



**Grand Tower Energy Center
Closed CCR Impoundment
Quarterly Inspection Form**

Date: 9/19/2023
Time: 9:00-10:30
Name: Marshall Arendell
(Inspector)

Weather:

Temperature:

70 deg. F

- Sunny
- Cloudy
- Raining
- Other

Observations:

- Erosion / Gullies
- Cracking / Sloughing
- Ponding / Damp Areas
- No Problems Identified
- Woody Vegetation Growth
- Other

Conditions Limiting Visibility:

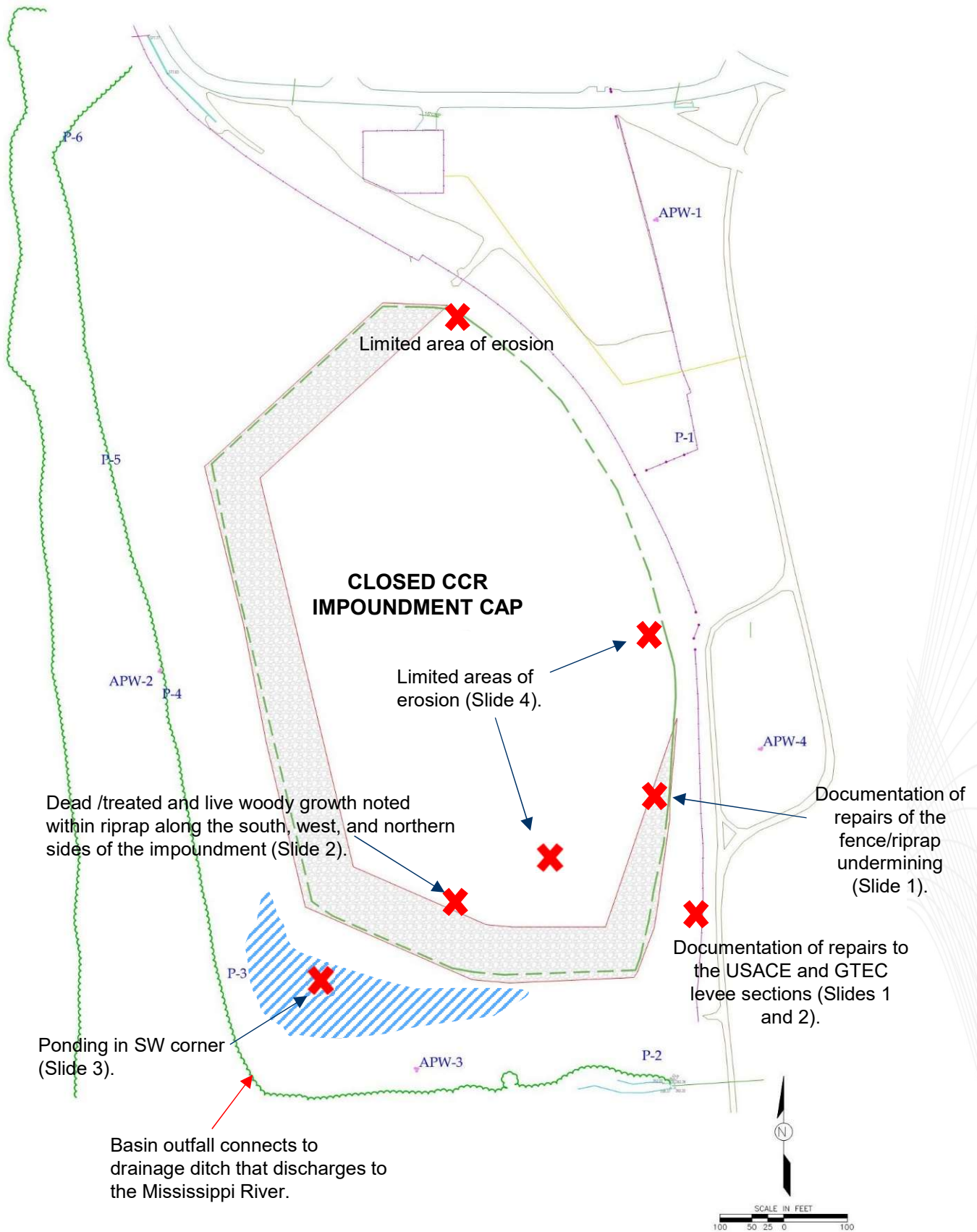
- Snow Cover
- Vegetation
- None
- Other

Observations in Detail Below:

- ERM onsite for the Q3 2023 inspection of the CCR impoundment and groundwater sampling event.
- Repairs to the United States Army Corps of Engineers (USACE) and GTEC levees continue to hold, and successful re-vegetation of levee face continues to progress.
- Erosion noted across north, west, and southern CCR impoundment cap faces up to 9" deep.
- Ponding continues to be noted in the SW corner of basin around the toe of the slope of the impoundment cap near the outfall.
- The impoundment cap was mowed during Q2 2023 and found to be in generally good condition.
- The inspector recommends continued treatment of woody growth within the riprap on the impoundment cap with appropriate management methods such as brushhogging, mowing, cutting, herbicide applications, and the filling of the erosional channels noted above.

Please see observation locations on figure on the following page.

Observation Locations Map



Grand Tower Energy Center Q3 2023 Closed CCR Impoundment Cap Inspection

Repairs to the Fenceline and Levee area on the SE Side of Closed CCR Impoundment Cap



Facing north along the repaired fence-line, riprap, and levee area. Levee has successfully revegetated since repairs were initiated during 2022.

Woody Growth Observations



September 19th, 2023, at 09:45:41 AM

Facing west towards impoundment cap.

Dead/herbicide treated woody vegetation noted within riprap up to 1" diameter. Limited amount of live woody growth remains.

Facing north towards impoundment cap.



September 19th, 2023, at 08:34:14 AM



September 19th, 2023, at 10:02:40 AM

Southern portion of the impoundment cap in foreground facing the southern berm and pond.

Ponding in the SW Corner of Site Basin Near the Outfall



Ponded area in southwest corner of basin near the outfall, as viewed from mowed impoundment cap.

Note: Mississippi River backwater enters the GTEC CCR Impoundment Basin when the river level gage operated by the U.S. Army Corps of Engineers at Grand Tower, IL reaches a stage of approximately 27 ft.

Erosional Channel Observations



Erosion facing southwest
from southern side of
impoundment cap.