with the approved plans and all applicable solid waste administrative code requirements. All observed deviations shall be explicitly noted and discussed including any changes in materials. This certification may not be construed to be either an implied or express guarantee or warranty regarding the performance of the construction documented in this report. No further qualifications to the certification statement may be made and each statement shall also clearly identify the personal observations, knowledge or other information on which the certification is based. The certification shall include the following items:

a. The clay component of a liner or cap. The statement shall specifically address the quality of clay material used and the methods utilized in its placement; connections with previously placed clay layers; preparation of leachate collection trenches, sumps, gas header trenches and any pipe penetrations through the clay liner; and placement of soil materials over the clay liner or clay capping layer.

b. Elements of the construction relating to leachate or storm water routing, collection, storage and transportation as well as gas extraction systems. The statement shall include but not be limited to: construction of leachate collection and transfer lines, side slope risers for leachate pumping, all liner penetrations, collection tanks, manholes, lift stations, lysimeters, gas extraction system construction and leachate headwells.

(d) The department may, under s. 289.91, Stats., inspect construction projects for the purpose of determining compliance with ch. 289, Stats., and chs. NR 500 to 538. The department's district and central office staff shall be notified, by telefax, telephone or letter, at least one week prior to beginning each of the construction events specified by the department. A fee shall be paid to the department for each required inspection in accordance with s. NR 520.04 (5). The inspection fees shall be paid at the time the construction documentation review fee is submitted to the department.

(e) Reports documenting the construction of all new landfill areas shall contain a set of 24 inch by 36 inch engineering plan sheets, or alternative size if approved by the department in writing, prepared in accordance with s. NR 500.05 and containing:

1. A plan view documenting the constructed grades for the sub−base, sidewalls, leachate collection trench undercuts and all sub−base appurtenances such as lysimeters and drain pipes, prior to liner placement. Documentation of the grades shall consist of spot elevations taken on a maximum 50−foot grid pattern, with leachate collection trench undercut elevations at least every 25 linear feet. If a total station or laser equipment is used to set elevations, the elevations may be taken every 50 linear feet. The approved sub−base grades shall also be shown for the same area in a clear and legible manner.

2. Plan view drawings showing the locations of all the various soil testing performed. Each test location shall be clearly labeled with appropriate identification codes. The plan view drawings shall clearly show any areas where removal and recompaction of clay was necessary in order to attain the minimum required specifications. Multiple plan views may be shown on a single plan sheet if legibility is not compromised.

3. A plan sheet documenting the constructed elevations for the liner system. This plan sheet shall contain spot elevations of the base, sidewalls and leachate collection trenches. Documenta-

tion of grades shall include spot elevations taken on a maximum 50−foot grid pattern, with leachate collection trench elevations taken every 25 linear feet. If a total station or laser equipment is used to set elevations, the elevations may be taken every 50 linear feet. The approved base grades shall be shown for the same area in a clear and legible manner.

4. A plan view drawing showing the constructed base grades as well as the locations and elevations of all leachate collection and transfer piping, manholes, lift stations, culverts, berms and the location of all unsaturated zone, groundwater, gas, leachate monitoring and cleanout devices, surface drainage features and other pertinent structures. This information may be shown on the plan sheet required in subd. 3. if legibility is not compromised.

5. A minimum of 4 cross−sections through the constructed area parallel and perpendicular to the base line of the landfill, 2 of which shall be in each direction. Additional cross−sections shall be prepared as necessary to add clarification. Each of the cross−sections shall show actual and design sub−base and base grade contours, the top of the granular drainage blanket, leachate pipe elevations and the actual base and sub−base contours of adjacent filled areas. The design sub−base and base grade contours do not need to be shown if there is not an observable variation from the design grades.

6. Detail drawings, both plan view and cross−sections, of all manholes, lift stations, storage tanks, sumps and sideslope risers or locations where leachate transfer piping exits the lined area and the secondary containment of these features as well as leak detection monitoring points and other pertinent construction details. At a minimum, these drawings shall show base and top elevations, the invert elevations of all associated piping, pump details, float level elevations and the extent of recompacted clay placed around and below the structures. If float elevations are not available at the time of submittal of the construction documentation report, they shall be provided to the department when they are available.

7. Cross section details shall be included to illustrate all important construction features of the liner, lysimeters, leachate collection trenches and sumps, and sediment control and storm water management systems.

8. Detail drawings shall be included for leachate header lines or drain lines located outside the limits of waste in critical areas of below−ground piping such as where several pipes cross or meet, to illustrate sufficient pipe location and invert information.

9. Additional plan sheets, patterned after those specified in subds. 1. to 8., shall be included for those landfills designed with multiple liners, groundwater gradient control systems or other nonstandard design features.

(f) The report shall contain a detailed narrative describing the construction of the area in a logical fashion. Particular emphasis shall be given to any deviations from the approved plan of operation and to the explicit construction methods used for all locations where leachate transfer piping exits the lined waste fill area. This report shall include the following information at a minimum:

1. An analysis and discussion of all soil testing work performed. All density and moisture content testing results shall clearly indicate which Proctor curve is applicable to the soil being compacted. Any changes in the referenced Proctor curve shall be identified as to when they occurred and why the change was made. All raw data from the soil testing performed shall be included in an appendix to the construction documentation report unless other arrangements were previously approved by the department. The raw data shall be summarized using a tabulated format.

2. A table containing thicknesses of each layer in the liner system on a 100−foot grid pattern.

3. Documentation of the initial leachate collection pipe cleanout and pressure testing of force mains and leachate storage tanks. All provisions used to seal pipe connections, manhole sections and leachate storage tanks including protective coatings and corrosion protection shall be described. The manufacturer's recommendations for the installation of all equipment shall be included. Any deviations from the recommendations shall be discussed.

4. A series of properly labeled 35 millimeter color photographs documenting all major aspects of landfill construction. This shall include close−up photographs of the construction process including clay liner placement, leachate pipe placement including all places where transfer piping exits the lined waste fill area or sideslope riser installation, drainage blanket placement and the installation of all manholes, sumps, sideslope risers, lift stations and storage tanks. Panoramic views shall be included showing the prepared sub−base and the completed liner before and after granular blanket placement.

(g) All construction documentation reports for the closure of landfill areas shall contain a set of 24 inch by 36 inch engineering plan sheets, unless an alternative size is approved by the department in writing, prepared in accordance with s. NR 500.05 and shall include:

1. A plan sheet documenting the final waste grades, including daily or intermediate cover. Documentation of grades shall include spot elevations taken on a maximum 100−foot grid after grading has been performed to establish uniform slopes. For areas less than 4 acres, a 50−foot grid shall be used.

2. A plan view drawing for each one−foot thickness of clay placed showing the locations of the various soil testing performed at each test location. Multiple plan views may be presented on a single engineering plan sheet if legibility is not compromised.

3. A plan sheet documenting the final landfill surface following topsoil placement. Documentation of grades shall include spot elevations taken on a maximum 100−foot grid. The approved final grades shall also be shown in a clear and legible manner. This plan sheet shall also show the locations of all manholes, lift stations, risers, head wells, gas venting systems, surface settlement monitoring points, storm water management and sediment control structures, environmental monitoring points and other appurtenances. For areas less than 4 acres, a 50−foot grid shall be used.

4. A minimum of 4 cross−sections through the closed area which are constructed parallel and perpendicular to the base line of the landfill, 2 of which shall be in each direction. Each of the cross−sections shall show all surficial and subsurface features encountered including gas vents, leachate lines, and other landfill structures and shall be tied into the grades of adjacent previously filled areas. At a minimum, each cross section shall show sub−base grades, base grades, final waste grades and final topsoil grades.

5. Detail drawings, plan view and cross−section of the gas venting system, manholes, lift stations and collection tanks.

6. Cross section details shall be included to illustrate all important construction features of the final cover, including sediment control and storm water management structures.

(h) The report shall contain a detailed narrative describing the closure of the area in a logical fashion. Particular emphasis shall be placed on any deviations from the approved plans. This report shall also include the following information at a minimum:

1. An analysis and discussion of all soil testing work performed. All density and moisture content testing results shall clearly indicate which Proctor curve or line of optimums is applicable to the soil being compacted. Any changes in the referenced Proctor curve or line of optimums shall be identified as to when they occurred and why the change was made. All raw data from the soil testing performed shall be included in an appendix to the closure documentation report unless previously approved by the department. The raw data shall be summarized using a tabulated format. Also included shall be the make, model, weight and foot length of each piece of equipment used to compact clay.

2. When the auger method is used to determine soil layer thickness, a discussion of how the auger boreholes were backfilled and the materials used.

3. A table containing thicknesses of each layer in the cover system on a 100–foot grid pattern. When determining soil thickness by using surveying information, the table shall contain elevations before and after soil layer placement on the 100–foot grid. For areas less than 4 acres, a 50–foot grid shall be used. As an alternative to the survey method, soil thickness shall be controlled using settlement plates and grade stakes, and clay thickness shall be established on a 100–foot grid using auger borings. Boreholes shall be backfilled with a soil–bentonite mix such that the in–place permeability of the backfilled material is equal to or less than the surrounding clay cap.

4. The rates and types of fertilizer, seed and mulch applied. Liming requirements shall also be included along with the actual rate of application.

5. A series of properly labeled 35 millimeter color photographs which document all major aspects of landfill closure. This shall include panoramic views of the closed area as well as close–up photos of the construction process and completed engineering structures such as gas vents, cleanout ports, manholes and other pertinent structures.

(i) Testing shall be performed during the construction and closure of all landfill areas. At a minimum, this testing shall include:

1. For all recompacted clay soil construction the following tests shall be performed:

a. Dry density and as–placed moisture content shall be determined on an approximate 100–foot grid pattern for each one–foot thickness of clay placed. The grid pattern shall be offset on each subsequent layer of tests. A minimum of 2 dry density and moisture content tests for each one–foot thickness of clay placed shall be performed to fully define the degree of soil compaction obtained in confined areas where equipment movement is hindered or hand compaction is necessary.

b. One moisture–density curve shall be developed for every 5,000 cubic yards or less of clay placed and for each major soil type utilized. At least 5 points shall be established on each curve. If a line of optimums analysis is performed, at least 2 curves shall be included for each analysis. A representative sample for every 5,000 cubic yards or less of clay placed shall be analyzed for grain size distribution through the .002 millimeter particle size and for Atterberg limits. If apparent changes in soil quality are observed during clay placement, a one–point Proctor analysis shall be utilized to verify the applicability of previously analyzed moisture–density curves.

c. A minimum of one undisturbed sample for each acre or less for every one–foot thickness of clay placement shall be retrieved and analyzed for Atterberg limits, grain size distribution through the .002 millimeter particle size, moisture content and dry density. Laboratory hydraulic conductivity tests using effective stresses less than or equal to 5 psi and hydraulic gradients less than or equal to 30 shall be performed on every third undisturbed sample. The department may require that a portion of the hydraulic conductivity testing for liner documentation be performed using leachate.

2. During placement of the leachate drainage blanket over the liner or the granular drain layer in the final cover, the following testing shall be performed:

a. If sand is used, one grain size distribution to the #200 sieve for each 1,000 cubic yards of material placed. For lesser volumes, a minimum of 4 samples shall be tested. The department may allow a reduction in the testing frequency if a uniform gravel material is used. If washed stone or gravel is used, one grain size distribution to the #200 sieve for each 5,000 cubic yards of material placed. For lesser volumes, a minimum of 2 samples shall be tested.

b. One remolded laboratory hydraulic conductivity test for each 2,500 cubic yards of material placed. The samples shall be tested at the anticipated field density. The moisture content and density of each sample shall be recorded. The department may require that a portion of the hydraulic conductivity tests be performed using leachate. For lesser volumes, a minimum of 2 samples shall be tested. The department may allow a reduction in testing frequency if a uniform gravel material is used. No hydraulic conductivity tests are required if washed stone or gravel is used.

c. The department may require that chemical durability testing of the material when exposed to leachate be performed.

3. During placement of all leachate or groundwater collection pipe bedding material, the following tests shall be performed:

a. One grain size distribution to the #200 sieve for each 1,000 linear feet of trench. For construction projects with combined trench lengths of less than 3,000 feet, a minimum of 3 grain size analyses shall be conducted. Bedding for solid wall piping associated with transfer of leachate shall be tested at the same frequency but only to the #4 sieve.

b. One grain size distribution to the #200 sieve for each 500 cubic yards of drainage material placed in collection sumps.

c. Chemical durability testing of the material when exposed to leachate and laboratory hydraulic conductivity testing be performed if required by the department.

4. During construction of the final cover system, the following tests shall be performed:

a. One grain size distribution to the #200 sieve for each 1000 cubic yards of gravel used for pipe bedding and drain outlets for the drain layer and toe drain.

b. Testing of samples of geotextiles, geocomposite drains or other geosynthetic materials used in construction of the final cover system if required by the department.

(6) FINANCIAL RESPONSIBILITY FOR CLOSURE AND LONG–TERM CARE. The owner of a landfill approved in accordance with this section shall establish proof of financial responsibility for closure and long–term care of the landfill using methods listed in s. NR 520.06.

(a) The owner of a landfill approved in accordance with this section shall submit, prior to beginning disposal operations and annually thereafter for the period of active landfill life, proof of financial responsibility to ensure compliance with the closure requirements of the approved report.

(b) The owner of a landfill approved in accordance with this section shall provide proof of financial responsibility for the long–term care of the landfill for 40 years after landfill closure. An owner responsible for long–term care shall submit, prior to beginning disposal operations and annually thereafter for the period of active landfill life, proof of financial responsibility to ensure compliance with the long–term care requirements of the approved report.

(c) Any person acquiring rights of ownership, possession or operation of a landfill approved in accordance with this section shall be subject to all requirements of the plan of operation for the landfill and shall provide any required proof of financial responsibility to the department in accordance with ch. NR 520. The previous owner shall maintain proof of financial responsibility until the person acquiring ownership, possession or operation of the landfill obtains department approval of proof of financial responsibility.

(7) ENVIRONMENTAL MONITORING. The owner of a landfill regulated under this section shall establish an environmental monitoring program which, at a minimum, includes the requirements of this subsection. The department may require installation of additional monitoring devices, additions to the groundwater and leachate sampling and analysis programs, gas monitoring and provisions to protect against the detrimental effects of leachate and gas migration.

(a) Baseline water quality shall be established at all monitoring wells for all the parameters listed in Table 3.

(b) A minimum of 4 samples, with at least 30 days between sampling rounds, shall be collected and analyzed for all parameters in Table 3 except VOCs and the results shall be submitted with the proposal for constructing the landfill. Four additional samples, with at least 30 days between sampling rounds, shall be collected and analyzed for any parameter listed in Table 3 which attained or exceeded the preventive action limit established in Table 1 of ch. NR 140 during 2 or more of the first 4 rounds or attained or exceeded the enforcement standard established in Table 1 of ch. NR 140 during one or more of the first 4 rounds.

(bg) Baseline groundwater quality for VOCs shall be established for all VOCs listed in ch. NR 507 Appendix III, at all monitoring wells outside the proposed limits of filling.

(br) Samples shall be collected for VOC analysis from each well at the same time as the first and second sampling rounds are collected to establish baseline for the other Table 3 parameters. If any well has VOC parameters in concentrations above the limit of detection in either of the first 2 sampling rounds, that well shall be sampled for VOCs 2 additional times for a total of 4 sampling rounds. The results shall be submitted with the proposal for constructing the landfill and in accordance with s. NR 507.26 (3).

(c) If additional samples are required under par. (b) or (br) the results of the 4 additional samples shall be submitted in the construction documentation report for the landfill.

(d) Collection, handling and analysis of samples shall be performed in accordance with ss. NR 507.16 and 507.17.

(e) A detection groundwater monitoring program shall be established at each monitoring well beginning with the first sampling period following acceptance of waste. Each well shall be sampled semi–annually for the parameters listed in column 1 of Table 3 unless otherwise approved in writing by the department.

Table 3
Groundwater Sampling for Intermediate Size Construction & Demolition Waste Landfills

Parameters for Detection and Baseline Groundwater Sampling	Parameters for Baseline Groundwater Sampling Only
Field Conductivity	Arsenic
Field pH	Barium
Alkalinity	Cadmium
Chloride	Chromium
COD	Cyanide
Hardness	Lead
Sulfate	Manganese
Groundwater elevation	Mercury
	Selenium
	Zinc
	VOCs

(f) A leachate monitoring program shall be established beginning with the first sampling period following acceptance of waste in accordance with Table 4 or as approved by the department in writing.

(g) A minimum of one leachate point shall be sampled for the parameters in Table 4 according to the frequency indicated in Table 4 unless otherwise approved by the department. Leachate volume pumped shall be recorded monthly. The parameters listed in column 2 in Table 4 shall be sampled semi–annually for 2 years beginning with the first sampling period following acceptance of waste. The parameters listed in column 3 in Table 4 shall be sampled annually following the first 2 years of sampling.

Table 4
Leachate Sampling for Intermediate Size Construction & Demolition Waste Landfills

Monthly Leachate Sampling	Semi–Annual Leachate Sampling for 2 years	Annual Leachate Sampling following first 2 years
Leachate Volume Pumped	Field Conductivity	Field Conductivity
	Field pH	Field pH
	Alkalinity	Alkalinity
	Ammonia Nitrogen	Ammonia Nitrogen
	BOD_{5-day}	BOD_{5-day}
	Cadmium	Cadmium
	Chloride	Chloride
	COD	COD
	Hardness	Hardness
	Iron	Iron
	Lead	Lead
	Manganese	Manganese
	Mercury	Mercury
	Sodium	Sodium
	Sulfate	Sulfate
	Total kjeldahl nitrogen	Total kjeldahl nitrogen
	Total suspended solids	Total suspended solids
	VOCs	VOCs

(8) EXPANSIONS. (a) Any person who wishes to expand an existing intermediate size construction and demolition waste landfill shall comply with all provisions of this section. The department shall interpret expansions to include the establishment of any new landfill within 1/4 mile of an existing landfill. In no case may the combined design capacity of the landfill and all subsequent expansions exceed 250,000 cubic yards. The department may deny any request for an expansion if, in the department's opinion, the disposal of additional waste may result in a detrimental effect on surface or groundwater or cause or exacerbate an attainment or exceedance of any standard in ch. NR 140. The local geology, hydrogeology and topography shall be considered in this decision.

(b) Any person who wishes to expand a small size construction and demolition waste landfill which was in existence prior to July 1, 1996, into an intermediate size construction and demolition waste landfill shall comply with all provisions of this section. In no case may the combined design capacity of the existing landfill and the subsequent expansion exceed 250,000 cubic yards. If the existing small size construction and demolition waste landfill is not designed with a clay liner, a separation distance of at least 100 feet shall be maintained between the existing landfill and the proposed expansion. A small size construction and demolition landfill which was not in existence before July 1, 1996, may not be expanded into an intermediate size construction and demolition waste landfill.

(9) INSPECTION FEES. (a) The department may specify in any approval that critical construction steps of a landfill be inspected by the department. The owner or operator shall pay a construction

inspection fee of $500.00 per inspection to the department at the time of submittal of a construction documentation report or as specified in the plan approval. A maximum of 10 inspections per major phase of construction may be required.

(b) The owner or operator of an intermediate size construction and demolition waste landfill shall pay an operation inspection fee to the department in accordance with ch. NR 520 Table 3 prior to beginning initial operation and annually on October 1st of each year.

History: Cr. Register, June, 1996, No. 486, eff. 7−1−96; am. (3) (d) 19. and (7) (g) Table 4, Register, August, 1997, No. 500, eff. 9−1−97; am. (4) (n), (o) and (5) (d), Register, December, 1997, No. 504, eff. 1−1−98; correction in (5) (d) made under s. 13.93 (2m) (b) 7., Stats., Register March 2003 No. 567; CR 05−020: am. (2) (c) (intro.), (d) 4. b., (3) (e) 5. and 6., (4) (b) (intro.),(d), (h), (j) 6., (7) (b), (c) and (e), cr. (7) (bg) and (br) Register January 2006 No. 601, eff. 2−1−06; correction in (4) (a) 10. made under s. 13.93 (2m) (b) 7., Stats., Register January 2006 No. 601.

APPENDIX B
WDNR PUBLICATION No. PUB-FH-061-2004

THE STATE OF WISCONSIN APPROVAL PROCESS

FOR DREDGING OF COMMERCIAL PORTS

GUIDANCE FOR APPLICANTS AND WDNR STAFF

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
Scott Hassett, Secretary

Wisconsin Department of Natural Resources Box 7921 Madison, WI 53707-7921

Publication No. PUB - FH - 061 - 2004
February, 2004

WISCONSIN
DEPT. OF NATURAL RESOURCES

PRINTED
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TABLE OF CONTENTS

Acknowledgments:

The collaborative efforts of the Wisconsin Commercial Ports Association (WCPA) are greatly appreciated. Thanks also for the constructive comments from reviewers within the WDNR and the WCPA.

The following WDNR workgroup members were the principal authors of this document.

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Jim Doyle, Governor
Scott Hassett, Secretary

February 12, 2004

Mr. Dean R. Haen, President
Wisconsin Commercial Ports Association
2561 S. Broadway
Green Bay, WI 54304

Dear Mr. Haen:

I am pleased to transmit the guidance document entitled " The State of Wisconsin Approval Process for Dredging of Commercial Ports" to the Wisconsin Commercial Ports Association (WCPA). This document is the result of an effort by the WCPA and the Wisconsin Department of Natural Resources (WDNR) to improve the process of obtaining approval to complete navigational dredging needed for our commercial ports. As you know, this process began nearly two years ago when your organization contacted us and asked us to work with you and other interested parties on the dredging, disposal and beneficial reuse aspects of navigational dredging projects in Wisconsin. We appreciate the time and effort that your organization put forth.

This step by step guide will improve the process by which commercial ports can apply for approval for dredging projects. In addition, the appointment of a project manager for each commercial port dredging project and the appointment of a regional dredging project coordinator and in each of our Regions with commercial ports will further facilitate the review and approval process.

Enclosed with this letter are 15 copies of this guide for distribution to members of your organization. I am also transmitting this document to staff within the WDNR that are involved in the approval process for navigational dredging. We will have this document available on the WDNR Website.

Thank you for working so closely with us on this effort. We would appreciate continuing dialogue and any feedback as this guidance is implemented. Please contact, Greg Hill, our statewide dredging coordinator, at 608-267-9352 with any questions you may have regarding this transmittal or other dredging issues.

Sincerely,

Scott Hassett, Secretary

THE STATE OF WISCONSIN APPROVAL PROCESS FOR DREDGING OF COMMERCIAL PORTS

GUIDANCE FOR APPLICANTS AND WDNR STAFF

JANUARY, 2004

Introduction and Purpose

Navigational dredging of sediment at Wisconsin's 13 major commercial ports is a necessary activity in order to maintain the ability of these facilities to provide a corridor to handle the nearly 40 billion dollars of liquid and dry freight that are essential to the state's economy. Each year in Wisconsin there's a need to remove approximately 1 million cubic yards of sediment from our navigational channels. Dredging of this sediment and the management of the material removed requires a major work effort for Wisconsin's commercial ports.

State law requires the Wisconsin Department of Natural Resources (WDNR) to evaluate the environmental impacts of the dredging of the sediment and grant the necessary permits and approvals before dredging can take place. It is in the best environmental and economic interests of the state to maintain a consistent and timely review process of these dredging projects.

This guidance document is the culmination of nearly two years of workgroup meetings between the Wisconsin Commercial Ports Association and the WDNR to improve the process of obtaining permits and approvals for navigational dredging.

Applicability

This document is intended to cover navigational dredging for shipping cargo and freight in Wisconsin's commercial ports. It is intended to include dredging in the main navigational channel as well as dredging from the main navigational channel to a particular commercial shipping dock within the commercial port. Although some portions of the guidance (e.g. statewide, regional and project coordinators) are not applicable to other dredging projects, the guidance may prove useful for other projects such as marinas and recreational boating that require the removal of sediment from Wisconsin's waters. This guidance only describes WDNR state approvals and does not cover any federal or local approvals that may be required for a particular project. This guidance is not directly applicable to U.S. Army Corps of Engineers dredging of commercial ports on the Mississippi River because s. 30.202, Stats., authorizes a separate process under a Memorandum of Understanding (MOU) for disposal of

materials dredged by the Corps of Engineers from the Mississippi, St. Croix and Black rivers. Although this document does not apply directly to dredging projects authorized under s. 30.202, Stats., parts of this guidance may be cited in administration and future revision of the MOU.

Background

In November 2001 the Wisconsin Commercial Ports Association (WCPA) and former WDNR Secretary Darrell Bazzell met to discuss concerns of the WCPA regarding WDNR's review of applications regarding sediment from dredging of commercial ports. Based upon the discussions at that meeting, WDNR agreed to establish a liaison to interface with the WCPA, to identify a person in each WDNR Region, with a commercial port to serve as the initial point of contact for all dredging projects in that Region. In addition, former Secretary Bazzell agreed to convene a group of Department staff to develop guidance in a workgroup setting with WPCA representatives.

The discussions between WDNR and WCPA representatives resulted in identification of key elements for improving the process of obtaining approval by the WDNR to dredge in Wisconsin's commercial ports.

Key Elements for an Improved Process

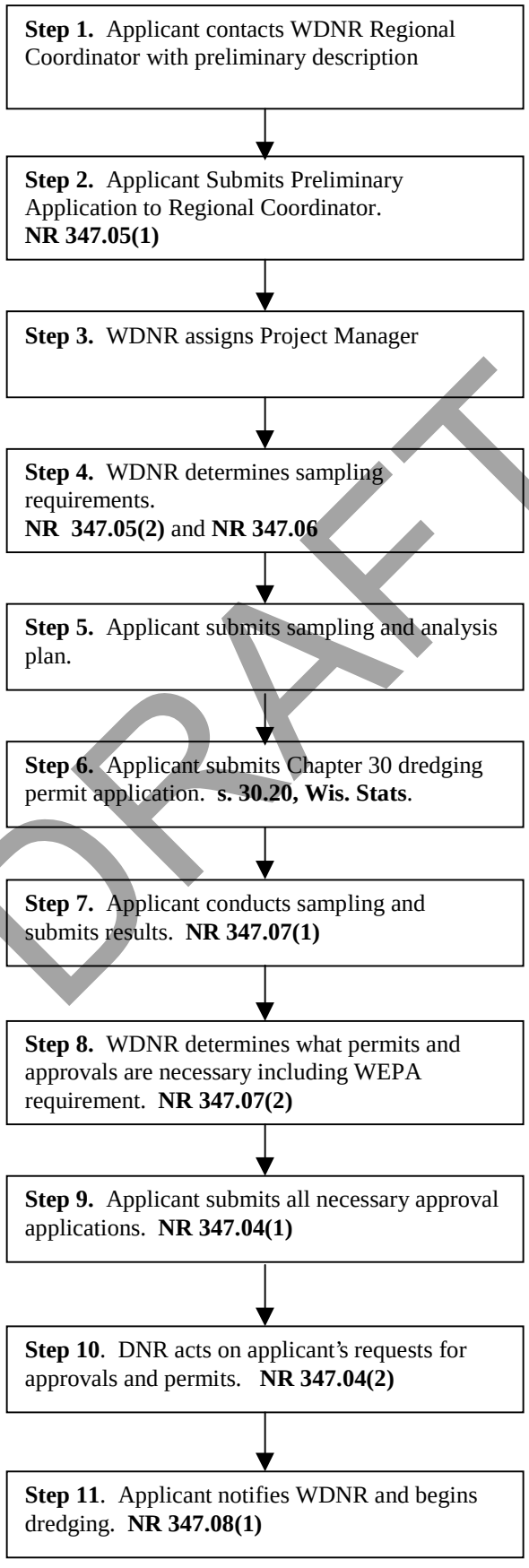
This document describes the step by step process to be used by WDNR staff and dredging project applicants. This step by step process emphasizes certain key elements identified in those discussions between the WDNR, WCPA, and other parties outlined above. These elements include:

1. Early contact of WDNR by applicants, timely and complete submittals of information and applications to WDNR and subsequent timely reviews of dredging requests by WDNR.
2. Effective communication by all parties throughout the process from initial project contact by the applicant to the actual completion of the dredging and disposal or beneficial reuse efforts.
3. A clear understanding of the roles and responsibilities of each of the parties throughout the project.
4. The appointment of a WDNR project manager for each dredging project to ensure coordination of project review across all programs within the WDNR.
5. Documentation of the process for submittal, review, and approval to assure consistency in the review of each project.

Each of these elements is explained in more detail in the step by step process described in the remainder of this guidance.

Flow Chart

The State of Wisconsin Approval Process for Dredging of Commercial Ports



Step - by - Step Description of the Process

The 11-Step State of Wisconsin Approval Process for Dredging of Commercial Ports

Step 1 Commercial Port Applicant Makes Informal Contact With WDNR Regional Coordinator. This step is strongly encouraged to promote early communication between the applicant and the WDNR. WDNR has assigned an overall coordinator for commercial port dredging projects in each WDNR region that has commercial ports. The regional coordinator has overall cross program coordination responsibility for the commercial port dredging program in that region. See Appendix 2 for a description of the responsibilities of the regional coordinator. This step is intended to be a very informal contact (which may be by telephone) to let the WDNR regional coordinator know that a dredging project will be proposed and that a preliminary application will be forthcoming (Step 2). This contact allows the applicant and the regional coordinator to discuss project timing, proposed disposal or beneficial reuse methods, informational requirements for the preliminary application, and go over any questions.

Step 2 Applicant Submits Preliminary Application Per NR 347.05(1). S. NR 347.05(1)(a)-(g), Wis. Adm. Code, lists the information that is required for a Preliminary Application. The Preliminary Application should be submitted to the regional coordinator for commercial port projects. The information that is required for a preliminary application includes:

(a) Volume of material to be dredged;
(b) Name of waterbody and location of project;
(c) Brief description of dredging method and equipment;
(d) Brief description of proposed disposal method and location and, if a disposal facility is to be used, size of the disposal facility;
(e) Any previous sediment sampling (including field observations) and analysis data from the area to be dredged or from the proposed disposal site;
(f) Copy of a map showing the area to be dredged, the depth of cut, specific location of the proposed sediment sampling sites and the bathymetry of the area to be dredged; and
(g) Anticipated starting and completion dates of the proposed project.

It's important that all required information is included in the preliminary application so that unnecessary delays are avoided in later steps of the process.

Step 3 WDNR Assigns a Project Manager and Notifies the Commercial Port Applicant.
WDNR will assign a project manager for each dredging project involving a commercial port. The project manager has responsibility for overall cross program coordination within WDNR for all aspects of that particular dredging project. See Appendix 2 for further description of the responsibilities of project managers. WDNR Regions are encouraged to assign a project manager following step 1 if possible, but in any case the expectation is that WDNR should assign a project manager and notify the applicant within 10 business days of receipt of the preliminary application.

Step 4 WDNR Determines Sampling Requirements and the Notifies Applicant Per NR 347.05(2) and NR 347.06. From existing data, WDNR must determine whether there is reason to believe that any sediment contamination exists within the proposed project area. If there is reason for concern about potential contamination, WDNR conducts a coordinated cross-program review and determines all in-situ sediment sampling that will be required. S. NR 347.05(2), Wis. Adm. Code, requires WDNR to notify the applicant of the sampling requirements within 30 business days of receipt of the Preliminary Application submitted in Step 3. This written notification will include a requirement for the submittal of a Sampling and Analysis Plan. Further details about sampling requirements and how WDNR makes decisions regarding sampling are contained in the WDNR internal guidance document entitled " Guidance for Applying Chapter NR 347, Wisconsin Administrative Code, To Dredging Projects In Surface Waters."

Step 5 Applicant Submits and WDNR Reviews the Sampling and Analysis Plan.
If sampling requirements are established in Step 4, the submittal of a Sampling and Analysis Plan will be required. The Sampling and Analysis Plan allows WDNR a review of the sampling proposal for compliance with NR347 requirements prior to the sampling commencing. The expectation is that the WDNR review and response to the Sampling and Analysis Plan will occur very quickly. For commercial port dredging projects, the target for WDNR response is within 10 business days.

Step 6 Applicant Submits the Chapter 30 Dredging Permit Application.
An applicant could delay submittal of the permit application under Chap. 30, Wis. Stats, until being notified of the need for this permit under s. NR 347.07(2), Wis. Adm. Code (Step 8). However, a Chap. 30 dredging permit is always required and submittal of the application at this point is strongly encouraged. An early submittal of the Chapter 30 dredging permit application provides the WDNR with a better understanding of the project and allows a more efficient and expedited project review.

Step 7 Applicant Conducts Sediment Sampling and Submits Sampling Results Per NR 347.07(1).

In accordance with s. NR 347.07(1), Wis. Adm. Code, when the sampling has been completed and the results are available, the applicant submits a copy of the testing report to the WDNR. The sampling report contents are described in NR 347.07(1) and must include the raw data, a map of the project area showing all specific sampling locations, laboratory quality control and quality assurance information including analytical methods, detection limits and quantitation limits. The applicant may submit the Chapter 30 dredging permit application (Step 6) in conjunction with this report if it has not been previously submitted.

Step 8 WDNR Determines What Permits and Approvals are Required and Whether Additional Information is Needed from the Applicant. Based upon the information submitted under Steps 6 and 7, WDNR identifies which of the approvals listed in s. NR 347.04(1) will be necessary for the particular project. In addition, per NR 347.07(2) and (3), WDNR must also determine whether additional information and sampling is necessary. Finally, WDNR must also make a Wisconsin Environmental Policy Act (WEPA) determination under Chap. NR 150 regarding the need for an Environmental Assessment (EA) or an Environmental Impact Statement (EIS). The WDNR determination and the notification to the applicant must be completed within 30 business days of the submittal of the sampling results under Step 7. The applicant should submit any required additional information or sampling results before or at the time of proceeding to Step 9.

See Appendix 3 for descriptions of permits and approvals that may be needed for dredging projects. Also see s. NR 347.07 for a list permits and approvals that may be required.

Step 9 Applicant Submits All Necessary Applications for Permits and Approvals Per NR 347.04(1). Based upon the determinations made in Step 8, the applicant must apply for all necessary WDNR permits and approvals. If the applicant has not already submitted the Chapter 30 dredging permit application under Step 6, he or she must do so as part of this step. Statutory deadlines and processes specific to each permit or approval apply. The WDNR objective is a timely and coordinated cross program review of all applications.

For commercial port projects, the WDNR project manager is responsible for overall coordination and should be contacted and kept informed regarding any problems or questions related to the project. The WDNR project manager should receive copies of all correspondence related to the project and copies of any permits and approvals. Proactive informal communication between the applicant and the WDNR is encouraged so that there are no unexpected delays in the review process.

See Appendix 3 for descriptions of permits and approvals that may be needed for dredging projects. Also see s. NR 347.07 for a list of permits and approvals that may be required.

Step 10 WDNR Makes Approval and Permit Determinations and Notifies Applicant Per NR 347.04(2). WDNR prepares an NR 150 environmental review document if required and issues decisions for each application submitted under Steps 6 and 9. Statutory deadlines and processes specific to each permit or approval apply. Except as otherwise provided by law, the WDNR decisions on permits and approvals should be made concurrently with the NR 299 Water Quality Certification or the permit under Chap. 30, Wis. Stats. per NR 347.07(2). An opportunity for a public hearing(s) or public informational meeting may be required during this step before the WDNR can issue some types of permits or approvals.

Step 11 Applicant Notifies WDNR Per NR 347.08(1) and Begins Dredging. After all permits and approvals are granted, the applicant is required under NR 347.08(1) to notify the WDNR at least 5 days prior to the time that dredging is to begin.

Appendix 1

Chapter NR 347, Wis. Adm. Code

Unofficial Text (See Printed Volume). Current through date and Register shown on Title Page.
Register, January, 2002, No. 553

Chapter NR 347
SEDIMENT SAMPLING AND ANALYSIS, MONITORING PROTOCOL AND DISPOSAL CRITERIA FOR DREDGING PROJECTS

Note: Chapter NR 347 as it existed on February 28, 1989 was repealed and new chapter NR 347 was created effective March 1, 1989.

NR 347.01 Purpose and policy. (1) The purpose of this chapter is to protect the public rights and interest in the waters of the state by specifying definitions, sediment sampling and analysis requirements, disposal criteria and monitoring requirements for dredging projects regulated under one or more of the following statutes: s. 30.20, Stats., which requires a contract or permit for the removal of material from the beds of waterways; s. 281.41, Stats., which establishes a wastewater treatment facility plan approval program; ch. 289, Stats., which establishes the solid waste management program; ch. 291, Stats., which establishes the hazardous waste program; and ch. 283, Stats., which establishes the Wisconsin pollutant discharge elimination system (WPDES) program.
(2) It is department policy to encourage reuse of dredged material and to minimize environmental harm resulting from a dredging project.
History: Cr. Register, February, 1989, No. 398, eff. 3–1–89; **corrections in (1) made under s. 13.93 (2m) (b) 7., Stats., Register January 2002 No. 553.**

NR 347.02 Applicability. The provisions of this chapter apply to the removal and disposal of material from the beds of waterways except where exempted by statute.
History: Cr. Register, February, 1989, No. 398, eff. 3–1–89.

NR 347.03 Definitions. (1) "Analyte" means the chemical substance or physical property being tested for in a sample.
(2) "Bathymetry" means the measurement of depth of water in lakes or rivers to determine lake or river bed topography.
(3) "Beach nourishment disposal" means the disposal of dredged material on the beaches or in the water landward from the ordinary high–water mark of Lakes Michigan and Superior for the purpose of adding, replenishing or preventing erosion of beach material.
(4) "Bioassay" means a method for determining the acute or chronic toxicity of a material by studying its effects on test organisms under controlled conditions.
(5) "Bulk sediment analysis" means a test to measure the total concentration of a specific constituent in a sample being analyzed.
(6) "Carriage water" means the water portion of a slurry of water and dredged material.
(7) "Carriage water return flow" means the carriage water which is returned to a receiving water after separation of the dredged material from the carriage water in a disposal, rehandling or treatment facility.
(8) "Connecting waterways" means a portion of a navigable lake or stream which is directly joined to Lake Michigan or Lake Superior and which contains a navigation channel providing access for commercial or recreational watercraft to Lake Michigan or Lake Superior.
(9) "Contamination" means a solid, liquid or gaseous material, microorganism, noise, heat, odor, or radiation, alone or in any combination, that may harm the quality of the environment in any way.
(10) "Contract" means a binding written agreement between the department and a dredging applicant authorizing the removal of material from the bed of a natural navigable lake or outlying water.
(11) "Department" means the department of natural resources.
(12) "Disposal facility" means a site or facility for the disposal of dredged material.
(13) "Dredged material" means any material removed from the bed of any waterway by dredging.
(14) "Dredging" means any part of the process of the removal of material from the beds of waterways; transport

of the material to a disposal, rehandling or treatment facility; treatment of the material; discharge of carriage or interstitial water; and disposal of the material.
(15) "Grain size analysis" means a method to determine dredged material and disposal site sediment particle size distribution.
(16) "Hazardous waste", as defined in s. 291.01 (7), Stats., means any solid waste identified as a hazardous waste under ch. NR 605.
(17) "Interstitial water" means water contained in the interstices or voids of soil or rock in the dredged material.
(18) "Limit of detection" means the lowest concentration level that can be determined to be statistically different from a k sample for that analytical test method and sample matrix.
(19) "Limit of quantitation" (LOQ) means the concentration of an analyte at which one can state with a stated degree of confidence for that analytical test method and sample matrix that ananalyte is present at a specific concentration in the sample tested.
(20) "Parent material" means the native unconsolidated material which overlies the bedrock.
(21) "PCBs" means those materials defined in s. 299.45 (1) (a), Stats.
(22) "Particle size distribution" means a cumulative frequency distribution or frequency distribution of percentages of particles of specified diameters in a sample.
(23) "Rehandling facility" means a temporary storage site or facility used during the transportation of dredged material to a treatment or disposal facility.
(24) "Treatment facility" in this chapter means a natural or artificial confinement facility used for the separation of dredged material solids from the interstitial or carriage water.
(25) "Upland disposal" means the disposal of dredged materials landward from the ordinary high–water mark of a waterway or waterbody.
History: Cr. Register, February, 1989, No. 398, eff. 3–1–8**9;** correction in (16) made under s. 13.93 (2m) (b) 7., Stats., Register, October, 1995, No. 478.

NR 347.04 Permits, approvals and reviews required. (1)

The following are the permit, approval and review requirements for dredging projects:
(a) Except where otherwise provided by law, all private and municipal dredging projects require a permit or contract under s. 30.20, Stats., and ch. NR 346. Dredging in portions of the Mississippi, St. Croix and Black rivers by the U.S. army corps of engineers is governed by s. 30.202, Stats.
(b) All dredging projects require review under ch. 289, Stats., and chs. NR 500 to 520 for disposal of dredged material under the solid waste management program.
(c) All dredging projects shall be reviewed under ss. 1.11 and 23.11(5), Stats., and ch. NR 150 for compliance with the Wisconsin environmental policy act.
(d) All federally funded, permitted or sponsored dredging projects require water quality certification under ss. 281.11 to 281.22 and 283.001, Stats., and ch. NR 299.
(e) A Wisconsin pollutant discharge elimination system (WPDES) permit under ch. 283, Stats., is required for dredging projects with carriage water return flows to surface water or groundwater.
(f) Plan approval under s. 281.41, Stats., is required for dredging projects which include a dredged material treatment facility.
(g) Sites and facilities for the disposal of hazardous waste and PCBs require review under subch. IV of ch. 291, Stats. and s. 299.45, Stats., and chs. NR 500 to 520 and 600 to 685.
(2) The project application process shall be coordinated by the department. Except as otherwise provided by law, decisions on all applicable department approvals, permits, contracts and licenses relating to a dredging project shall be made concurrently and with the decision on:
(a) Water quality certification under ch. NR 299 for all federally funded, permitted or sponsored projects, or
(b) Permit or contract under s. 30.20, Stats., and ch. NR 346 for all other projects.
History: Cr. Register, February, 1989, No. 398, eff. 3–1–8**9;** corrections in (1)
made under s. 13.93 (2m) (b) 7., Stats., Register, October, 1995, No. 478**.; corrections in (1) (b), (d), (e), (f), and (g) made under s. 13.93 (2m) (b) 7., Stats., Register January 2002 No. 553.**

NR 347.05 Preliminary application and analytical requirements. (1)

Prior to submission of a formal application, anyone seeking to remove material from the beds of waterways shall provide the department with preliminary information including:
(a) Name of waterbody and location of project;
(b) Volume of material to be dredged;
(c) Brief description of dredging method and equipment;
(d) Brief description of proposed disposal method and location and, if a disposal facility is to be used, size of the disposal facility;
(e) Any previous sediment sampling (including field observations) and analysis data from the area to be dredged or from the proposed disposal site;
(f) Copy of a map showing the area to be dredged, the depth of cut, the specific location of the proposed sediment sampling sites and the bathymetry of the area to be dredged; and
(g) Anticipated starting and completion dates of the proposed project.
(2) An initial evaluation shall be conducted by the department within 30 business days after receipt of the information under sub. (1) to determine if there is reason to believe that the material proposed to be dredged is contaminated. This initial evaluation shall be used by the department in specifying sediment sampling and analysis requirements to the applicant under s. NR 347.06 and shall be accomplished with existing data. Factors which shall be considered by the department in its evaluation of the dredging site and, if appropriate the disposal site, include, but are not limited to, the following:
(a) Potential that contaminants may be present. Potential routes that may have introduced contaminants into the dredging site shall be identified by examining appropriate maps, aerial photographs, or other graphic materials that show surface water-courses and groundwater flow patterns, surface relief, proximity to surface and groundwater movement, private and public roads, location of buildings, agricultural land, municipal and industrial sewage and stormwater outfalls, etc., or by making supplemental field inspections.
(b) Previous tests of the material at the dredging site or from other projects in the vicinity when there are similar sources and types of contaminants, water circulation and stratification, accumulation of sediments, general sediment characteristics, and potential for impact on the aquatic

environment, as long as nothing is known to have occurred which would render the comparisons inappropriate.
(c) The probability of past introduction of contaminants from land runoff.
(d) Spills of toxic or hazardous substances.
(e) Introduction of contaminants from point sources.
(f) Source and previous use of materials used or proposed to be used as fill.
(g) Natural deposits of minerals and other natural substances.
(h) Any other relevant information available to the department.
History: Cr. Register, February, 1989, No. 398, eff. 3–1–89.

NR 347.06 Sampling and analysis. Upon completion of the initial evaluation, the department shall establish sampling and analysis requirements.
(1) EXCEPTION. Except as provided in subs. (3)(a) and (6), the applicant shall collect and analyze data on sediments to be dredged in the manner outlined in this section.
(2) CORRECT METHODS. Unless otherwise specified, sampling, sample handling and sample analysis to demonstrate compliance with this section shall be in accordance with methods from applicable sources enumerated in ch. NR 149.
(3) NUMBER OF SAMPLES. (a) Sediment sampling may be waived by the department if it determines from its review of available information under s. NR 347.05(2) that sediment contamination is unlikely.
(b) If available information is either insufficient to determine the possibility for sediment contamination, or shows a possibility for sediment contamination, the department shall require the applicant to collect sufficient samples to describe the chemical, physical and biological properties of the sediment. The exact number and location of sediment samples required and analyses to be conducted shall be specified by the department, in consultation with the applicant, based on the initial evaluation and on other factors including, but not limited to, the potential for possibility of contamination, volume and aerial extent of material to be dredged, depth of cut and proposed method of disposal.
(c) For a project involving the disposal of dredged material at an upland disposal site, the department may require samples to be taken from the proposed disposal site and analyzed for parameters found to be elevated in the dredged material sediment samples. The number and location of disposal site samples required shall be specified by the department based on the size and other characteristics of the site.
(d) For a project to be conducted in the Great Lakes with beach nourishment disposal, at least one sample every 250 linear feet of beach with a minimum of 2 samples shall be taken from the proposed beach nourishment disposal site and analyzed for particle size and color. Core or grab samplers may be used.
(4) METHOD OF TAKING SAMPLES. (a) All samples shall be taken with a core sampler except as provided in sub. (3)(d). The department may approve other sampling methods if it finds them to be appropriate.
(b) All sampling equipment shall be properly cleaned prior to and following each sample collection.
(c) Samples collected for PCB, pesticide and other organic analyses shall be collected and processed using metallic (stainless steel preferred) liners, tubs, spoons and spatulas. Samples collected for other chemical analysis, including heavy metals, shall be collected and processed using non–metallic liners, tubs, spoons and spatulas.
(d) Core samples from the dredging site shall be taken to the proposed dredging depth plus 2 feet.
(e) Core samples shall be visually inspected for the existence of strata formation, and a written description including position, length, odor, texture and color of the strata shall be provided to the department.
(5) SAMPLE HANDLING AFTER COLLECTION AND PRIOR TO ANAL-YSIS. Sample handling and storage prior to analysis shall be in accordance with the maximum holding times and container types given in table F of ch. NR 219. Samples shall be preserved at the time of collection by cooling to 4°C.
(6) ANALYSES TO BE PERFORMED ON SEDIMENT SAMPLES. Analyses shall be done in accordance with methods from applicable sources enumerated in ch. NR 149. Analyses submitted to the department under this chapter shall be done by a laboratory certified or registered under ch. NR 149.
(a) Samples shall be analyzed from each distinct layer observed in the material to be dredged. If no strata formation exists, core samples shall be divided into 2–foot segments, and each segment shall be analyzed for the required chemicals and characteristics. For cores extending into parent material, analysis of only the top 2–foot segment of parent material is required. The department may approve other subsampling methods if it finds them to be appropriate.
(b) All samples shall be analyzed for those parameters listed in table 1 unless waived by the department as provided in par. (d). Elutriate testing may be required for all chemicals listed in Table 1 unless waived by the department as provided in par. (d).
(c) If previous sampling data or other adequate available information indicates the possibility of contamination by chemicals not listed in table 1, the department may require analysis for those chemicals.
(d) If previous sampling data or other adequate available information demonstrates that the possibility of contamination is negligible, analysis for any chemical may be waived, in writing, by the department.
(e) The department may require additional samples and analyses as specified by law or for other appropriate reasons.

TABLE 1
ANALYSES TO BE PERFORMED ON SEDIMENT SAMPLES

	GREAT LAKES	INLAND WATERS
PCB (Total)	X	X
Total 2,3,7,8 TCDD	X	X
Total 2,3,7,8 TCDF	X	X

	GREAT LAKES	INLAND WATERS
Aldrin	X	X
Dieldrin	X	X
Chlordane	X	X
Endrin	X	X
Heptachlor	X	X
Lindane	X	X
Toxaphene	X	X
DDT	X	X
DDE	X	X
Arsenic	X	X
Barium	X	X
Cadmium	X	X
Chromium	X	
Copper	X	X
Cyanide	X	
Iron	X	
Lead	X	X
Manganese	X	
Mercury	X	X
Nickel	X	X
Selenium	X	X
Zinc	X	X
Oil and Grease	X	X
NO_2, NO_3, NH_3–N, TKN	X	X
Total P	X	X
Grain–size	X	X
Percent Solids	X	X
Total Organic Carbon	X	X
Moisture Content	X	X
Settleability (if return water)	X	X

History: Cr. Register, February, 1989, No. 398, eff. 3–1–89; am. (5) and (6) (intro.), Register, November, 1992, No. 443, eff. 12–1–92.

NR 347.07 Review procedures and review criteria.
(1) When sediment sampling and analyses have been completed, the applicant shall submit a copy of the testing report to the department. This report shall include raw data for all analyses, a map of the project area showing the specific locations of sediment sampling sites and the name and address of the laboratory which per-formed the tests. All testing and quality control procedures shall be described and analytical methods, detection limits and quantification limits shall be identified.
(2) The department shall review the information submitted under sub. (1) within 30 business days after receipt and determine the applicable statutory and administrative rule provisions and any additional information required from the applicant under this section.
(3) Based on the submitted testing report the department may after consultation with the applicant require additional sediment sampling and analyses when there is evidence of contamination.
(4) For projects in the Great Lakes involving beach nourishment disposal, grain–size analysis results of the proposed dredged material and the beach shall be compared by the department.
(a) The department may allow beach nourishment disposal if:
1. The average percentage of silt plus clay (material passing a #200 sieve or less than .074 mm dia.) in the dredged material does not exceed the average percentage of silt plus clay in the existing beach by more than 15% and the color of the dredged material does not differ significantly from the color of the beach material.
Note: For example, if the silt plus clay content of the existing beach is 10%, suit-able
dredged material must have a silt plus clay content of less than 25%.

2. The criteria of any general permit regulating wastewater discharges under the Wisconsin pollutant discharge elimination system is not exceeded.

(5) For all projects where upland disposal is required or planned, the results of sediment sampling and analysis shall be compared by the department to the solid waste disposal standards and criteria specified in chs. NR 500 to 520.

(6) If the bulk sediment analysis criteria in sub. (4) is exceeded, the applicant shall have the option of demonstrating to the department through use of bioassay, or other methods approved by the department, that the dredging and sediment disposal operations will have minimum effects on the environment.

History: Cr. Register, February, 1989, No. 398, eff. 3–1–89; correction in (5) made under s. 13.93 (2m) (b) 7., Stats., Register, October, 1995, No. 478.

NR 347.08 Monitoring, reporting and enforcement.

(1) SURVEILLANCE. (a) The permittee shall contact the department 5 business days prior to the commencement of dredging to provide an opportunity for the department to review all required environmental safeguards to ensure they are in place and operable.

(b) The department may inspect the dredging project at any time during operation to determine whether requirements of permits and approvals are being met or to conduct effluent sampling.

(2) MONITORING. (a) For those projects authorized in part by a WPDES permit, monitoring, analyses and reporting shall be performed as specified in the WPDES permit.

(b) For all other projects, monitoring, analyses and reporting shall be performed as specified in ss. NR 347.06(2) and 347.07(1).

(c) Project characteristics to be monitored may include, but are not limited to, carriage water return flow, total suspended solids, dissolved oxygen concentrations, effluent and receiving water temperatures, receiving stream flow rates, effluent ammonia–ni-trogen concentrations, and pH.

(3) SUSPENSION OF WORK. If the department determines that project performance is not in compliance with permit or contract conditions, the permittee shall suspend work upon written notification from the department. This shall be a condition of any permit or contract issued by the department. The permittee shall be accorded an opportunity for hearing in accordance with s. 227.51(3), Stats. The issuance of a suspension order under this subsection shall not limit other enforcement actions or penalties. The department and permittee shall analyze operational deficiencies and the department shall prescribe changes necessary to bring project operation into conformance with permit or contract conditions.

(4) PENALTIES. (a) Each violation of the conditions of a permit or contract issued under s. 30.20, Stats., or this chapter, may result in a forfeiture of not less than $100 nor more than $10,000 for the first offense and shall forfeit not less than $500 nor more than $10,000 upon conviction of the same offense a second or subsequent time. The permit or contract may be rescinded and appropriate restoration orders may be issued as authorized by ss. 23.79, 30.03, 30.12, 30.15, 30.20, 30.292, 30.294 and 30.298, Stats.

(b) The enforcement provisions of s. 283.91, Stats., shall apply to any violations of WPDES permits associated with dredging projects.

(c) The enforcement provisions of ss. 289.97 and 299.97, Stats., and chs. NR 500 to 520 shall apply to violations of solid waste management approvals for this chapter.

(d) The enforcement provisions of ss. 291.95 and 291.97, Stats., shall apply to violations of any hazardous waste approvals for disposal activities associated with dredging projects authorized by this chapter.

History: Cr. Register, February, 1989, No. 398, eff. 3–1–89; corrections in (4) made under s. 13.93 (2m) (b) 7., Stats., Register, October, 1995, No. 47**8; corrections in (4) (b) to (d) made under s. 13.93 (2m) (b) 7., Stats., Register January 2002 No.**

553.

Appendix 2

WDNR Staff Roles and Responsibilities for Commercial Port Dredging Projects

1) Statewide Coordinator

The WCPA has requested that the WDNR name an overall statewide coordinator for commercial port dredging projects. The role of the statewide coordinator is:

- To assure consistency in implementation of WDNR policy and guidance;
- To serve as liaison with the WCPA on statewide issues related to commercial ports dredging projects;
- To communicate and coordinate across WDNR program lines statewide commercial port dredging issues; and
- To represent the WDNR in interactions with federal agencies and other states.

The statewide coordinator should be consulted on statewide cross program issues, on issues related to consistency between regions, or on implementation of statewide policy.

Note: As of the date of publication of this guidance, Greg Hill is the designated Statewide Coordinator for commercial port dredging projects. Contact: Greg Hill; Greg.Hill@dnr.state.wi.us 608-267-9352.

2) Regional Coordinators

At the request of WCPA, the WDNR has named a regional coordinator for commercial port dredging for each WDNR region with commercial ports. The responsibility of the regional coordinator is to assure consistency and cross-program coordination on commercial port dredging issues within that WDNR region and to represent the region on statewide issues. The regional coordinator should be the initial point of contact before a project manager is named for a particular project. The regional coordinator may also be contacted if there is a question or dispute that cannot be resolved with the project manager.

The regional coordinator will contact the regional Water Leader and the regional Air and Waste (AW) Leader within that WDNR region when there is a need for a project manager to be named. The regional coordinator may recommend the name of a project coordinator to the regional AW and Water leaders.

Note: As of the date of this publication, the following persons were designated as a Regional Coordinator for commercial port dredging projects.

Northern Region: Duane Lahti, NOR Watershed Management Program
Duane Lahti@dnr.state.wi.us 715-395-6911

Southeast Region: Rob Grosch, SER Waste Management Program
Robert.Grosch@dnr.state.wi.us 262-574-2148
Northeast Region: Kristy Rogers, NER Aquatic Habitat Coordinator
Kristy.Rogers@dnr.state.wi.us 920-492-5817

3) Project Managers

Whenever a commercial port dredging project is proposed, the WDNR Region will name a project manager for that project and inform the applicant within 10 days of receipt of the preliminary dredging application (Step 3 of the 11-step process). The project manager's role is cross-program coordination and communication on all aspects of the proposed project. The project manager is the principal liaison between the applicant and the WDNR. When approvals or permits are needed, direct communication between the applicant and the lead WDNR reviewer for a particular permit or approval is encouraged, however the project manager should receive copies of all correspondence and should be kept fully informed and appraised of communications and progress on the project.

Appendix 3

Descriptions of Permits, Approvals and Other Requirements That May Apply to Dredging Projects

A. Chapter 30 Dredging Permits.

All projects that involve dredging or removing bottom material from the bed of a waterway require a Dredging Permit under section 30.20, Wisconsin Statutes. Applicants submit preliminary plans that show the location, extent and volume of proposed dredging, along with the proposed disposal site or beneficial reuse option. DNR staff identify any sediment sampling requirements needed to determine if the sediment is contaminated, and the applicant conducts sampling. When a final permit application is received, DNR staff evaluate the impacts of proposed dredging and disposal on wetlands, fish and wildlife habitat, and on other public rights in navigable waters, including navigation. If the project involves 3000 cubic yards or greater of material to be dredged, DNR prepares an Environmental Assessment to evaluate the project in greater detail. A Dredging Permit is granted if DNR determines that the work can be done, perhaps with certain permit conditions, in a manner that will not harm public rights in Wisconsin waters.

B. Wastewater Treatment Facility Plan Review

If a dredging project include s a dredged material treatment facility, the facility may not be constructed or operated unless the plans and specifications for the proposed facility have been reviewed and approved by the WDNR. Procedures for submission of plans and specifications for wastewater treatment facilities are contained in Chapter NR 108, Wis. Adm. Code. According to s. 281.41(1)(b), Wis. Stats., the WDNR must review and approve or deny the plans and specifications within 90 days following their receipt.

C. WPDES - Wastewater Discharge Permits.

A Wisconsin Pollutant Discharge Elimination System (WPDES) wastewater discharge permit is required under Chapter 283, Wis. Stats., and Chapter NR 200, Wis. Adm. Code, for a point source discharge of pollutants into the waters of the state. Wastewater discharge permits are applicable to dredging operations that discharge carriage and/or interstitial water, and small amounts of the dredged material resulting from the disposal or temporary storage.

General WPDES Permit

General Permit. In some cases, the removed sediment is essentially innocuous. Consequently, any return of water and small amounts of the dredged material from the disposal site to waters of the state are also innocuous and can be covered by a Dredging Operations general permit (WPDES Permit No. WI-0046558-3).

Provisions have been included in the General Permit for the disposal of dredged sediments in Lake Michigan and Lake Superior via beach nourishment and unconfined disposal. These activities are defined as follows:

> Beach nourishment: The disposal of dredged material on the beaches or in the water landward from the highwater mark of Lakes Michigan and Superior for the purpose of adding, replenishing or preventing erosion of beach material.
>
> Unconfined disposal: The deposition of dredged sediments, in water, on the bed of a waterway. Typically, state law prohibits disposal of dredged sediments via unconfined disposal. However, unconfined disposal may be allowed where the lake bed in the dredged disposal area has been granted to a local government entity. See Sections 30.12(1), 30.202, 30.203, and 30.11, Stats.
>
> Disposal via these means is allowed only if the following two conditions are met: the particle size of the dredged material must meet the requirements of s. NR 347.07(4)(a)1, Wis. Adm. Code and the dredged material must meet the background criteria for uncontaminated sediment identified in the General Permit - WPDES Permit No. WI-0046558-3.

Specific WPDES Permit

Specific WPDES Permit. A Specific Permit is necessary in situations where there exists a possibility of violating surface or groundwater quality standards (NR 102, 105, 106, and 140). For situations where specialized environmental controls are necessary the discharge will be regulated by a specific permit. In general if bioaccumulating compounds are present, regulation of these substances requires a specific permit. Discharges to outstanding and exceptional resource waters requires a specific permit which provides the oversight and discharge limitations necessary to protect these types of receiving waters.

D. NR 299 Water Quality Certification

Chapter 299, Wis. Adm. Code, contains procedures and criteria for application, processing and review of water quality certifications required by the Federal Water Pollution Control Act. A water quality certification is required for any federally funded, permitted or sponsored dredging project.

E. NR 500 Solid Waste Regulation and Approvals

Dredged material is considered a solid waste under Wisconsin statutes and case law. As explained below, however, disposal of most dredged material is exempted from normal solid waste regulation by the WDNR's Waste Management Program (s. 289.43(8), Wis. Stats, and s. NR 500.08(3), Wis. Adm. Code).

Wisconsin's solid waste statutes (Ch. 289, Wis. Stats.) and regulatory codes (chs. NR 500 through NR 520, Wis. Adm. Code) are primarily directed at the regulation of complex land disposal facilities, also referred to as solid waste landfills. Dredged material disposal sites can be regulated in a manner similar to landfills; however, most are exempted from solid waste program regulation by rule or on a case-by-case basis. Projects likely to be subject to formal regulation are those that include large volumes of dredged material, contaminated dredged material, engineered structures, or those proximate to a protected resource such as wetlands.

Dredged Material Wastes Exempt by Rule

S. NR 500.08(3), Wis. Adm. Code, lists several types of facilities for disposal of non-contaminated dredged material which are exempted by rule. For those facilities that qualify for this exemption, any Department requirements for disposal would be exercised through the dredging permit. Formal solid waste regulation would not be invoked, as long as the disposal site complied with performance standards of s. NR 504.04(4), Wis. Adm. Code. This exemption by rule is based on certain presumptions about the environmental impact of projects. Where the WDNR has enough information to judge that the sediment is not contaminated or where disposal will not cause problems, the exemption by rule can apply.

The NR 500.08(3) exemption by rule does not apply to volumes of 3,000 cubic yards or greater from the Great Lakes, the Mississippi River and certain water bodies where historical contamination or a large number of dischargers existed or is still present. The exemption by rule also does not apply if the WDNR has reason to believe that the performance standards of s. NR 504.04(4), Wis. Adm. Code would be violated.

Dredged Material Wastes Exempt Following Case-by-Case Review

According to s. 289.43(8), Wis. Stats., the WDNR can exempt certain solid waste facilities from the licensed landfill siting process on a case-by-case basis . The applicant still has to demonstrate that the project will not cause violations of standards or threaten protected resources, like groundwater quality, surface water quality, wetland functional values, critical habitat, or endangered species.

The intent of this statute is to allow the applicant to tailor the design, active life, closure, etc., of the disposal facility to the size and requirements of the dredging project. The exemption can require a facility design with any type containment needed, ranging from

filling a depression in the landscape to an engineered design with a liner, leachate collection, and final cover similar to a licensed landfill.

An applicant has to prepare a plan and submit an application to the WDNR for case-by-case review. The WDNR recommends that the following items to be included as part of a request for a grant of exemption:

- de-water dredged material as much as possible to allow for proper placement.
- disposal in an upland location that is not a wetland, critical habitat area, recharge area for private or public water supply wells
- confine to as limited an area as practicable
- confine to as limited a volume as practicable
- cover with soil if necessary to prevent erosion and direct contact. (Thicker cover (1 to 3 feet) may be necessary if there is greater concern for contact.)
- post-dredging reporting to the WDNR to document the disposal location, cover, volume used, changes made, etc.

It is also possible that the WDNR would require a greater degree of containment or isolation due to higher contaminant concentrations, greater concern about toxicity or leaching of certain types of contaminants or other factors. Early discussion with WDNR staff will help to define degree of containment that has to be designed for.

Public Meeting Required for Solid Waste Decisions

Before a formal solid waste approval can be issued, s. 289.54, Wis. Stats., requires the WDNR to hold a public meeting in the city, village or town where disposal of dredged material is proposed to take place. The statute specifically states that this is applicable to any dredged material that contains PCBs or heavy metals in concentrations of less than 50 ppm. Given that dredged material will show a range of concentrations, the effect of this statute is to require a public meeting prior to issuing a Waste Management program approval for any dredged material disposal project. At these meetings, the Department will expect the applicant to present an overview of the proposal. Comments will be recorded and considered for utility in the approval requirements. If the dredged material is determined to be exempt from solid waste regulation (either by rule or on a case-by-case basis), then no public meeting is required.

Beneficial Reuse of Dredged Materials

According to s. NR 500.08(5), Wis. Adm. Code, the WDNR may grant exemptions from normal solid waste regulatory requirements for the purpose of allowing or encouraging the recycling of solid wastes. While there is no specific beneficial reuse code applicable to dredged material, s. NR 347.01(2) states the WDNR policy of encouraging the beneficial reuse of dredged materials. Beneficial reuse can be addressed under the

dredging permit, for projects which are eligible for the code exemption under s. NR 500.08(3), or by a case-by-case low hazard exemption under s. 289.43(8), Wis. Stats.

In support of the WDNR's policy to encourage beneficial reuse projects, the WDNR is a member of the Great Lakes Dredging Team and contributes to the beneficial reuse initiative and guidance documents developed by that Team (see www.glc.org/dredging). Examples of a beneficial reuse projects include landfill cover as approved in a Plan of Operation, habit creation, beach nourishment, construction fill materials, and soil amendment.

Landspreading of Dredged Materials

This alternative is not commonly used and is probably most applicable to inland lake dredging projects with highly organic, mucky sediments which can be easily removed and land-applied by hydraulic pumping. At a minimum, it has to be shown that the use of the dredged material will cause no harm or additional contamination. For landspreading proposals, it is desirable to be able to demonstrate a benefit for the intended use of the land.

There are two possible WDNR Waste Management regulatory approaches for landspreading projects.

A landspreading plan can be accepted and reviewed under Chap. NR 518, Wis. Adm. Code. This is most applicable to repetitive dredging actions. Code requirements are similar to the information required for land application of municipal treatment plant sludge. A formal approval will be issued following one step review process. No solid waste license is required but plan review fees are listed in Chap. NR 520, Wis. Adm. Code. The dredged material would have to be characterized, and appropriate land application limits would have to be defined on a case-by-case basis.

Land application can also be allowed under the low hazard case-by-case grant of exemption under s. 289.43(8), Wis. Stats. This approach is more appropriate for one-time dredging actions.

Approval to Dispose of Dredged Materials in an Existing Landfill

Disposal of dredged material in an existing licensed solid waste landfill involves relatively little direct interaction with the Department but does require negotiations with the landfill operator. A landfill that does not already have an approval to accept dredged material would have to submit a modification to its plan of operation to the WDNR.

Landfill disposal is not a popular choice for dredged material that is considered to be uncontaminated, but it may be the most practical choice for smaller dredging projects dealing with contaminated dredged material. In some instances, the landfill operator can use dredged material for certain landfill construction purposes.

Approval of a New Landfill for Dredged Materials

For dredged material that is not eligible for the code-based or a case-by-case exemption, disposal in a dedicated licensed landfill is possible. The applicant would have to follow the licensed landfill siting process in ch. 289, Stats., and chs. NR 500 to NR 520, Wis. Adm. Code. This process is well defined, but highly intensive in terms of demands on time and resources. It can take 3 to 7 years to complete.

Historically, there have been few efforts to site licensed landfills solely for dredged material, and none of those efforts were pushed to completion. This alternative is most likely for projects involving large volumes of contaminated sediment, to be dredged over a time span of several years.

Approval to Dispose of PCB-Containing Dredged Material

Some of Wisconsin's waterways have been contaminated with PCBs. The alternatives for disposal of dredged material from those waterways can be subject to different regulatory requirements.

Sediment with PCB concentrations of less than 50 ppm would be regulated as a solid waste under WDNR authority, including Chaps. NR 157 and NR 500 to NR 520, Wis. Adm. Code. Sediment material contaminated by PCBs is usually not eligible for a low hazard exemption unless the concentrations are very low. For higher concentrations, disposal in a licensed landfill is normally required. For lower PCB concentrations, a range of disposal and beneficial reuse options should be considered on a case-by-case basis whether or not the material is deemed eligible for a low hazard exemption. Please refer to Guidance for Landspreading of PCB-Contaminated Solid Wastes - WA-39 for further information regarding landspreading of sediment materials containing PCBs.

Sediment with PCB concentrations of 50 ppm or greater is also regulated under federal law - in the Toxic Substances Control Act (TSCA). Applicants for TSCA-regulated dredged material are advised to dispose of it at an established commercial toxic/hazardous waste landfill rather than attempting to establish their own facility. The process of establishing a new TSCA-approved waste landfill would be at least as laborious as establishing a new solid waste landfill, and probably more so.

TSCA also allows use of a mechanism called the TSCA coordinated approval. This involves WDNR working with USEPA Region 5 on review of an application to dispose of TSCA-level PCB-contaminated dredged material in a Wisconsin licensed solid waste landfill. The possibility of disposing of waste in a landfill that wasn't specifically designed under TSCA requirements is based on the level of engineering and construction oversight that the NR 500 to 520 codes require. Proposed plans by the applicant and the WDNR's review would have to meet certain additional requirements that USEPA Region 5 would expect to see addressed.

Disposal in a Confined Disposal Facility

Historically, a dredged material facility that has been constructed by the US Army Corps of Engineers (Corps) within the ordinary high water mark of a water body has been termed a "confined disposal facility" (CDF). This type of disposal is subject to agreements between local sponsor (municipality) and the Corps. The applicant for any new CDF would have to demonstrate that the facility is eligible for a low hazard exemption under s. 289.43(8), Wis. Stats. In that case, there would be no licensing or other requirements by the Waste Program under the landfill siting laws. However, there would be specific requirements in WPDES permits for the facility. With existing CDFs, the WDNR's Waste Program has been largely concerned with closure plans once the facility has filled to capacity.

F. NR 150 Environmental Impact Determination

According to the Wisconsin Environmental Policy Act (s. 1.11, Wis. Stats.), all state agencies, including the WDNR, must evaluate and be aware of the environmental consequences of their regulatory, management or administrative actions. Section NR 150.03, Wis. Adm. Code, establishes a "Type List" which categorizes WDNR actions. For dredging projects, each WDNR action on a permit or approval would be categorized from the NR 150.03 Type List and there would be an opportunity for public input.

For a dredging permit under s. 30.20, Wis. Stats., the following would be considered a Type II action: 1) over 3000 cubic yards being dredged, 2) a potential for sediments characterized as a hazardous substance and involving more that 7 cubic yards being dredged, or 3) draining or filling of wetlands affecting more than five acres. Type II actions require the preparation of an Environmental Assessment (EA) and may require the preparation of an Environmental Impact Report (EIR). If the proposed action is determined to be a "major action significantly affecting the quality of the human environment," an Environmental Impact Statement (EIS) will be a required.

*(**Note Regarding Appendix 3**: This appendix contains a summary of WDNR requirements that may be applicable to dredging projects for commercial ports. This is not a complete listing of all state, federal and local requirements that could be applicable to a dredging project. See the legal notice and disclaimer on page 2 of this publication.)*

Luke Francois

From: Dan Schultz
Sent: Tuesday, July 16, 2024 11:25 AM
To: Greg Horeth; Grant Horn; Alex Abendschein; Luke Francois; Bill McCormick; Scott Uhler
Subject: Town of Burlington funding for Browns Lake Dredging

-
-
- Hi all,
- Interesting article of the Town of Burlington approving significant funding for the Browns Lake dredging project. Makes sense as the entire community, not just the riparians benefit from the project.
- Dan
-
-
-
-
-
- TOWN OF BURLINGTON — A proposed dredging project on Browns Lake is getting a $2.5 million boost from town taxpayers, plus the town's borrowing capacity to finance the work.

The Burlington Town Board voted Thursday to forge a financial partnership with the Browns Lake Sanitary District for a long-discussed effort to rejuvenate the lake.

Town Board members heard opposition from some residents who were concerned that the entire town was being asked to support a project largely benefitting homeowners around the lake.

But the **town's elected leaders** said restoring Browns Lake would have a positive impact throughout the region, preserving a spot that is popular with boating and fishing enthusiasts.

"That lake cannot turn into a swamp," Town Supervisor Jason Ketterhagen said. "And I think it is partly our responsibility."

People are also reading…

The Browns Lake Sanitary District is seeking $2.5 million from the town and another $2.5 million from Racine County to cover half of the expected $10 million cost.

Sanitary district board chairman Claude Lois said he hopes the town's actions provide added encouragement to Racine County officials to approve their share of the project.

Lois attended the Town Board meeting and said later he felt optimistic that Browns Lake would be restored.

"We're full speed ahead now," he said.

The district is planning to **remove about 500,000 tons of sediment** and other pollutants from the 397-acre lake lake, primarily along the western and southern shores. Work is scheduled to begin in 2025 and to continue through two summer boating seasons.

The Wisconsin Department of Natural Resources has approved a permit for the project, including plans to discharge sludge onto farm fields just east of the lake.

Contractor proposals received in May included a low bid of $9.3 million and three other proposals as high as $12.2 million.

The sanitary district has proposed borrowing $10 million at 5% interest and paying it off at a rate of $800,000 a year for 20 years. Under that scenario, the **county and town each would contribute** $200,000 a year while the sanitary district would contribute $400,000 a year.

To fund the town's portion, officials said the owner of a $200,000 home would pay about $39 a year in higher property taxes, or $780 during the course of 20 years.

Some residents Tuesday spoke against the plan, urging Town Board members to reject it.

Bill Joerndt said the **project is too expensive** to take on without first holding a public referendum and gauging taxpayer support.

"This is a 20-year tax," Joerndt said. "It should've been voted on by everybody."

Others expressed support for the Browns Lake partnership.

Sue Deans said **dredging the lake has been discussed** for years without success. But the current plan, she said, is solid and "ready to go."

"We may never be able to do this again," she said.

The town operates on a yearly budget of $3.8 million, which includes $1.9 million in property taxes.

The Town Board voted 5-0 to contribute the $2.5 million for lake dredging, and voted separately to use the town's borrowing capacity to issue municipal bonds raising the entire $10 million for the project.

Agreements still must be worked out to specify details of the financing arrangement.

The sanitary district has taxing authority, too, and already collects about $380,000 a year in property taxes from landowners around the lake.

Racine County officials have not indicated when they will consider the Browns Lake request. County Board Chairman Tom Kramer has expressed skepticism about the chances for county funding.

During debate Tuesday about town funding, Town Board Supervisor Brian Fliss said he agrees that the question ideally should have been put before voters in a referendum.

Fliss, however, said circumstances have not allowed enough time to plan a referendum. With a state permit approved and contractor bids in hand, he said the project is close to reality.

"We can't miss this opportunity," he said.

Dan Schultz
Waterford Waterway Management District
Secretary
414-915-8320