

Memorandum

From: Rob Zuber, DRMS

To: M-2023-025 File

Date: September 5, 2024

Re: Important commitments by the operator of the Bernhardt Sand and Gravel Pit

W.W. Clyde & Co. (W.W. Clyde) has committed to comply with all elements of the permit, including the mining and reclamation plans, exhibits related to hydrology and wildlife protection, and the other exhibits. Some particular items are worth highlighting, and they are listed in this memorandum.

Entrance road from WCR 46

- Improvements to roads outside of the permit area, for the purposes of mining, have not been authorized with this permit.

Protection of oil and gas facilities

- A minimum 200-foot setback from oil and gas infrastructure will be maintained prior to obtaining agreements with owners.
- W.W. Clyde will work with PDC and other companies, as well as the Colorado Energy and Carbon Management Commission (formerly COGCC), to plug abandoned wells.

400-ft setback

- A 400-foot corridor (from the high-water mark of the South Platte River) will be maintained. This will protect the hydrologic balance of the river and preserve a migration corridor for wildlife.

Mining and concurrent reclamation

- The mining face will have a 2H:1V slope. Reclaimed slopes will be 4.5H:1V.
- To maintain slope stability, routine inspections and inspections after major precipitation events will be conducted. Remediation will be conducted as necessary.
- W.W. Clyde commits to a maximum length of 3,000 feet of un-reclaimed slope within the mining operation.
- For the backfill material, 95 percent compaction will be achieved to ensure integrity of the reclaimed slopes.
- No structural fill will be imported from outside the permit area.

Wildlife commitments

- During the first year of operations, no ground disturbance will be conducted from December 1 to April 30.
- For non-raptor birds, prior to vegetation removal a nest survey should be completed to ensure that active nests are not disturbed.
- W.W. Clyde committed to conducting another raptor survey prior to mobilization of earth-moving equipment or excavation at the site.
- Results of the raptor survey must be submitted 30 days or more prior to mobilization of earth-moving equipment or excavation.
- Based on the results of the raptor survey and other bird survey, W.W. Clyde will coordinate with the Division and Colorado Parks and Wildlife and update the Mining Plan, as appropriate, to limit wildlife impacts.
- An egress ramp for wildlife will be maintained with a slope of 5H:1V.
- If new fencing is constructed, it will be wildlife friendly.
- Where possible, irregular shorelines shall be constructed around the reservoir.

Substitute Water Supply Plan and well permit

- W.W. Clyde will obtain an approved Substitute Water Supply Plan (SWSP) and well permit from the Division of Water Resources prior to exposing groundwater. The SWSP will be updated annually.

Water quality

- A CDPS permit will be obtained from the Water Quality Control Division at the Colorado Department of Public Health & Environment prior to discharging any water from the site. This permit will be kept current and amended as necessary to ensure that any water discharged from the site will meet the permitted water quality standards.
- To protect water quality in the river, Best Management Practices will be installed, inspected, and maintained.
- Wetlands will not be impacted.

Slurry wall and groundwater drain design

- A detailed report must be submitted to the Division, as part of a technical revision (TR), and the TR must be approved, prior to construction of these structures.
- The design and construction of the slurry wall will meet the standards of the State Engineer's Office.

Groundwater protection

- W.W. Clyde will comply with the groundwater sampling and analysis plan for both water levels and water quality.
- Groundwater data and analysis will be submitted to the Division in quarterly reports.
- Mitigation measures for impacts on nearby wells will be implemented, as necessary.
- Three monitoring wells will be points of compliance, and data from these wells will be compared to the WQCC's Regulation 41 for compliance.

Long-term plan for monitoring wells and other similar features

- Other than monitoring wells, no auger holes, excavations, or shafts will be left on the property.
- Monitor wells will remain on the property so the end user may continue to monitor levels of the groundwater elevations.

Soil management

- Topsoil must be stripped and salvaged from all disturbed areas, including the areas where overburden material will be stockpiled. Approximately, the top six inches of soil is considered topsoil.
- Soil stockpiles need to be stabilized.
- Topsoil piles should not exceed 20 feet in height.
- Topsoil will be handled as little as possible. Moving a topsoil stockpile requires submittal and approval of a Technical Revision (TR).
- Stockpiles will be placed parallel to the floodplain to limit impacts.

Vegetation and Weed management

- All disturbed and non-disturbed lands within the permit area will be routinely inspected and maintained to prevent the establishment and spread of noxious weeds. Mechanical control is the priority before chemical methods.
- Reclamation seeding will incorporate native species.

Processing equipment

- All processing equipment shall be mobile and temporary without fixed foundations.

Stormwater management

- No constructed ponds, ditches, or other structures have been approved by the Division for locations outside of the permit boundary.