

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4

ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

JUL 29 2010

Lt. Colonel Anthony P. Mitchell
District Engineer
U.S. Army Corps of Engineers
Nashville District
Attn: Marty Tyree
3701 Bell Road
Nashville, Tennessee 37214-2660

Subject: LRN 2007-1641, Jamieson Construction Company
Neely Creek, Pulaski County, Kentucky.

Dear Lt. Colonel Mitchell:

The Environmental Protection Agency (EPA), Region 4, has reviewed the proposed Individual Permit (IP) application for the Jamieson Construction Company, application number LRN 200701641. The applicant is seeking authorization under the IP for deposition of fill into 814 linear feet (lf) in streams that flow into unnamed tributaries to Neely's Creek.

EPA applauds the Army Corps of Engineers (Corps) for considering this project under a Section 404 IP due to the potential impacts associated with the potential to create or contribute to an exceedance of water quality standards for sediment and conductivity. In this case, the activities include fill material to be deposited into Neely Creek and its unnamed tributary, and the placement of an in-stream sediment pond below the toe of the hollow fill. The IP will function as a better permitting vehicle to address issues of concern including, avoidance and minimization, water quality, compensatory mitigation, cumulative impacts, environmental justice (EJ), and endangered species. EPA recommends a watershed approach for the applicant to address these issues on at least a Hydrologic Unit Code (HUC) 12 digit watershed.

We outline our site specific concerns regarding the authorization of this permit below:

Avoidance and Minimization

40 CFR § 230.10(a), states, "no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences." These recommendations for an analysis of alternatives are to meet a defined and scaled purpose. EPA believes that alternatives to the discharge of fill material do exist.

The applicant should conduct a thorough alternatives analysis and incorporate avoidance and minimization measures. The analysis should include, at a minimum, surface area disturbance, disposal location, drainage area, impacts, monitoring data, watershed conditions both at the site and downstream of the discharge point(s) and geological information. They should address the linear extent of streams impacted and reduce drainage through spoil and dispose of spoil materials on uplands such that they do not impact waters of the United States. The Kentucky Department of Mine Permits has published a Regulatory Advisory Memorandum 145, which provides the best available technology to determine if the fill placement optimization process results in the least environmental damaging practicable alternative. Without this process applied to this permit application a viable practicable alternative cannot be ruled out.

Water Quality

As described in the Clean Water Act (CWA) Section 404(b)(1) Guidelines (Guidelines), implemented through 40 CFR §230.10(a)(3), when activities associated with proposed impacts to special aquatic sites are not water-dependent, practicable alternatives that do not involve special aquatic sites are presumed to be available.

According to 40 CFR §230.10(b), no discharge may be authorized if it causes or contributes to violations of any applicable State water quality standard or violates any applicable toxic effluent standard; 40 CFR §230.10(c) further prohibits discharges that would cause or contribute to significant degradation of waters of the United States. 40 CFR §230.10(b) further states that no discharge may be permitted if it jeopardizes the continued existence of species listed as endangered or threatened, or may destroy or adversely impact critical habitat for those species and EPA recommends that the applicant complete a site survey to determine the potential impacts to endangered and threatened species.

Historical documentation for in-stream specific conductivity (SC) levels in upper Appalachia indicates that for the permit to address narrative water quality concerns a numeric level for SC should not exceed 500 μ S. The CWA 402 and 404 permits work in tandem and when the 402 permit has been issued without appropriate limits, the 404 permit, in this case the IP, should address water quality conditions to protect water quality and prevent significant degradation. These requirements are accomplished using numeric and narrative water quality criteria to protect existing water quality.

The CWA Guidelines require that no discharge of dredge or fill material shall be permitted if it will cause or contribute, after consideration of disposal site dilutions and dispersion, to an exceedance of any applicable State water quality standard (40 CFR § 230.10(b)) or which will cause or contribute to significant degradation of the waters of the United States (40 CFR § 230.10(c)). The material provided with the permit application does not address these issues in sufficient detail for EPA to review it for consistency with water quality standards. The applicant should provide an analysis prior to authorization and construction that the project will not cause or contribute to

excursion(s) from water quality criteria and/or significant degradation of the water body. The permits should include a monitoring plan that appropriately addresses these issues.

EPA does not believe that a sufficient reasonable potential analysis for SC or Total Dissolved Solids has been conducted in accordance with Section 301(b) (1)(c), of the CWA and 40 CFR §122.4 (a, d, and i) and 40 CFR § 122.44(d) (1). EPA concludes that sufficient evidence exists based on our review of water quality data from other mining projects in eastern Kentucky that it is reasonable to assume that significant water quality degradation will occur absent an site specific analysis demonstrating that discharges from the proposed discharge site will not have a reasonable potential to cause or contribute to a violation of the Kentucky narrative water quality standards and specifically for sediment and SC. Neely's Creek flows into the Cumberland River. The Cumberland River is listed as impaired on the Kentucky Division of Water's (KDOW) Section 303(d) impaired waters list. EPA's concern is that the discharge from the proposed site could increase pollutant loads and cause or contribute to the water quality impairments in the Cumberland River. SC values greater than 500 μS may result in reduction of availability of dilution waters from stream reaches necessary to support a balanced population of indigenous aquatic species. A SC trigger should be included in the permit such that the site does not contribute to existing environmental degradation within the watershed and downstream in the Cumberland River.

Compensatory Mitigation

EPA has reviewed the enclosed mitigation plan. As proposed, the plan does not comply with the Guidelines and 2008 mitigation rule. EPA's concern is that the current proposed permit is inconsistent and has not explored all of the options available. Therefore, if additional avoidance and minimization cannot be achieved through off-site spoil disposal thereby increasing the success of mitigation, additional mitigation should be required to compensate for the loss of the aquatic systems. The applicant should be requested to provide long term protection mechanisms for consistency with the 2008 mitigation rule.

EPA recommends that the mitigation have a 50 percent success rate and 5-year maturity and that the plan contain detailed success criteria. For this reason the plan is incomplete. Depending on the flow velocity and the stream geology within the natural flood plain the mitigation proposal has the potential to increase downstream erosion. This, in turn, will decrease the downstream water quality. Natural sloping of the stream bank with native vegetation to support the bank is mentioned in the mitigation plan, however, the plan is not specific enough.

Cumulative Effects

The cumulative impact analysis should address past, present, and foreseeable future impacts. To accomplish this EPA recommends an assessment at the watershed scale HUC 12. The HUC 12 watershed map provides greater analysis capability for natural resources than the HUC 8. The proposed project is located in the HUC 12 (0701)

and falls within Ecoregion 69. The proposed project is located in the headwaters of the Cumberland River. SC parameters in the unnamed tributary(s) of Neely's Creek are presently unknown and EPA is concerned that the project as presently proposed would decrease the water quality conditions in Neely's Creek. These creeks are critical to supporting the existing state water quality standards in the Cumberland River.

EPA requests that the permit be held in abeyance until the cumulative impact analysis is complete and the Corps has made a determination that the proposed project will not have an unacceptable adverse impact either individually or in combination with known and/or probable impacts of other activities affecting the ecosystems of concern. Should a permit be issued then it should be conditioned to include in-stream chemical, physical and biological monitoring, together with the remedial actions required, to ensure that further cumulative effects are sufficiently monitored and avoided.

Environmental Justice

The requirements of Executive Order (E.O.) 12898 and the Presidential Memorandum accompanying it must be addressed appropriately in federal action such as federal permitting under 404 of the CWA and the National Environmental Policy Act. Under E.O. 12898, "each Federal agency shall make achieving (EJ) part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." EPA would encourage the District to include EJ as part of this permit's review. Residences may be affected by changes in ground water (drinking water wells), air quality (particulate matter), noise, vibrations, and increased traffic. EPA is also concerned that the Pre-discharge Notification will not provide the EJ community with a chance to review and comment. One way to achieve the President's Executive Order is to provide open communication to the public and the IP permit is a better vehicle to achieve this goal. Where applicable Geographical Information System demographics maps specific for EJ issues and epidemiological maps should be used to address the impact that the proposed project would have on disadvantaged populations within the permit site and downstream from the site. Review of the application did not display any EJ survey maps or whether the EJ issue was properly addressed. For this reason EPA would request that the applicant provide this information and the District should ensure that the EJ issues have been properly addressed, prior to the issuance of any permit.

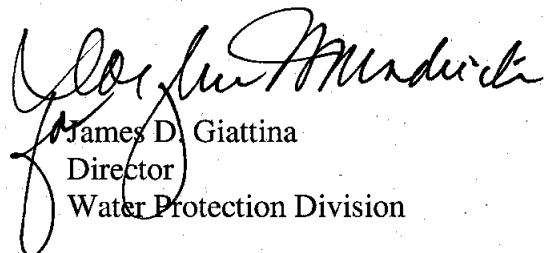
Conclusion

EPA feels that the application package presented is not complete and requires more thought be directed to the issues in reference to project purpose, avoidance and minimization, water quality, compensatory mitigation, cumulative impacts, and EJ impacts of the proposed project. Given that the unnamed tributaries and Neely's Creek would be impacted, that in-stream treatment pond(s) would be used, that the project is covered under a general 402 Kentucky Pollutant Discharge Elimination System (KPDES)

permit, and that the potential for degradation of water quality may occur, it appears that the proposed activities' environmental impact will not be minimal.

Thank you for the opportunity to comment on this permit application. If you have any questions regarding these comments, please contact Larry Long (long.larry@epa.gov or 404-562-9460) or Duncan Powell (powell.duncan@epa.gov or 404-562-9258).

Sincerely,



James D. Giattina
Director
Water Protection Division

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Concurrence: G:\Wetlands Coastal & Oceans Branch\2 - SMT Surface Mining Team\Coal Mining NON-IAP\2.Kentucky Coal Mine Permits\LRN-2007-1641, Jamieson Construction Company, KDMP 900-0047 IP Comment Ltr. Rv 7

CWilson _____ DPowell _____ PMancui-Ungaro _____ AEllis _____

TWelborn _____ GRicks _____ JGiattina _____