Caerus WASHCO
Operator # 86610
Church #2
Remediation # 4301
Pit Facility ID # 117560
SENE Sec 25 Township 3S Range 51W
Supplemental Form 27 – Site Investigation and Remediation Workplan

Remediation Plan

Please see Document # 402348217 and associated attachments for details of inorganic concentrations exceeding COGCC Table 910-1 for the Church# 2 historic pit. The site was sampled at 5 locations at 0-6" and 18-24" below ground surface on 3/11/2020 within the original disturbance area. The pH concentrations from the 5 sample locations from the historic pit site were determined to range between 8.32 and 9.83. Sample locations SS1, SS2, SS3, and SS5 at both depths exceeded the allowable concentrations for pH. The adjacent soils to the west of the historic pit were sampled at 2 locations from 0-6" and 18-24" and concentrations were between 7.40 and 8.34. The SAR concentrations from the former pit site ranged from 2.17 to 17.5 and exceedances were only present at locations SS1, SS2, & SS3 from 18-24" in depth. The adjacent soils west of the historic pit SAR concentrations were from 0.0681 to 0.138 (see Figure 2).

Caerus proposes to blend soils from the top 3 feet of the former pit disturbance area, approximately 1.52 acres in size, with soils from the land immediately adjacent and west of the historic pit. Background samples BS1 and BS2 were collected from this area and soils are conducive for successful remediation though blending. A site map has been attached for location and site details (see Figure 1). This process will lower pH and SAR concentrations and allow for future successful reclamation of the site and for the site to be compliant with COGCC Table 910-1. The entire disturbed area will require stormwater BMPs prior to beginning work. The property landowner is Caerus and the proposed disturbance area is 5.64 acres.

Reclamation Plan

After analytical results have determined successful remediation of the inorganic constituents the site will be leveled and compacted in the lower 2 feet to prevent subsidence. Reclaimed topographic conditions should be similar to pre-disturbance conditions. The reclaimed landscape will blend with the surrounding contours, historic hydrology will be restored and erosion control BMPs will be installed to prevent stormwater discharges from the disturbance. The upper foot of soil will be disked to allow air movement and water infiltration in the soil and plant growth to occur. The site will be reseeded with a dryland pasture grass, nutrients will be added to promote growth and the disturbance will be stabilized.

Seed will be certified weed free. Seed weight will be calculated in pounds per acre. Seed tags need to be submitted with the seed report form. Seeding may need to be repeated until successful. Caerus will monitor and ensure successful vegetation establishment.

Management of Invasive Plants

Through annual site visits, noxious and invasive weeds will be identified, inventoried and treated by licensed contracted herbicide applicators or mechanically removed. Caerus will monitor, control and reduce the spread of noxious and invasive weed species within Caerus's disturbances as determine in the Colorado Noxious Weed Act and rules pertaining to the administration and enforcement of the Colorado Noxious Weed Act.

Reclamation Monitoring and Reporting

State regulations and Caerus' Best Management Practices require routine site visits and active management over construction activities, along with annual reclamation reporting requirements. For compliance with Colorado Department of Public Health and Environment (CDPHE) Stormwater rules, the location will be visited every 14 days during active construction and monthly thereafter until the vegetation has reached 70% cover of pre-disturbance levels, with the focus on stabilizing the site post-construction. Annual inspections (at a minimum), will then take place on the location, for compliance with COGCC, until the location reaches 80% pre-existing vegetative cover. Focus for this phase will be to further stabilize soils, preventing erosion and site degradation, and to monitor for and treat invasive species.