

MEMO

FROM: Kayla Lyon, Director, Dept. of Natural Resources

Cc: Ed Tormey, Division Administrator, Environmental Services Division
Alex Moon, Deputy Director, Dept. of Natural Resources
Tammie Krausman, Legislative Liaison, Dept. of Natural Resources
Amie Davidson, Bureau Chief, Land Quality Bureau

DATE: August 26, 2025

RE: Midwest Interstate Low-Level Radioactive Waste Compact Commission Annual Report

Pursuant to 457B.1, Article III, paragraph "i", subparagraph (1), the annual report of the activities of the Midwest Interstate Low-Level Radioactive Waste Compact Commission is submitted. The Compact is an agreement between the states of Indiana, Iowa, Minnesota, Missouri, Ohio and Wisconsin enacted into law by each member state legislature in the early 80s and received Congressional consent in 1985. The policy of the commission is to provide sufficient capacity for the safe and proper disposal of commercial low-level radioactive waste generated in the region while limiting the number of facilities required to accomplish this.

If there are any questions regarding this report please contact Amie Davidson, Chief, Land Quality Bureau, Department of Natural Resources at Amie.Davidson@dnr.iowa.gov or 515-330-8581.

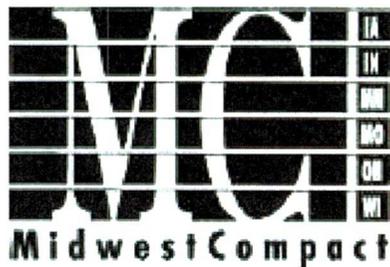
Midwest Interstate Low-Level Radioactive Waste Compact Commission

Annual Report

for the period from July 1, 2023 to June 30, 2024

A Report to the Citizens of the Midwest Compact
Region on the Activities of the Midwest Interstate
Low-Level Radioactive Waste Compact Commission

January 2025



Midwest Interstate Low-Level Radioactive Waste Compact Commission

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Annual Report

for the period from July 1, 2023 to June 30, 2024

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Introduction

An interstate compact is a formal agreement between two or more states. Under Article 1, Section 10 of the U.S. Constitution, states may form compacts with the consent of Congress to resolve conflicts or address common problems. More than 120 such compacts have focused on various subjects, including water, education, transportation, fisheries, health, and waste.

The Midwest Interstate Low-Level Radioactive Waste Compact is an agreement between the states of Indiana, Iowa, Minnesota, Missouri, Ohio, and Wisconsin that provides for the cooperative and safe disposal of commercial low-level radioactive waste. The Compact was enacted into law by each member state legislature during the period from 1982 through 1984, and received Congressional consent in 1985.

During the late 1970s, prior to formation of the Compact, all of the nation's low-level radioactive waste was shipped to three disposal facilities located in Nevada, South Carolina, and Washington. With the support of the National Governors' Association and the National Conference of State Legislatures, these three states demanded a more equitable distribution of waste disposal responsibility and development of new disposal facilities. Congress responded by enacting the Low-Level Radioactive Waste Policy Act of 1980. This Act was later replaced by the Low-Level Radioactive Waste Policy Amendments Act of 1985. The federal legislation made disposal of Class A, B, and C low-level radioactive waste a state responsibility.

To reduce the number of new disposal facilities, Congress encouraged states to form regional Compacts. Congress gave Compacts the unique authority to exclude waste from outside the boundaries of the compact region. States found this approach attractive because access to a regional disposal facility could be restricted solely to members of the compact. In addition, the approach allowed compact states to share the development costs for new disposal facilities.

Today, the Midwest Compact is one of eleven regional low-level radioactive waste compacts in the United States. Six states are not part of a compact.

This is the thirty-ninth report in the series of annual reports published by the Midwest Compact Commission, the Compact's administrative body. The report summarizes activities and actions during the preceding fiscal year (July 1, 2023 through June 30, 2024). As required by Article III(k) of the Compact, the report also contains the Commission's FY 2024 audited financial statements and the report of its independent, certified public accountant.

In accordance with another provision of the Compact, Article III (i)(2), this annual report will be submitted to the member state governors and appropriate legislative officers.

The Commission

The Midwest Interstate Low- Level Radioactive Waste Compact Commission (the Commission) is the administrative body of the Compact. It consists of one voting Commissioner from each of the six-member states. Each state determines how it will appoint its Commissioner, and the state's Governor must provide written notification to the Commission of the Appointment of a Commissioner.

Advance notice is given for all meetings, which are open to the public, and actions are recorded in meeting minutes and posted on the website.

The Commission holds an annual meeting in June of each year to hear reports and adopt a general fund budget.

In alternate years, the Commission elects officers to serve two-year terms. The Commission Executive Director is the administrative officer of the Commission.

The following persons were serving as Commissioners and Alternate Commissioners as of November 2024:

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OHIO

Vacant

Vacant

WISCONSIN

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Vacant

Annual Meeting

Annual Meeting 2024

The MCC convened virtually via Microsoft Teams on June 4, 2024, at 2:00 PM CDT, with Vice Chair Courtney Eckstein presiding. A quorum was established with participation from Indiana, Wisconsin, Iowa, Missouri, and Minnesota. Outgoing Executive Director James Chiles announced that Ohio had not yet named a new member following a recent retirement and introduced Minnesota's new alternate representative, Sarah Kilgriff.

The minutes from the June 2023 meeting were approved without changes. Chiles presented a financial overview of FY24, reporting that expenses aligned closely with projections. The LLW Forum membership remained the largest cost at \$9,500. Website and editing fees were unchanged from the prior year, and no legal or travel costs were incurred due to the remote format of national meetings. The fund closed FY24 with a positive balance of \$48,527.

The Commission approved the FY25 budget, which included no salary for the Executive Director, as Indiana offered Patrick Turner, a state employee, for the role. Travel funding was slightly increased, the final year's audit fee rose

to \$6,825 per contract terms, and \$500 was allocated for office expenses related to the leadership transition.

Chiles formally announced his retirement and recommended Patrick Turner as his successor. Turner's appointment was approved unanimously. Chiles emphasized the importance of continuity and long-term leadership for effective governance and fiscal stewardship. He outlined logistics for the transition, including transferring financial instruments and MCC materials to Turner.

Regarding officer roles, Eckstein agreed to continue as Vice Chair for another term. The Chair position remains unfilled, though members discussed establishing a rotation system to ensure broader participation among states. Additionally, members agreed to solicit competitive bids for future auditing services after the current contract ends, with Turner tasked to oversee that process. They also acknowledged the likelihood of a handoff fee should the auditor change.

The meeting concluded at 2:40 PM CDT.

Public Involvement

The Commission has developed a website, www.midwestcompact.org, which has all of the information about the Commission and its activities. This technology will keep interested persons better informed than an occasional mailing would. The Commission encourages interested parties to use the website as a place of communication.

The Commission encourages public attendance at all of its meetings. Commission meetings are open to the public and noticed at least twenty days before the meeting. Public comment on agenda items is invited at the meetings.

Member states also distribute material on the subject within their jurisdiction.

Figure 1

What is Commercial Low-Level Radioactive Waste?

Commercial low-level radioactive waste is material that is contaminated with radioactivity. In 1995, there were 187 potential generators of such waste in the Midwest Compact region (including nuclear power plants, hospitals, universities, research institutions, government agencies, and industries) of which 49 actually shipped waste that was received at commercial disposal.

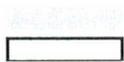
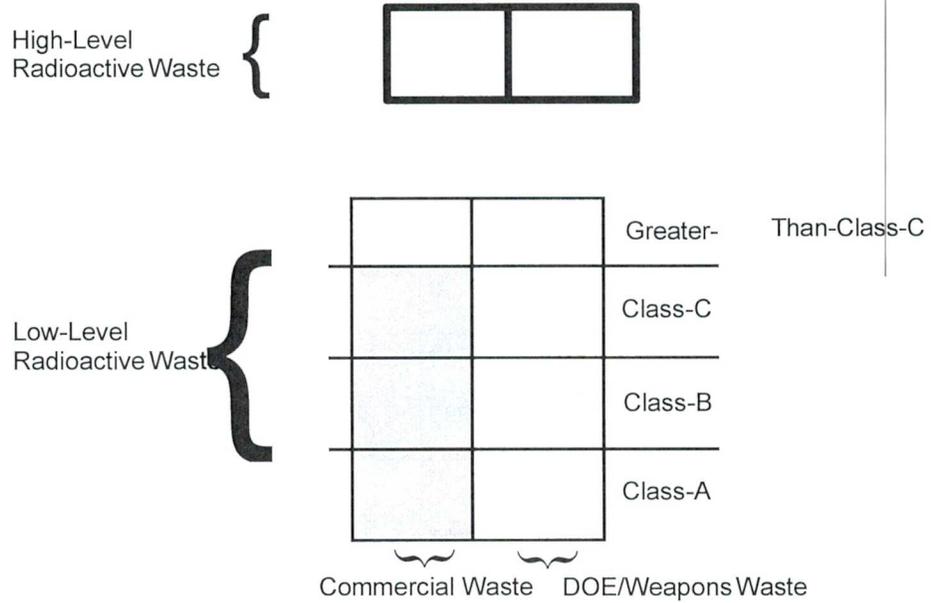
The number of generators shipping waste for disposal during any given year is subject to variation. The reasons for this variation can include the following: changes in product line or services offered substitution of different radioactive or nonradioactive materials, periodic maintenance, equipment replacement, decontamination and dismantlement activities, and temporary storage of waste pending collection of amounts sufficient for economical shipment.

The waste can consist of clothing, wipe rags, lab equipment and glassware, luminous dials, hand tools, sealed radiation sources (e.g., measurement devices), filters and filter resins, consumer products (e.g., smoke detectors), internal reactor parts, and demolition debris. Most of this waste (Class A) has low concentrations of radionuclides, although a very small amount of the waste (Class B and Class C) has higher concentrations and different management requirements.

Low level radioactive waste shipped to commercial disposal facilities does not include spent fuel from nuclear reactors, atomic weapons production waste, or uranium mine and mill residues. Nor does it include liquid waste that is explosive, pyrophoric, or chemically hazardous.

Figure 2

Radioactive Waste Disposal Responsibility (chart not proportional)



Waste that is the disposal responsibility of the Midwest Compact
Waste that is a federal disposal responsibility

Figure 3

MCC Proposed Budgets for FY 18, 19, 20, 21, 22, 23, 24, 25, and 26

Activity	FY 2018 Budget	FY 2019 Budget	FY 2020 Budget	FY 2021 Budget	FY 2022 Budget	FY 2023 Budget	FY 2024 Budget	FY 2025 Budget	FY 2026 Budget
Reimbursement for Executive Director	\$5,000	\$4,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reimbursement for Clerical	300	0	0	0	0	0	0	0	0
Travel to LLW Forum Meetings	2,200	2,600	2,700	2,700	2,700	3,000	3,000	4,000	4,000
MCC Annual Report - Editing	1,600	500	500	500	500	500	500	500	500
Teleconference Cost	10	0	0	0	0	0	0	0	0
Accounting for Audit	9,000	9,460	9,740	10,200	10,200	6,200	6,500	6,825	7,250
Legal Counsel	3,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Scanning and Office Expenses	0	0	0	0	0	1,200	400	600	600
Website	2,700	2,700	2,700	2,700	2,700	2,500	2,500	2,500	2,500
LLW Forum - Dues	9,500	9,500	9,500	9,500	9,500	9,500	9,500	9,500	9,500
LLW Forum Meeting Sponsorship	0	0	0	0	0	0	0	0	0
Total	\$33,310	\$31,260	\$27,140	\$27,600	\$27,600	\$24,900	\$24,400	\$25,925	\$26,350

Rebate Balance 4/30/2023 \$1,713,472.95
 Rebate Balance 4/30/2024 \$1,756,901.24
 Rebate Balance 4/30/2025 \$1,824,605.87

Interregional Cooperation

The Midwest Compact Commission regularly interacts with other compacts and states. Among the notable activities and actions involving other compacts and states were the following:

Low-Level Radioactive Waste Forum

The Commission continues to participate actively in the Low-Level Radioactive Waste Forum, Inc. (LLW Forum). The LLW Forum is a national association of representatives of compacts, host states, unaffiliated states, and states with currently operating disposal facilities, as well as companies, operating sites, generators, processors and distributors. The Forum was established to facilitate the LLW Forum provides a Low-Level Radioactive Waste implementation of the 1985 Policy Amendments Act. The LLW Forum provides an opportunity for compacts and states to share information and exchange views with officials of federal agencies and other interested parties. LLW Forum participants also serve as liaisons to other entities, including the Conference of State Radiation Control Program Directors, the Conference of State Legislatures,

and the Federal Facility Compliance Act Task Force. The Commission is represented on the LLW Forum by its Chair, and the Executive Director attends the semi-annual meetings.

Export and Disposal of Midwest Compact Waste

By action of the Atlantic Compact, Midwest Compact region generators no longer have access to the *EnergySolutions* disposal facility in Barnwell, South Carolina. Midwest Compact generators have access to the *EnergySolutions* disposal facility in Clive, Utah. The *EnergySolutions* facility generally accepts high volume, low activity Class A waste that does not exceed license limitations on radionuclide concentrations. *EnergySolutions*, Inc. of Utah has over 200 million cubic feet of unused capacity.

The state of Texas has established a commercial disposal site. It is now available to Midwest Compact generators for the disposal of Classes A, B, and C waste. The high cost of transport and disposal has kept the amount of disposal low.

Looking Ahead

Exploring Disposal Alternatives

The Commission will continue to examine opportunities to ensure consistent access to disposal facilities for low-level radioactive waste generators. This includes assessing potential consolidation strategies, exploring contractual disposal arrangements, and tracking developments in proposed privately-developed sites, while also reviewing the performance and availability of currently operating facilities across the country.

Supporting Disposal Development in Other Compacts

Although the Commission is no longer pursuing a disposal site within the Midwest Compact, it remains committed to supporting the development of new disposal capacity efforts in other regional compacts. These efforts are monitored closely, and the Commission will continue to engage as needed to facilitate progress and regional collaboration.

Commission Staffing

The Commission delegates its administrative responsibilities to the Executive Director. After the retirement of Stanley York (Wisconsin) in 2017, the role was filled by James Chiles, then Minnesota's alternate commissioner, who served until his retirement from state service in May 2024.

At its June 2024 meeting, the Commission unanimously appointed Patrick Turner of Indiana as the new Executive Director. As a state employee, Turner will serve without direct compensation from the Commission. Chiles emphasized the importance of leadership continuity, given the Executive Director's fiduciary duties and role in maintaining administrative stability.

Figure 4a

Commercial LLRW Disposed at Andrews, Barnwell, Beatty, Clive, and Richland: 1986-2024

VOLUME (ft3)	1986	1987	1988	1989	1990	1991	1992	1993
Indiana	295.51	2,257.06	1,891.97	2,150.31	1,956.01	5,723.62	2,715.14	967.15
Iowa	9,975.20	18,795.26	7,206.61	6,055.37	5,557.86	12,815.37	5,447.79	1,979.32
Minnesota	28,655.60	20,250.67	15,477.16	21,954.29	26,985.22	43,520.53	40,197.42	5,056.68
Missouri	27,307.48	28,782.69	11,911.77	18,802.64	19,609.59	19,055.46	11,271.86	3,178.02
Ohio	16,541.70	20,882.17	22,585.21	58,866.18	24,146.85	24,335.89	22,339.31	6,637.84
Wisconsin	6,252.10	9,792.73	10,599.36	6,880.93	9,217.32	7,228.19	6,884.60	2,225.38
TOTALS	89,027.59	100,760.58	69,672.08	114,709.72	87,472.85	112,679.06	88,856.12	20,044.39

	1994	1995	1996	1997	1998	1999	2000	2001
Indiana	1,622.81	100.78	341.01	380.93	84.69	707.21	431.00	6,136.40
Iowa	3,179.02	2,058.00	3,644.73	1,419.18	1,039.89	1,531.76	943.95	8,485.82
Minnesota	1,932.46	2,466.63	4,071.20	1,873.55	1,389.38	1,838.92	3,268.80	1,616.01
Missouri	5,896.82	6,998.54	14,680.10	8,691.32	17,133.50	8,703.04	7,844.02	412,278.44
Ohio	20,833.52	49,464.57	158,622.35	155,730.83	127,866.59	75,511.73	64,371.49	31,230.10
Wisconsin	5,892.17	1,050.86	2,404.15	1,282.43	1,556.47	2,689.17	1,270.50	4,702.41
TOTALS	39,356.80	62,139.38	183,763.54	169,378.24	149,070.52	90,981.83	78,129.76	464,449.18

	2002	2003	2004	2005	2006	2007	2008	2009
Indiana	201.53	137.01	313.28	83.90	462.96	451.17	1,157.37	257.98
Iowa	3,532.21	448.92	250.89	20,034.79	1,654.87	10,791.12	4,435.46	5,462.29
Minnesota	3,698.92	10,850.85	31,742.88	22,165.87	8,288.81	8,525.20	5,443.38	9,387.49
Missouri	26,875.32	8,813.37	93,973.58	82,705.78	4,517.65	14,437.36	110,164.29	82,527.22
Ohio	15,055.19	32,210.60	216,828.48	107,030.60	39,091.27	21,332.23	71,870.83	66,186.37
Wisconsin	12,588.36	3,202.55	7,485.49	12,908.23	4,603.60	17,302.73	5,766.94	6,571.40
TOTALS	61,951.53	55,663.29	350,594.60	244,929.17	58,619.17	72,839.80	198,838.26	170,392.76

	2010	2011	2012	2013	2014	2015	2016	2017
Indiana	361.32	97.01	628.91	87.95	352.51	64.81	51.45	239.34
Iowa	1,699.19	7,179.63	10,681.73	11,235.15	6,339.04	70,064.00	66,429.04	35,154.07
Minnesota	2,698.68	19,147.35	5,076.97	13,103.89	4,840.89	7,685.04	4,990.43	3,965.25
Missouri	28,959.94	7,403.97	160,595.62	44,171.80	13,827.98	20,119.58	6,909.53	2,875.06
Ohio	182,884.32	68,342.24	53,299.55	38,359.23	42,553.12	31,105.65	27,743.34	18,699.06
Wisconsin	15,201.74	10,371.46	8,923.77	7,788.16	32,699.11	4,857.24	22,277.33	445,998.24
TOTALS	231,805.19	112,541.66	239,206.55	114,746.18	100,612.65	133,896.32	128,401.12	506,931.02

	2018	2019	2020	2021	2022	2023	2024
Indiana	128.56	16,257.93	10,275.15	462.77	798.81	738.45	98.15
Iowa	8,851.99	44,008.34	1,822.35	1,326.89	990.04	26,689.58	25,965.60
Minnesota	1,054.57	2,047.83	1,940.77	2,118.32	1,952.46	1,620.08	810.65
Missouri	521,649.89	1,455.01	1,212.00	2,297.64	2,604.95	2,451.24	179.49
Ohio	13,096.66	13,170.97	6,409.21	8,527.91	6,887.94	11,144.96	3,642.30
Wisconsin	606,894.88	42,505.83	1,658.71	2,385.87	3,305.84	460,987.41	641,694.82
TOTALS	1,151,676.55	119,445.91	23,318.19	17,119.40	16,540.04	503,631.72	672,391.01

GRAND TOTAL 1986 THROUGH 2024: 7,206,583.74 ft3

Source: The DOE MIMS System

Figure 4b

Commercial LLRW Disposed at Andrews, Barnwell, Beatty, Clive, and Richland: 1986-2024

ACTIVITY

(curies)	1986	1987	1988	1989	1990	1991	1992	1993
Indiana	0	34.78	58.75	63.13	43.67	370.39	26.89	6.75
Iowa	21,664.13	1,067.71	400.98	16,953.42	37,807.79	528.67	42,085.40	51,341.86
Minnesota	28,332.33	1,042.42	2,327.71	60,952.08	1,657.09	4,030.69	59,979.20	1,449.65
Missouri	30.54	310.46	1,166.45	793.03	919.62	3,046.88	1,127.67	444.13
Ohio	339.00	309.46	836.96	1,211.40	4,315.70	3,839.66	3,440.21	2,370.27
Wisconsin	1,564.88	1,885.48	1,215.25	1,074.88	569.68	1,011.62	570.65	345.09
TOTALS	51,930.88	4,650.31	6,006.10	81,047.94	45,313.55	12,827.91	107,230.02	55,957.75

	1994	1995	1996	1997	1998	1999	2000	2001
Indiana	128.92	35.61	9.63	0.89	45.32	65.07	0.76	16.61
Iowa	1,632.89	209.38	552.05	114.34	266.71	1,721.81	150.27	88.01
Minnesota	1,738.82	365.12	1,406.08	82.75	313.95	128.05	127.09	113.59
Missouri	1,200.21	183.47	150.58	1,670.81	811.81	3,924.16	174.23	511.57
Ohio	582.69	552.77	50,021.87	1,077.37	99.75	402.46	291.90	140.80
Wisconsin	879.26	347.92	153.07	1,343.55	8.05	441.60	185.42	133.67
TOTALS	6,162.79	1,694.27	52,293.28	4,289.71	1,545.59	6,683.15	929.67	1,004.25

	2002	2003	2004	2005	2006	2007	2008	2009
Indiana	7.01	2.38	0.62	0.64	5.21	0.55	1.32	0.05
Iowa	108.39	1.17	1.37	0.82	16,049.79	110.00	137.35	58.19
Minnesota	30.49	45,932.72	13,453.55	250.06	121.72	264.47	28,729.45	118.86
Missouri	358.30	80.34	310.18	42.38	923.47	166.52	616.20	6.71
Ohio	1,218.94	362.21	11,002.21	1,154.81	2,510.02	39,997.46	6,082.42	11.86
Wisconsin	205.46	258.05	87.49	387.83	5,959.10	9,958.02	158.15	0.65
TOTALS	1,928.59	46,636.87	24,855.42	1,836.54	25,569.31	50,497.02	35,724.89	196.32

	2010	2011	2012	2013	2014	2015	2016	2017
Indiana	0.05	0.09	0.21	0.14	0.02	0.02	0.04	0.29
Iowa	23.05	334.81	56.87	47.82	37.35	50.45	32.50	165.79
Minnesota	26.51	66.76	40.60	537.09	160.56	57.00	434.65	57.03
Missouri	36.41	38.79	22.16	30.57	2.68	58.20	13.03	82.50
Ohio	76.98	61.87	13.12	25.49	128.95	109.97	76.09	1,236.57
Wisconsin	23.98	17.43	4.51	42.97	519.70	167.05	98.63	1,282.86
TOTALS	186.98	519.75	137.47	684.08	849.26	442.69	654.94	2,825.04

	2018	2019	2020	2021	2022	2023	2024
Indiana	1.44	440.82	272.52	8.26	8.69	7.98	0.08
Iowa	111.35	172.16	155.98	21,933.02	0.68	2.95	0.20
Minnesota	42.32	58.63	169.54	318.98	7,834.37	115.90	38.91
Missouri	39.67	5.14	5.95	45.37	14.93	17.22	1.68
Ohio	136.97	62.29	63.90	16.89	23.93	15.47	20.49
Wisconsin	411.25	213.04	45.37	106.19	87.75	118.55	182.23
TOTALS	743.00	952.08	713.26	22,428.71	7,970.35	278.07	243.59

GRAND TOTAL 1986 THROUGH 2024: 666,441.40 curies

Source: The DOE MIMS System

NOTES:

