

COMMUNITY & ENVIRONMENTAL DEFENSE SERVICES

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While our client was delighted with the victory we won, they wished to be anonymous

RE: Equitable Solutions - Robert Collins Company, LLC Mining Proposal

Dear [REDACTED]

As requested by you and your neighbors, CEDS has completed an initial analysis of options for resolving concerns regarding the mining operation proposed by the Robert Collins Company, LLC, for the 118 acre property (TMS#116-00-00-011). These options are based upon our Equitable Solutions approach (ceds.org/eqs.html) where we first verify potential impacts then seek ways of eliminating each while allowing applicants to achieve their goals.

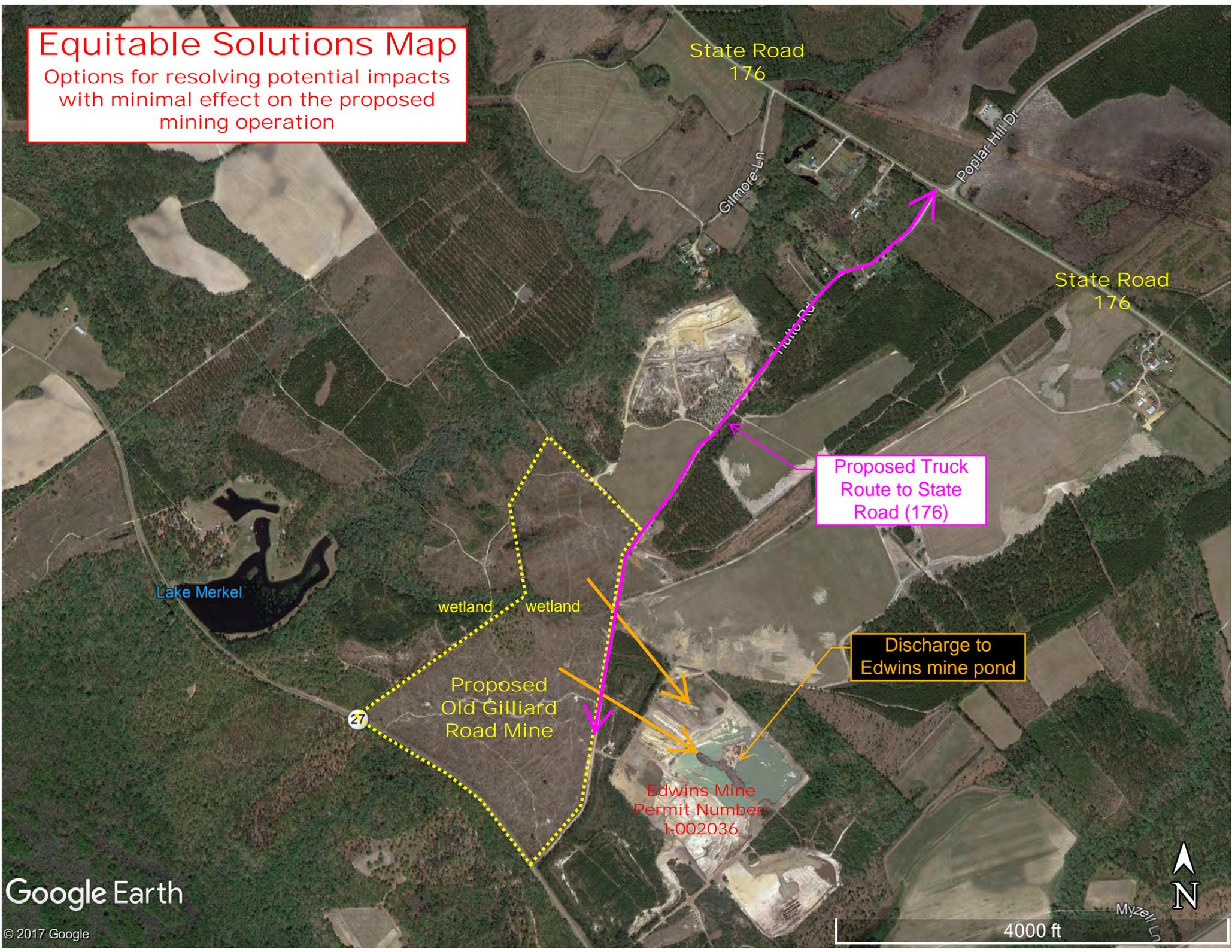
I am delighted to report that we have been successful with regard to the Robert Collins Company, LLC mining proposal. The suggested options are shown on the aerial photo on the next page. These options should be viewed as tentative. It is not uncommon for applicants to suggest other, equally effective solutions that are more compatible with their project goals.

Resolving Sediment Impacts to Lake Merkel, Intervening Wetlands & Four Hole Swamp

The applicant has proposed disturbing 85 acres during the mining operation. This will create the potential for substantial soil erosion and sediment release to the wetlands located on the site, then to Lake Merkel and Four Hole Swamp. While project plans do show a proposed sediment basin and other measures, these can only remove 30% to 70% of the eroded soil entrained in runoff. The clays and fine silts discharged or pumped from the basin contain the bulk of the nutrients and other pollutants. These particle sizes are also the most harmful to aquatic life. Though maximizing the use of mulch, grass and other stabilization measures will reduce erosion and sediment pollution, the potential impact will not be eliminated.

Equitable Solutions Map

Options for resolving potential impacts with minimal effect on the proposed mining operation



State Road 176

Gilmore Ln

Poplar Hill Dr

State Road 176

Proposed Truck Route to State Road (176)

Lake Merkel

wetland wetland

Proposed Old Gilliard Road Mine

Discharge to Edwins mine pond

Edwins Mine Permit Number: 1-002036

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Google Earth

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4000 ft



Myzell Ln

The applicant's Mine Plan shows that pumped water from the sediment basin and Segments 11-12 will be discharged to the onsite wetland. From there the discharge would pass through offsite wetlands then into Lake Merkel and Four Hole Swamp. As an added safeguard for all of these sensitive resources, I suggest directing both pumped water and stormwater discharges to the large impoundment located on the Edwins mining site a short distance to the east as shown in the Equitable Solutions Map on the next page.

Resolving Lake Merkel Dam Breach Concerns

In 2015 and 2016 hurricanes produced floodwater flows that resulted in the failure of a large number of older earthen dams throughout South Carolina. While the Lake Merkel dam survived these events, there is well-founded concern regarding watershed activities which may increase flood flows. The applicants proposed mining operation does have the potential to increase flood flows.

Soils exposed during mining would have a greater runoff volume compared to current site conditions. Furthermore, the applicant's reclamation plan shows that three lakes with a combined surface area of 84 acres will remain after mining is completed. Should one or more of the three dam spillways fail it could send a massive amount of floodwaters down into Lake Merkel, posing a heightened threat of dam failure.

Instead, I suggest that the principal and emergency spillways for all post-mining lakes be designed to direct discharges to the large impoundment on the Edwins mine to the east. This impoundment is just a couple of years old while the Lake Merkel dam dates from 1955. The Edwins impoundment would have been built to modern standards and is far more likely to withstand a breach of the applicant's three proposed lakes when compared to the 62-year old Lake Merkel dam.

Truck Traffic

The proposed mining operation has the potential to generate a considerable amount of truck traffic. A number of studies have shown that an increase in the volume of heavy, diesel truck traffic has been associated with adverse health effects and property value loss.

The applicant has proposed routing truck traffic onto Old Gilliard Road (Route 27). Consideration should be given instead to routing mining truck traffic north along Mose Wilson Lane (aka Hutto Road) to State Road (Route 176). There's an existing mining operation just to the north labeled DOT Mine on the Equitable Solutions Map.

According to recent aerial photos mining on this site expanded in the last two years. Presumably truck traffic from the DOT Mine is already traveling north to State Road via Mose Wilson Lane (aka Hutto Road).

Noise & Visual Impacts

The homes surrounding Lake Merkel are within a half-mile of the proposed mining operation. The existing land surface of the mine site is about 25 feet higher than your home and that of your neighbors. The application indicates the site will be excavated to a depth of 20 feet so as mining progresses elevations may lower considerably.

You and your neighbors could be exposed to considerable noise from the mining operation. Also, if mining activity becomes visible from your homes then it could disrupt the tranquility you presently enjoy and adversely affect property value.

To their credit, the applicant has proposed berms and perimeter landscaping. There is a possibility that these measures will resolve both noise and viewshed concerns. I suggest asking the applicant to provide you with sightline and noise modeling analyses so we can assess actual impacts. Separate sightlines and noise analyses should be provided for each phase of mining.

Should you have any questions please contact me at 410-654-3021 or Rklein@ceds.org.

Sincerely,



Richard D. Klein