

Clarification of Supporting Reentrained Dust Information for Cooper Ridge, OSMRE Permit 3270

Introduction:

This report is a summary of the findings used to clarify the analysis pertaining to potential reentrained dust impacts from the Cooper Ridge Surface Mine, OSMRE permit 3270. These findings have been addressed in the Environmental Assessment (EA) for this project and supporting documentation. This clarification narrative is provided to summarize a determination of the Finding of No Significant Impact.

Findings:

- Coal will be transported from the permitted site via permitted haulroads and will travel Rock Ridge Creek Road but not directly pass any residence on its route to the Marion Tipple. Once at the tipple, the approved application proposes to transport coal to market via train (EA, Appendix C). This will go past residences in Clairfield, but will not be generating reentrained dust from Rock Creek Ridge Road (Figure 1 below).
 - It is foreseeable that the permittee could purchase or sell a small amount of coal for this project to meet market demands and involve travel to/from the Marion Tipple via Rock Creek Ridge Road. Past experience indicates purchase/sale of coal to meet market conditions has occurred on other Kopper Glo permits. This demand is uncertain, not identified in the application, and is not known with any degree of certainty at permit issuance. Peripheral coal sales are not expected to be a major part of this permitting action as a different coal seam will be mined than previous permits and the coal is anticipated, based on core samples, to be of a sufficient quality to meet market demand and contractual standards.

- TN Air Permit Marion Tipple
 - Appendix F of the EA contains the Fugitive Coal Dust Emissions Control Plan for the Marion Tipple. The plan calls for wetting of roads and parking areas, washing and wetting of coal during processing and storage, use of wind barriers, compaction and vegetative cover, records of operation and maintenance of the site, reporting requirements, Particulate Matter (PM) limits per hour and 12 consecutive months, emission limitations for the coal crushers, and shall comply with all federal and state air pollution regulations.

- The permittee has agreed to be subject to limitations in order to remain below the major source applicability threshold for PM-10 pollutant.
- Mitigation measures of the permitted area to minimize dust can be found in Appendix F and Section 4.3.1 of the Environmental Assessment
 - Measures include wetting of the road, speed reduction of vehicle transporting coal to/from the site, using smaller vehicles when appropriate, grading and road maintaining roads, and revegetation of any disturbed areas as quickly as possible.
- Inspections conducted by TDEC, MSHA, and OSMRE implementing their respective statutes and regulations indicate no air quality violations have occurred from the Kopper Glo mining activities in the recent past (EA, Appendix B).
- TDOT Health and Safety report (EA, Appendix F and Section 6.1)
 - TDOT reviewed the health and safety aspects of Rock Creek Ridge Road during evaluation of OSMRE permit 3231. No concerns were noted or found. The current 3270 permit is expected to have less traffic than Kopper Glo SMCRA 3231 due to differences in expected coal haulage patterns on Rock Ridge Creek Road as identified in the SMCRA application.
- Topography (EA, Sections 3.2, 3.3.2)
 - Steep slopes and ridges with low hollows are the typical topographic feature of the permitted and adjacent area. Due to the steep slopes and sinuous ridge lines, dust is not likely to travel to residential areas or churches under prevailing environmental conditions.

Conclusion:

OSMRE thoroughly reviewed the best available science and all information readily available to the agency when considering its EA determination. OSMRE reviewed the effects of fugitive dusts taking into account both the context and intensity of these effects. The context of an action “usually depend on the effects in the locale rather than in the world as a whole” and “both short- and long-term effects are relevant.” 40 CFR 1508.27(a). The intensity of an action “refers to the severity of the impact.” 40 CFR 1508.27(b). OSMRE generally reviews the effects of fugitive dust in the context of the locale because fugitive dust settles and generally has little to no impact on a larger scale (such as the nation or world). OSMRE reviews a number of factors in determining the intensity of an effect. 40 CFR 1508.27(b)(1)-(10):

- OSMRE reviews whether an action “may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.” 40 CFR 1508.27(b)(1). To the extent they occur, the effects of fugitive dust,

as noted in the EA, are adverse, but those effects are mitigated by mitigation measures and/or limited due to topographic and other constraints.

- OSMRE reviews “whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.” 40 CFR 1508.27(b)(10). Based on OSMRE’s review of federal, state, and local laws, review of prior state and local complaints regarding fugitive dust in the area, and discussions with federal, state, and local officials, the permittee has operated prior permits in compliance with all applicable local, state, and federal laws imposed for protection against fugitive dust. *See* 40 CFR 1508.27(b)(10). The Tennessee Department of Environment and Conservation has repeatedly reviewed and rejected a citizen’s complaints regarding fugitive dust in the area. Additionally, the proposed action is factually distinct from prior permits (for which no local, state or federal violations have been issued on the basis of fugitive dust) based on the location of the haul road and intersection with Rock Creek Ridge Road, would cause even less of an effect than these other permits, and does not threaten a violation of any Federal, state, or local law for the effects of fugitive dust. *See id.*
- OSMRE reviews “[u]nique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.” 40 CFR 1508.27(b)(3). The majority of these issues are addressed at the Local Interagency Working Agreement signed by the participating regulatory agencies having influence on SMCRA permit 3270. The LIWA meeting was held on September 17, 2012 and specifically addressed these issues for permit application 3270. As a result of the application review, OSMRE does not expect fugitive dust to have a significant impact on any such areas. The State Historic Preservation Officer concurred in a letter dated January 19, 2010. A 404 permit will be issued by the Army Corp of Engineers (ACOE) should wetlands be disturbed or in-stream affects occur. Prime farmlands do not exist in the permit area. No effects will occur to wild and scenic rivers or ecologically critical areas.
- OSMRE reviews “the degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.” 40 CFR 1508.27(b)(6). The decision on this permit application does not establish a precedent for future actions or represent a decision in principle about a future consideration, all of which will be decided on their own merits.
- OSMRE reviews “the degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or

historical resources.” 40 CFR 1508.27(b)(8). OSMRE does not reasonably expect significant effects on such objects or areas from fugitive dust.

- OSMRE reviews “the degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.” 40 CFR 1508.27(b)(9). OSMRE does not reasonably expect significant effects on such species or associated critical habitat from fugitive dust over the permitted and adjacent areas. This determination is supported by the limiting or mitigating measures mentioned in the EA and clarified here as well as the analysis provided in the Biological Opinion for this project.
- OSMRE reviews “the degree to which the effects on the quality of the human environment are likely to be highly controversial.” 40 CFR 1508.27(b)(4). The effects of fugitive dust have caused minor controversies in the area in the past resulting in an ongoing permit appeal for the effects of fugitive dust from coal haulage from another permit, but the controversy surrounding that permit has been limited in the past to a single individual. *See id.* The effects of fugitive dust in the area have not caused any major controversy for the locale or local or state governments.
- OSMRE reviews “the degree to which the proposed action affects public health or safety.” *See id.* at (b)(2). OSMRE determined that the permitted activity is unlikely to have an effect from reentrained dust on residence(s) or other occupied structures near the proposed action area. Reentrained dust impacts are limited to minimal foreseeable sale of coal to local vendors and sources to meet market conditions and may necessitate coal haulage on Rock Ridge Creek Road (dirt road) past residence(s) or structures in Clairfield and surrounding areas as well as the insubstantial volume of dust that would affect residences or affected structures from the use of Rock Creek Ridge Road to haul coal to the Marion Tipple. The sale of coal by truck is expected to be infrequent and of short duration. Additionally, Kopper Glo has voluntarily watered and maintained Rock Ridge Creek Road in the past to minimize the incremental dust impact created by transport of coal on Rock Creek Ridge Road. However, even if Kopper Glo were to stop watering the Rock Creek Road, the infrequent and short duration of coal trucks would still produce insubstantial amounts of dust.
- OSMRE also considered “the degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.” 40 CFR 1508.27(b)(5). Although some of the science regarding the effects of fugitive dust on human health is uncertain, a degree of certainty exists about the causes and effects of fugitive dust, and, based on mitigation or other limitations discussed in the

Environmental Assessment and the clarifications provided in this document, the best available science supports a finding of no significant impact.

- Finally, OSMRE reviews “whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment.” 40 CFR 1508.27(b)(7). Upon analyzing the aforementioned material found in the permit application and reference material identified in the EA, OSMRE found that the incremental impact from coal trucks passing by an occupied structure does not increase environmental impacts significantly beyond ambient dust levels. Although fugitive dust is a persistent problem for individuals or structures located on any unpaved road, the cumulative effects of fugitive dust from the addition of the number of trucks contemplated in the permit to the traffic of Rock Creek Ridge Road and the cumulative effects of fugitive dust from the permit, when added to the already existing traffic recognized by local and state authorities, are expected to have at most a minor/moderate impact on the locale. Similarly, OSMRE does not expect any significant impact in the locale to drivers or other infrequent users of the area due in parts to their infrequent exposure, limited duration of exposure, the enclosed nature of most modes of transportation, the number of trucks that will use the road over the life of the permit, and the other limiting or mitigating measures mentioned in the EA and clarified here.

Figure 1. Transportation of Coal for Permit 3270

