

Public Meeting

DAIRYLAND POWER PHASE IV ALMA COAL COMBUSTION RESIDUAL LANDFILL INITIAL PERMITTING

Tony Peterson, DNR Contact and Content Expert

Matt Bachman, Content Expert

Malena Grimm, DNR Hearing Officer

November 19, 2024

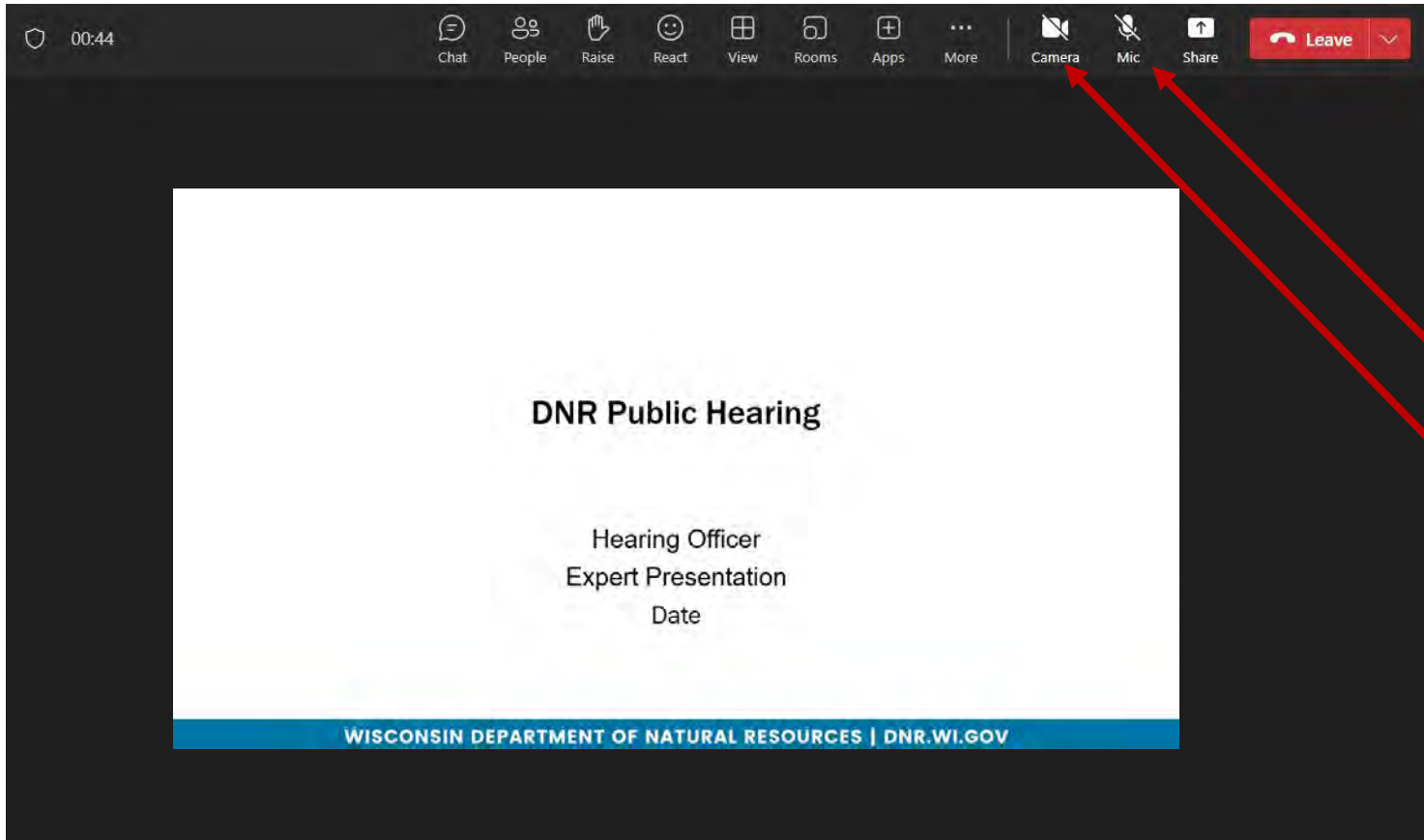
Reason for meeting:

Plan of operation modification report for initial permitting

s. NR 514.045, Wis. Adm. Code

- Requires submittal of a plan of operation modification
 - Demonstrations for performance, locational, design and monitoring criteria
 - Updated sampling plan, fugitive dust control plan, run-on/run-off control plan, closure and long-term care plans
- Completeness review, *public meeting*, and 60-day public comment period
- Draft decision and response to comments will be posted online

Attendees Using Teams

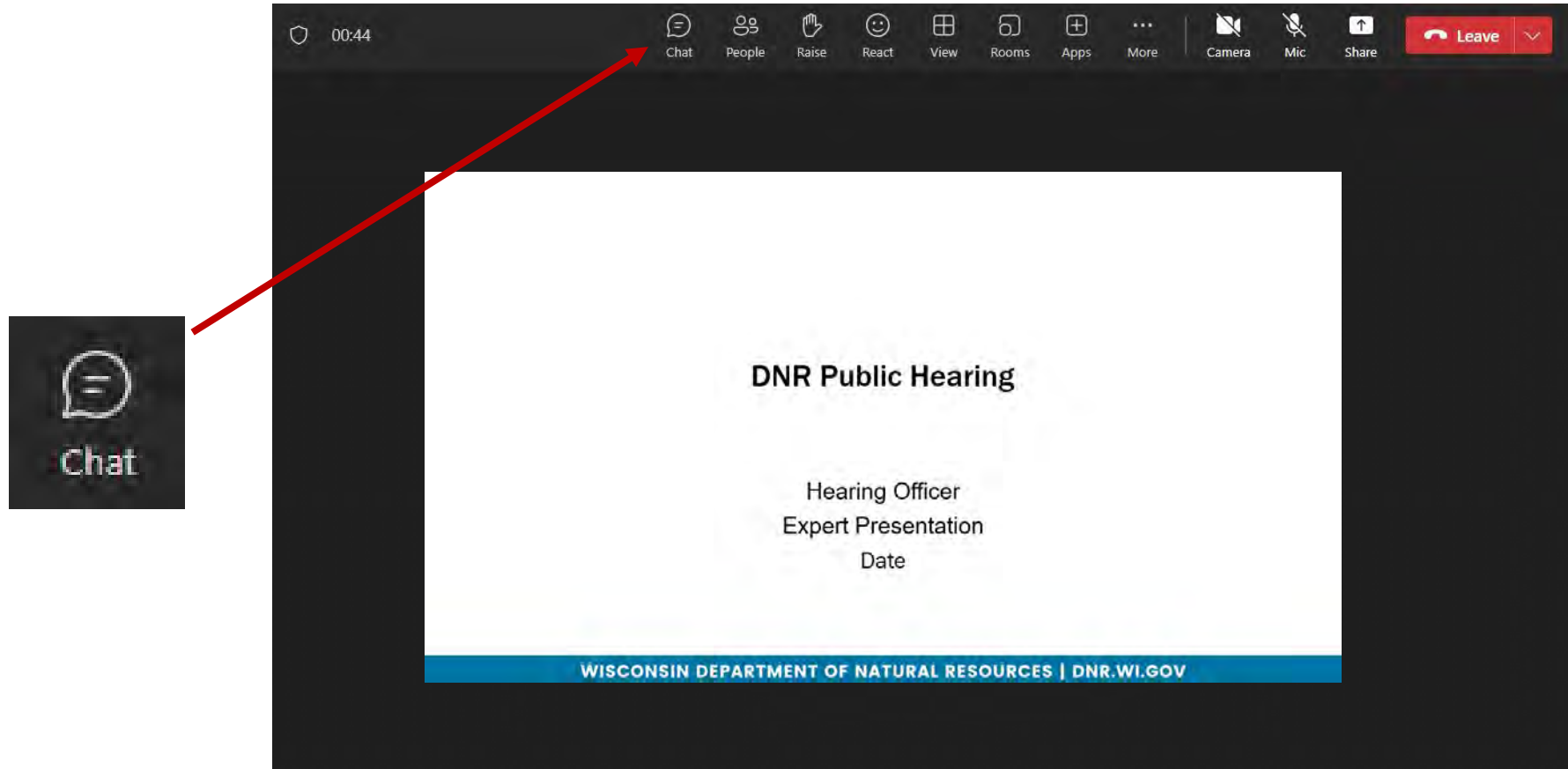


- You are currently **muted**
- You cannot share video



For Assistance with Teams

Use the **Chat** feature to contact the Teams Host with technical questions



Comments

Comments on the proposed rule must be received on or before January 2, 2025.

Written comments should be submitted to:

Attn: Tony Peterson

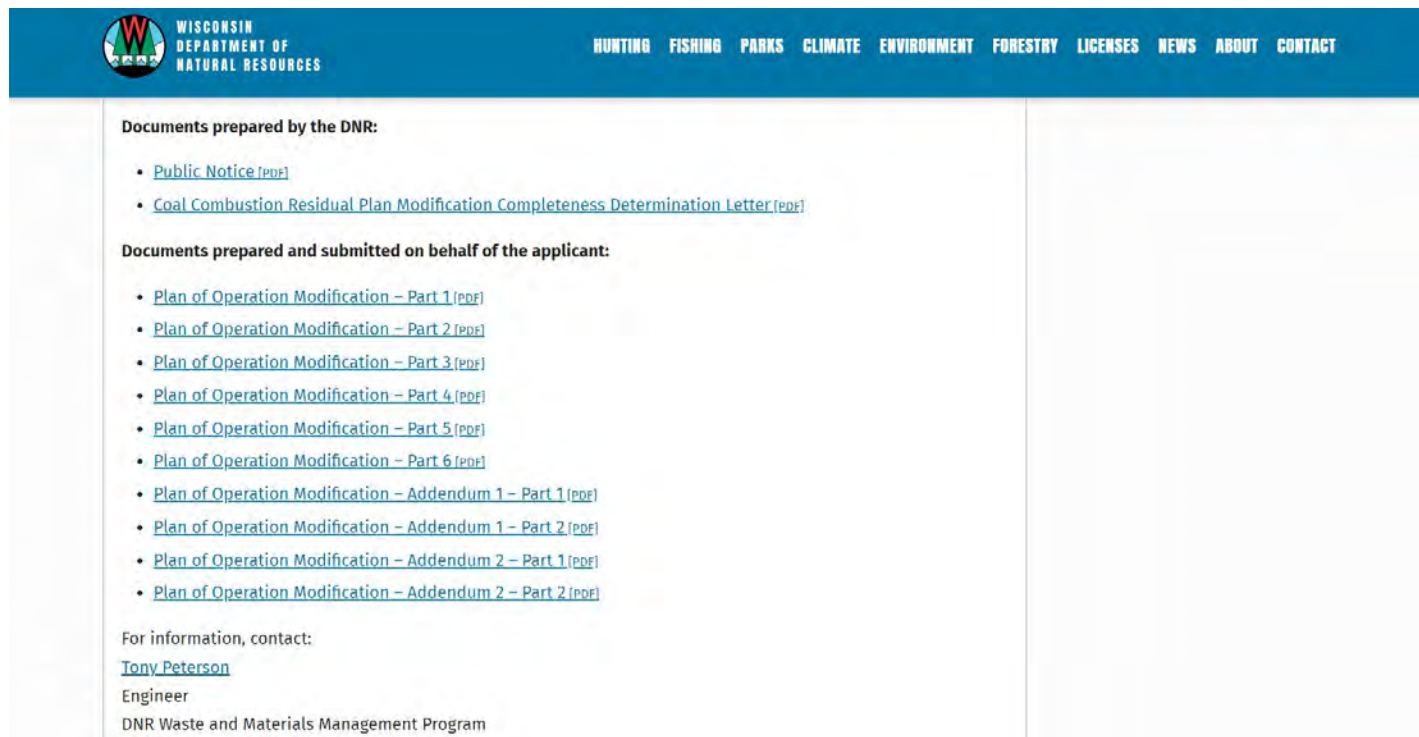
Department of Natural Resources

141 NW Barstow St. Room 180, Waukesha, WI 53188

anthony.peterson@wisconsin.gov

Where to find Dairyland Power Phase IV Alma Submittal Documents

Refer to the Waste Program Public Comment webpage:
<https://dnr.wisconsin.gov/topic/Waste/Comment.html>



The screenshot shows the Wisconsin Department of Natural Resources website. The header includes the DNR logo and navigation links: HUNTING, FISHING, PARKS, CLIMATE, ENVIRONMENT, FORESTRY, LICENSES, NEWS, ABOUT, CONTACT. The main content area is divided into two columns. The left column contains the following text:

Documents prepared by the DNR:

- [Public Notice \[PDF\]](#)
- [Coal Combustion Residual Plan Modification Completeness Determination Letter \[PDF\]](#)

Documents prepared and submitted on behalf of the applicant:

- [Plan of Operation Modification – Part 1 \[PDF\]](#)
- [Plan of Operation Modification – Part 2 \[PDF\]](#)
- [Plan of Operation Modification – Part 3 \[PDF\]](#)
- [Plan of Operation Modification – Part 4 \[PDF\]](#)
- [Plan of Operation Modification – Part 5 \[PDF\]](#)
- [Plan of Operation Modification – Part 6 \[PDF\]](#)
- [Plan of Operation Modification – Addendum 1 – Part 1 \[PDF\]](#)
- [Plan of Operation Modification – Addendum 1 – Part 2 \[PDF\]](#)
- [Plan of Operation Modification – Addendum 2 – Part 1 \[PDF\]](#)
- [Plan of Operation Modification – Addendum 2 – Part 2 \[PDF\]](#)

For information, contact:
[Tony Peterson](#)
Engineer
DNR Waste and Materials Management Program



Alma Off-Site Landfill Phase IV

Public Meeting

November 19, 2024

Site Location



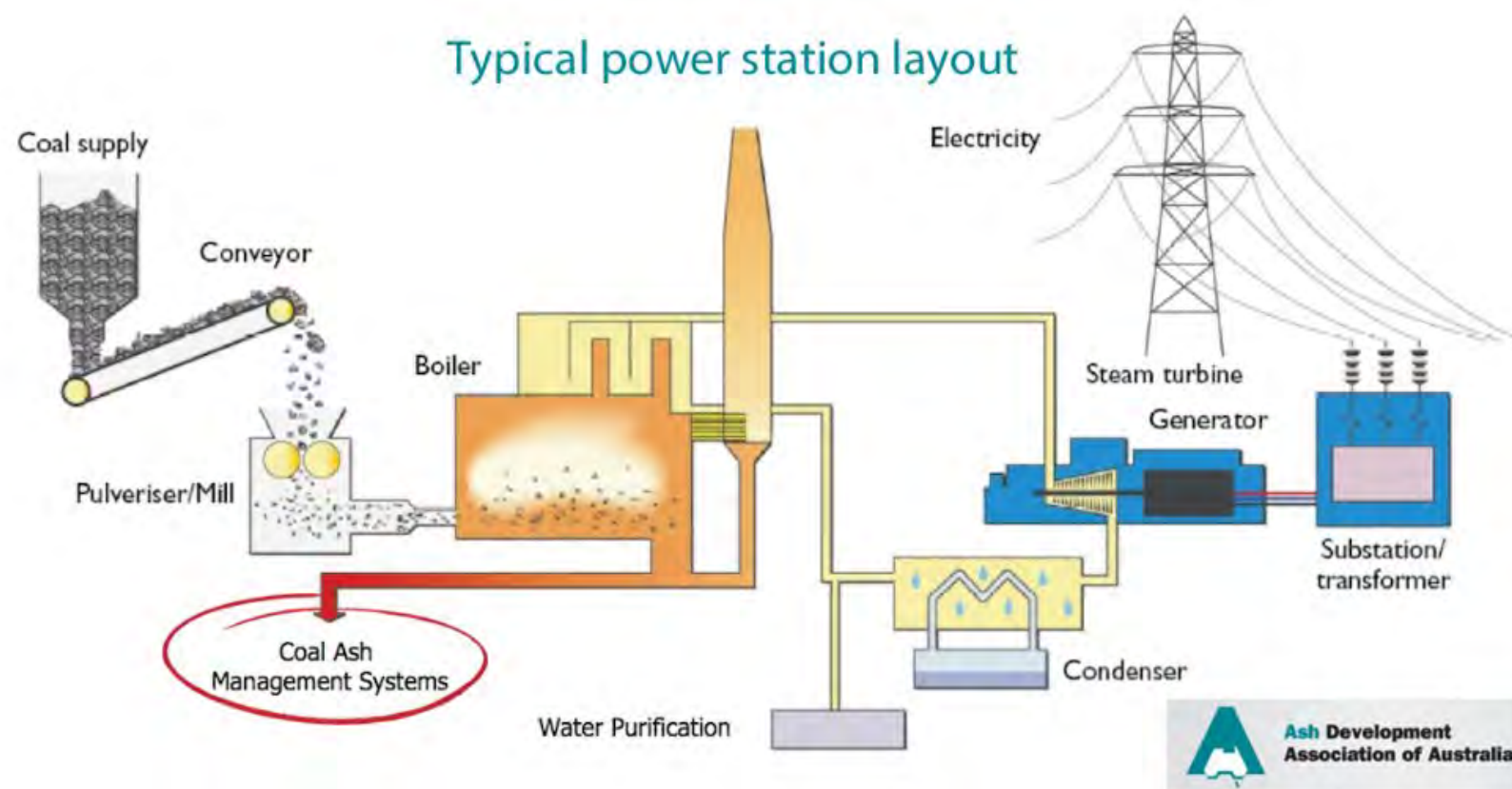
Alma Off-Site Disposal Facility



- Phase I/III and Phase II:
 - Licensed under WDNR Permit #2927
 - Landfill areas closed since prior to 2007
- Phase IV Landfill:
 - Active landfill area
 - Licensed under WDNR Permit #4126
 - Permitted in 2001
 - Accepts coal combustion residuals (CCR) and wastewater treatment sludge from DPC's generating facility

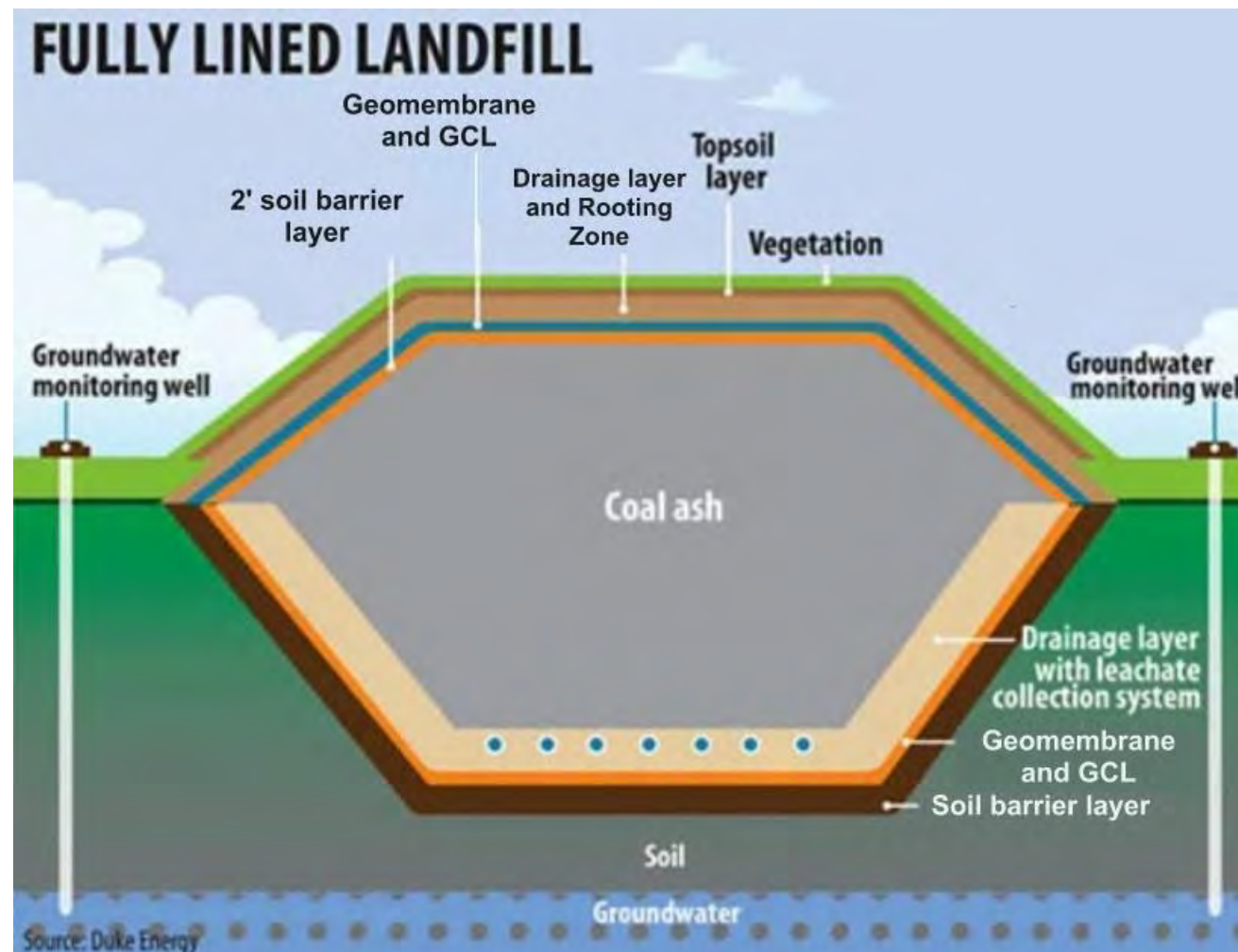
What is Coal Combustion Residuals (CCR)?

- By-products produced from the burning of coal in coal-fired power plants.
 - Fly ash
 - Bottom ash
 - Boiler slag
 - Flue gas desulfurization material
- Materials that did not burn or “combust” are left behind.



How is CCR Managed

- CCR is disposed of in landfills or beneficially reused.
- Currently DPC's only disposal location for CCR Material is the Phase IV Landfill.
- Beneficial reuse directs CCR away from landfills to be utilized for other products
 - Cement manufacturing
 - Geotechnical fill (in compliance with WDNR and EPA regulations)

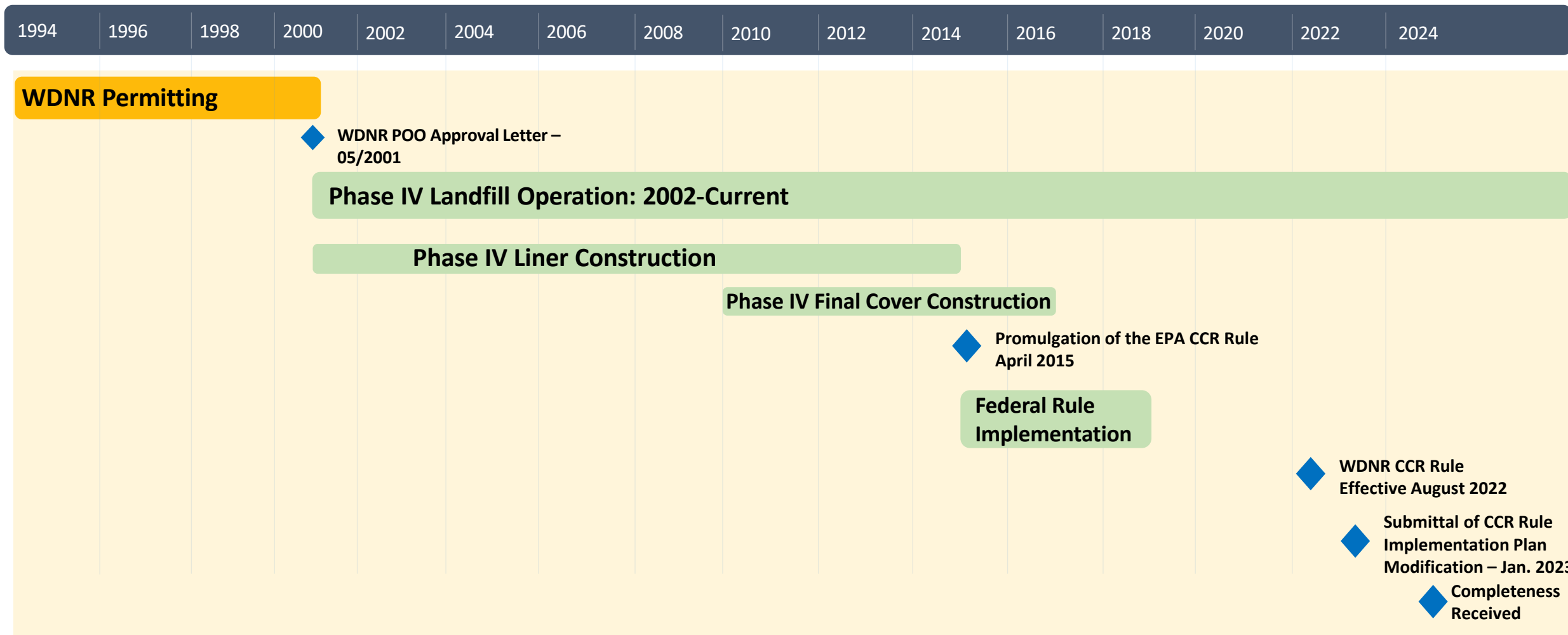


Phase IV Landfill

- Permitted in 2001 by the WDNR
- Accepts coal combustion residuals and wastewater sludge from DPC's generating stations
- Permitted Area: 32 acres
 - 20.3 acres have been constructed
 - 8.1 acres are closed (final cover placed)
 - 12.2 acres are open (filling area)
- Landfill only services DPC and accepts the material generated during power generation process
 - Necessary for DPC to provide economically feasible energy production for the local community.

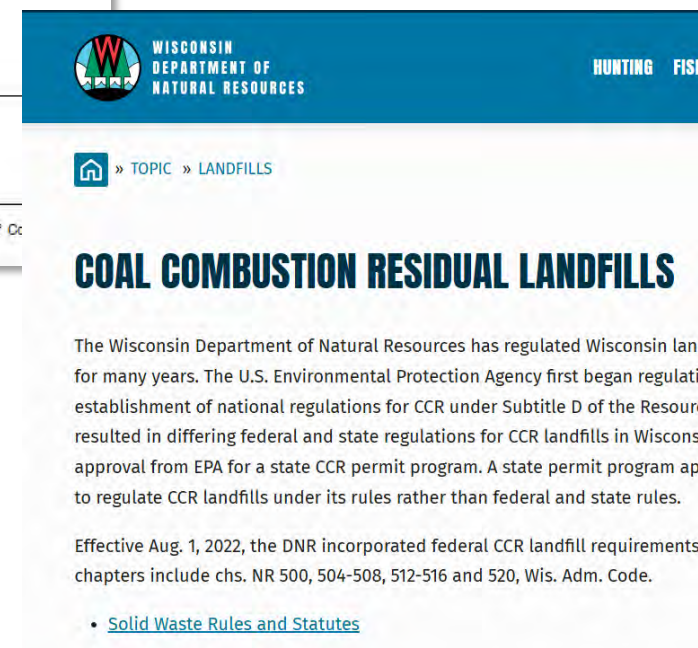


Phase IV Landfill Timeline



Regulations

- 2015 Federal CCR Rule
 - Establishes technical requirements for CCR landfills and surface impoundments under subtitle D of the Resource Conservation and Recovery Act (RCRA), the nation's primary law for regulating solid waste
- WDNR promulgated the federal CCR rule in 2022
 - WDNR rule update required plan modification to update existing Plan of Operations with the additional CCR requirements

Phase IV Landfill Design

- Designed and approved in compliance with NR 500 series. Maintains compliance with 2015 federal CCR requirements
- Landfill Design includes:
 - Liner system
 - Composite liner with Geosynthetic Clay Liner (GCL) and geomembrane
 - Leachate Collection System
 - Leachate is conveyed from the landfill to a centralized leachate collection tank
 - Removed leachate is used for dust control within the active area of the landfill or transported to DPC’s WWTP or a POTW
 - Stormwater Management System
 - Consists of drainage ditches, culverts, and diversion berms
 - Two sedimentation basins are proposed, one currently built.
 - Was designed for the 100-year storm at the time of permitting
 - Final Cover system
 - Composite cover with GCL and geomembrane
 - Minimizes stormwater infiltration into the CCR material
 - Groundwater Monitoring System
 - Monitoring wells located around the perimeter of the landfill
 - No statistically significant increases over background levels have been detected.



Primary Changes in 2023 Plan Mod

- Additional curbing near the leachate loadout station
- Modified final cover system for construction moving forward
 - Still consists of a composite final cover system but includes a soil barrier layer between the CCR and GCL
- Revised WDNR groundwater monitoring parameters and incorporation of CCR monitoring wells into WDNR program
- CCR operational plans brought into the WDNR program
 - Dust Control Plan
 - Run-off and Run-on Control System Plan
 - Closure Plan
 - Long-Term Care Plan
- Revised record-keeping which is in line with the federal requirements

Closing Thoughts

The Phase IV Alma Off-Site Landfill is a vital component of Dairyland Power Cooperative's operation in providing economically viable electric power to the local area. The facility has been constructed and will continue to be constructed using the state-of-the-art landfill designs and construction quality assurance and will be monitored during operation and post-closure care.

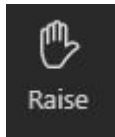
We appreciate the opportunity to continue to be of service to the communities that rely on us.




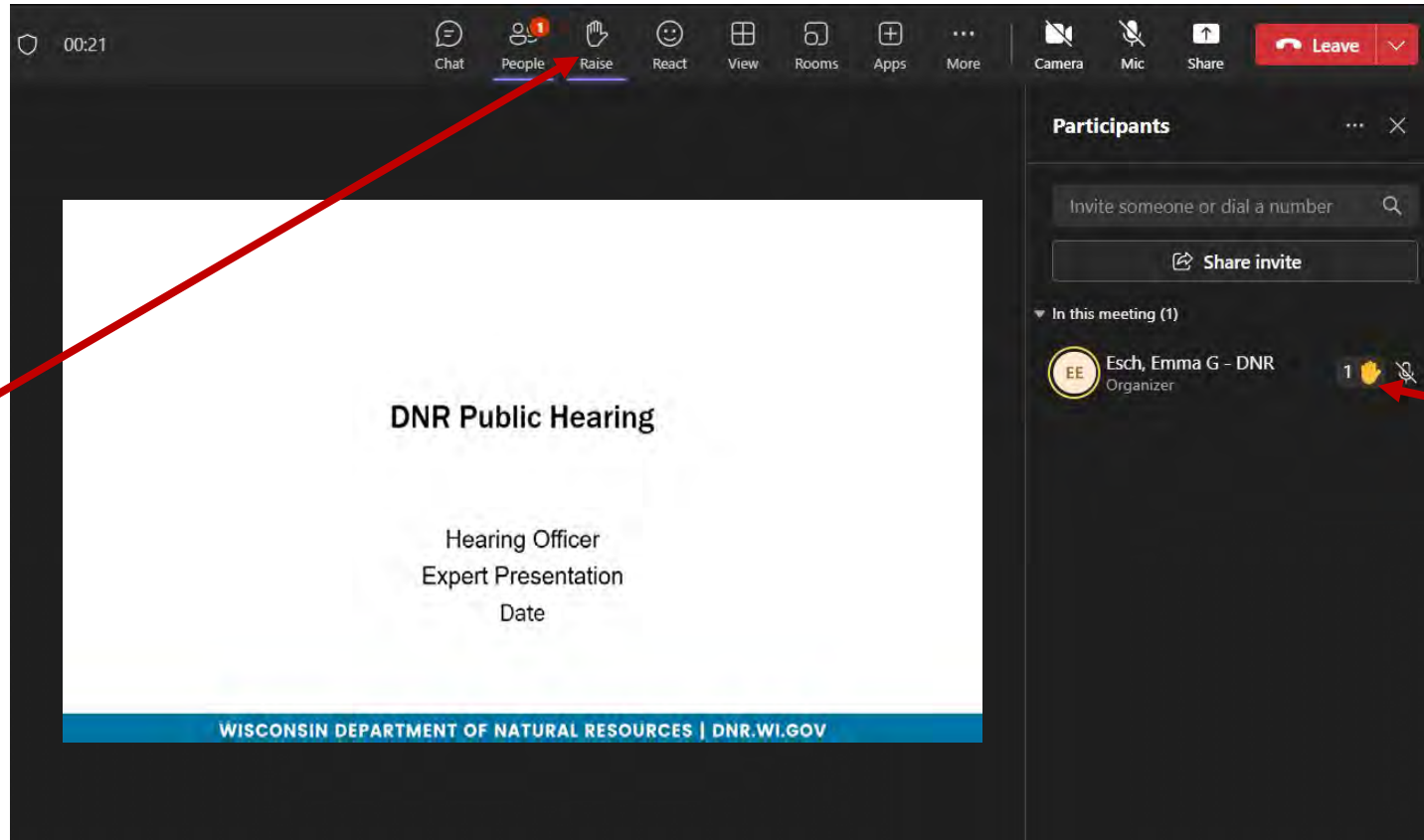
Thank you for your
time and interest!

Meeting Logistics (Teams): Raising Your Hand

If you'd like to comment, click **Raise Hand**.



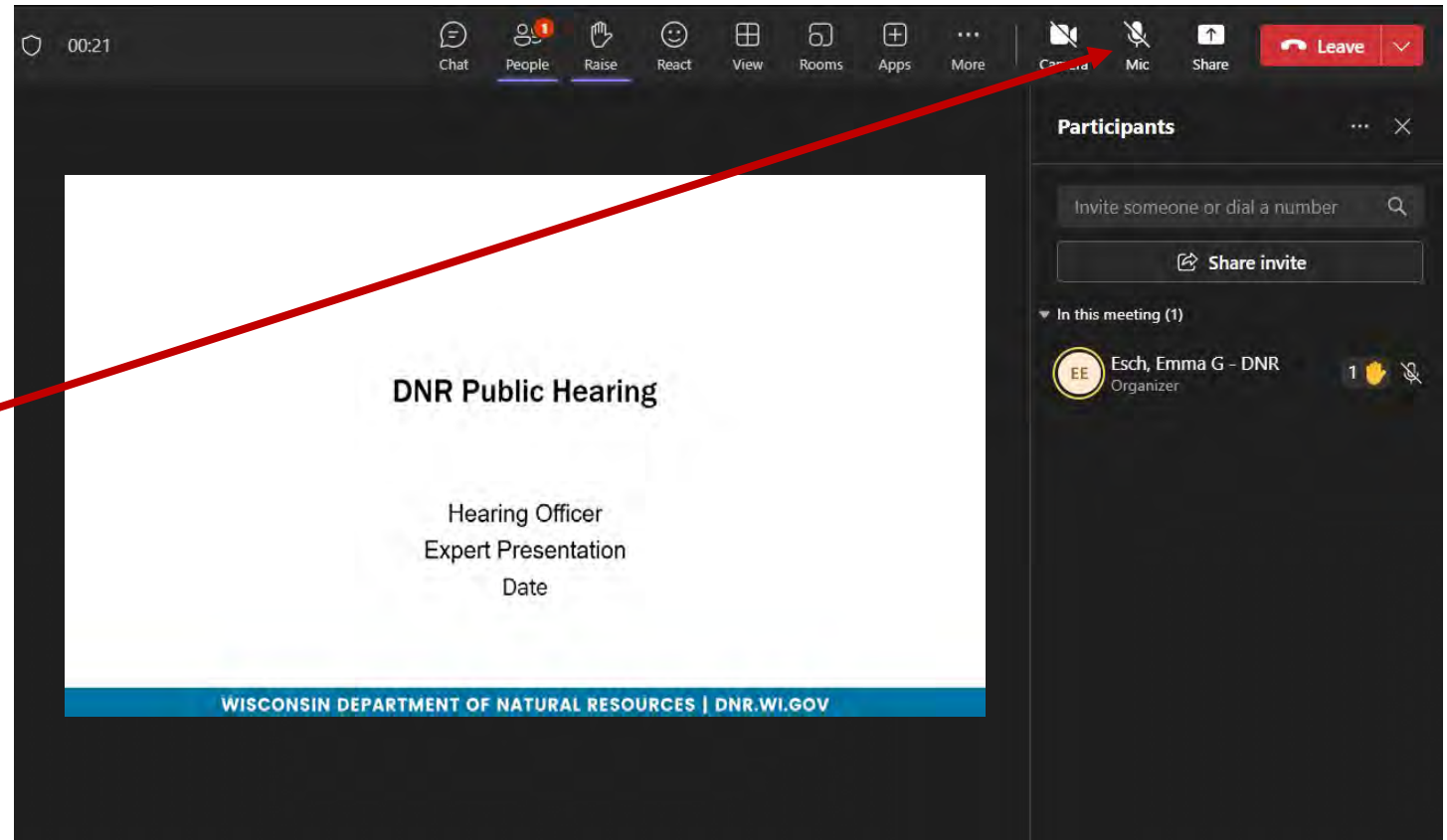
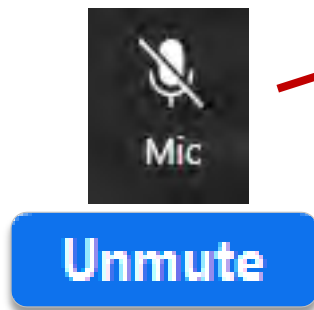
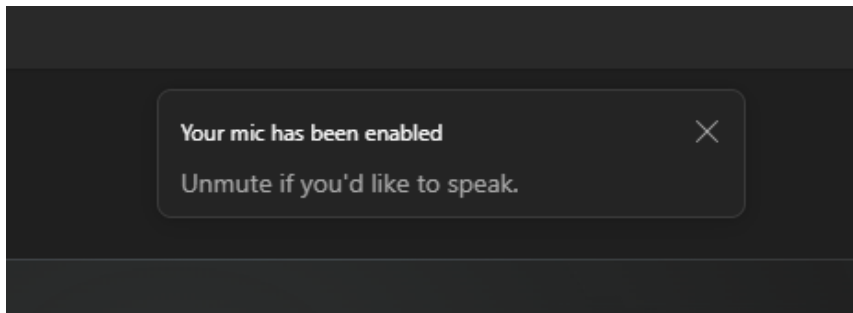
 By phone:
Dial *5 to raise hand.



A "Raised Hand" icon will appear next to your name in the "People" window.

Meeting Logistics (Teams): Unmuting

You should receive a pop-up “*Your mic has been enabled*”, then *click Unmute*.



By phone:

You'll be prompted to unmute by dialing *6.

Oral comments

- Public testimony
 - Please state your name and address for the record
 - Make your statement for the record
 - A written comment of your testimony is also appreciated

Written comments

Comments must be received on or before January 2, 2025. Written comments may be submitted by U.S. mail or email and will have the same weight and effect as oral statements presented today.

Written comments and any questions should be submitted to:

Attn: Tony Peterson

Department of Natural Resources

141 NW Barstow St. Room 180, Waukesha, WI 53188

(715) 491-8546

anthony.peterson@wisconsin.gov

Documents may be viewed at:

<https://dnr.wisconsin.gov/topic/Waste/Comment.html>

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"WILD WISCONSIN:
OFF THE RECORD"