

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
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ATLANTA, GEORGIA 30303-8960

APR - 2 2010

Lieutenant Colonel Anthony P. Mitchell
District Engineer
Nashville District Corps of Engineers
Attn: Marty Tyree (Regulatory Division)
3701 Bell Road
Nashville, Tennessee 37214

Subject: Long Creek/Crane Central Mine; Application # LRN-200901118, Public Notice # 10-05

Dear Colonel Mitchell:

The U.S. Environmental Protection Agency (EPA), Region 4, has reviewed Public Notice (PN) number 10-05 (Application # LRN-200901118), dated February 8, 2010, for Long Creek/Crane Central Mine proposed by GTM Energy Partners, LLC, as well as information provided with an earlier application, at the site visit of January 13, 2010, and via other communications. The proposal is seeking authorization under an Individual Permit (IP) to develop a surface coal mining operation on a 448 acre site in Jackson County, Alabama. The PN describes impacts to 2,226 linear feet of streams and 11.2 acres of wetlands resulting from surface mining cuts and construction of sediment basins. This project was originally proposed under Nationwide Permit #21, but involves impacts we believe to be more than minimal, as indicated in our letter of December 10, 2009, which recommended an IP. We appreciate that this project has now been re-proposed as an IP, but have remaining concerns about the project that were expressed in our letter of March 10, 2010. We also need the additional information requested in that letter to fully evaluate the proposed activities.

It has not been clearly established that adequate avoidance and minimization has been achieved, with selection of the Least Environmentally Damaging Practicable Alternative in accordance with the 404(b)(1) Guidelines. All appropriate options to avoid and minimize impacts to aquatic resources need to be considered, and there may be additional opportunities to minimize impacts to waters of the U.S., particularly by avoiding the larger wetlands areas still remaining within project boundaries. We have requested additional baseline data on water quality from active operations and/or post-mining monitoring from similar surface mining operations to demonstrate adherence to the antidegradation stipulation at 40 CFR Section 230.10(c), and to support the applicant's prediction that effects on water quality will be minimal and short-term, as well as any information on adaptive management plans for dealing with impacts that do present water quality degradation concerns.

Finally, the PN indicates that the applicant intends to provide a detailed compensatory mitigation plan beyond the conceptual approach provided to date. Once avoidance and

minimization have been addressed, we will look for a complete mitigation plan so that the project can be fully reviewed. There was one element of the PN that I do want to mention in this response, specifically the potential contingency of converting abandoned drainage and stormwater control structures to wetlands. Given that drainage features are generally not designed for natural channel morphology and ecological function, and that treatment features may have water quality issues, any such contingency would need documented up-front planning to ensure appropriateness for compensatory mitigation purposes and providing ecological lift.

Based on the above observations, EPA finds that the project does not comply with the 404(b)(1) Guidelines and will have substantial and unacceptable adverse impacts on aquatic resources of national importance. Therefore, we recommend denial of the project, as currently proposed. Additional information as described above would allow for a more complete evaluation of the proposed activities. This letter follows the field level procedures outlined in the August 1992 Memorandum of Agreement between the EPA and the Department of the Army, Part IV, paragraph 3(b) regarding Section 404(q) of the Clean Water Act.

Thank you for the opportunity to comment on this PN. If you have any questions regarding these comments, please contact Rosemary Hall (Hall.Rosemary@epa.gov or 404-562-9846) or Duncan Powell (Powell.Duncan@epa.gov or 404-562-9258).

Sincerely,



A. Stanley Meiburg
Acting Regional Administrator

cc: Alabama Historical Commission, Montgomery – Elizabeth Brown
US Fish & Wildlife Service, Daphne – William Pearson
Alabama Department of Conservation & Natural Resources, Montgomery – Matthew Marshall
Alabama Department of Environmental Management, Montgomery – Brandy Bowen, Eric Sanderson
Alabama Surface Mining Commission, Jasper – Randall Johnson
US Army Corps of Engineers, Nashville – Tammy Fudge
McGehee Engineering, Jasper – L. Stephen Blankenship

**Non-ECP
Surface Coal Mining Project under NWP21
18 March 2010**

**Long Creek/Crane Central Mine (PN 200901118)
Long Creek, Jackson County, AL**

Issue: GTM Energy Partners, LLC, has proposed surface coal mining activities as Long Creek/Crane Central Mine (not among the 79 ECP permits) in northeast Alabama. General concerns include extent of impacts to streams and wetlands, the possibility of elevated conductivity (although conditions in Alabama are believed to be different from those of headwater streams in Appalachia), and adequacy of the mitigation plan.

Project Background: The proposed project is for surface coal mining and was previously submitted under Nationwide Permit 21. After discussions among EPA, Nashville District, the applicant and their agent at a site visit on 13 January 2010, the applicant has applied for an individual permit (IP).

The applicant originally submitted a proposed project to Nashville District with much greater impacts to 46.66 acres of jurisdictional wetlands, and 7,256 lf of streams. These were reduced in the course of initial discussions with the Corps to the following:

Direct Impacts: 2,226 linear feet of streams and 11.2 acres of wetlands would be impacted by mine-through surface cuts and construction of sediment basins.

1,669 lf of ephemeral streams
557 lf of intermittent streams
11.2 acres of wetlands

Watershed condition/WQ: Receiving waters include Long Creek and Ladd Creek, neither of which is 303(d) impaired or has any TMDL. An earlier mitigation plan states that the site has been subject to previous silvicultural activities.

Conductivity: The earlier mitigation plan predicts that water quality will be impacted as a result of conductivity elevated by the proposed activities, but that it will be minimal and short-term. Some pre-mine monitoring data from the project site and a nearby mine have been submitted by the applicant (21 Jan 2010) showing background conductivity below 200 μ S/cm, but they indicate that no data is available for post-mining conditions. Sampling of post-mining conditions at a similar mine operated by a different applicant in the area (Flat Rock Mine #2 operated by D&E Mining) has shown low conductivity, but it is not certain whether this can be relied on as predictive for operations managed by other applicants. Whereas conductivity in this area may not be as important a stressor as in northern Appalachian mountain headwaters due to fundamental differences between these respective ecosystems (e.g., local geochemistry), baseline data is nevertheless important for establishing normal values and reducing uncertainty.

NPDES: NPDES permit (#AL0080071) was issued October 15, 2009 with limited monitoring requirements for Fe, Mn, Sb, TSS, pH, flow.

Adequacy of mitigation plan:

- Some avoidance and minimization has already been achieved, as evidenced in references to a previous project iteration with impacts to >7,000 lf of stream and >40 acres of wetlands. Further avoidance and minimization may be possible by avoiding some wetland parcels (particularly W2, which is 3.51 acres, and W8, which is 4.37 acres), with avoidance of W2 likely more logistically feasible. Wetlands present are primarily scrub-shrub with previous impacts from timbering.

- Direct impacts to **557 lf of intermittent streams and 1669 lf of ephemeral streams** would be compensated for by post-mine-through creation of streams on-site. Whereas the general preference is for purchase of credits for a mitigation bank (due to greater likelihood of success) within the watershed, there is limited availability of stream credits in northeast Alabama, and on-site creation of streams to substitute for those removed by mine-through activities may be an acceptable means of restoring the local landscape. However, there is risk that hydrology, vegetation, and ecological communities cannot be successfully re-established. Adaptive management plans should be presented to address this uncertainty. One contingency mentioned—the possibility of converting drainage features and stormwater control structures to wetlands as resource creation for mitigation—is questionable, given that drainage features generally do not have natural morphology and treatment basins may present water quality concerns. The mitigation plan is currently a conceptual description that needs to be expanded for the application to be considered complete.

Proposed Resolution:

Avoidance and Minimization: As required by Alabama state law, the perennial streams in the area will not be impacted. The possibility of further avoidance and minimization appears possible by avoiding one or two additional wetland areas.

Water Quality: Some pre-mining baseline data have been provided from this site and another that show conductivity less than 200 $\mu\text{S}/\text{cm}$, but additional post-mining or active-mining data from similar operations should be provided by the applicant. The applicant has had multiple other NPDES permits and should be able to provide additional data, likely including post-mining, but the similarity of those sites to the currently proposed project is unknown.

Cumulative Effects (if applicable): The cumulative effects of elevated conductivity on biota are unknown.

Mitigation: A complete mitigation plan should be submitted with details on baseline conditions to characterize the resources, performance standards, site protection instrument(s), contingency planning, monitoring, and financial assurances. Monitoring of any on-site compensatory mitigation should be conducted to verify successful establishment of appropriate form and ecological function. The potential contingency for creating resources from drainage and stormwater treatment features needs clear documentation of planning to demonstrate how these features could provide ecological lift.

Remaining Concerns: Primary concerns include the extent of direct impacts to streams, uncertainties concerning conductivity, and adequacy of the mitigation plan, as **described above**.

Avoidance and Minimization (if applicable):

Water Quality (if applicable):

Cumulative Effects (if applicable):

Mitigation (if applicable):