Rosemont Copper Mine

Objection Review

Objection # (s): 0084-SSSR

Resource Area(s): Soils – General (SOL-1)

Objection Issue:

- 0084-9: The FEIS fails to ensure sufficient soil resources for reclamation at all phases of mine operations.

Remedy Supplied by Objector (if any):

0084-9: Provide a detailed analysis of available soil materials for salvage including a reasonable breakdown by a, b, and c horizons. Include potential undisturbed areas to ensure that it provides a meaningful estimate of what is actually needed for reclamation.

Law, Regulation and/or Policy: General Mining Act of 1872, Multiple Use Mining Act of 1955, 36 CFR 228 Subpart A

Review Team Member Response: Soil resources that are suitable for reclamation is clearly articulated in the FEIS [PR 047511_3, pp. 190-191]. The surface soil will be salvaged on-site and stockpiled for reclamation purposes prior to mining activities. Studies were conducted to ensure natural soil physical and chemical properties were suitable for reclamation from five general areas within the project area FEIS [PR 047511_3, p. 190]. These areas include: north-aspects soils, south-aspect- soils, benches and side-slopes, alluvial terraces and alluvial fans.

Detailed plans for soil salvage are also disclosed in the FEIS [PR 047511_3, pp. 194-195] and outlines site specific procedures for when, where and how soil material will be managed for the salvage operations in support of the vegetation success. The handling and management of the soil salvage stockpiles to prevent erosion reduce compaction and maintaining the appropriate drainage is also discussed in the FEIS [PR 047511_3, p. 195]. No mechanical manipulation of the salvaged soil or creating soil by crushing waste rock is proposed. Almost all slopes would receive a cover of soil or a mixture of soil and rock cover for purposes of vegetation [PR 047511_3, p. 207]. Total soil salvage volumes by alternative are discussed in the FEIS [PR 047511_3, p. 212].

The total amount of salvage soil material needed for reclamation activities will depend on the final soil cover requirements, which will be determined in the final reclamation and closure plan. Preliminary estimates of the total cubic yards of material needed for vegetation, sufficient soil salvage material would be available to meet the expected reclamation needs for all alternatives except for the Scholefield-McCleary Alternative [PR 047511_3, p. 213].

Recommended Remedy by Review Team Member (if any): The remedy suggested by the objector is not warranted. No remedy is required.

Review Team Member: Wayne Robbie, Ecosystem Analysis and Planning/Watershed & Air.

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Objection Review

Objection # (s): 0091-PimaCounty

Resource Area(s): Soils – Effects (SOL-5)

Objection Issue:

- 0091-15: The method used to estimate erosion is not appropriate to evaluate the impact of mining alternatives (as determined by the developers of the methods themselves) and is far below industry standards.

Remedy Supplied by Objector (if any): None

Law, Regulation and/or Policy: Clean Water Act

Review Team Member Response:

The sediment yield analysis changed from the DEIS to the FEIS and now includes the evaluation of two assessments [PR 047511_3, p. 444]. The two assessments include the sediment yield model and a new geomorphology analysis. The expected changes in sediment yield from the project areas were modeled using the 1968 Pacific Southwest Inter-Agency Committee (PSIAC) method [PR 047511_3, p. 446]. The potential for downstream scour or aggradation caused by changes to upstream sediment yield was assessed qualitatively based upon two independent analysis and field observations. These studies were in conjunction with the sediment yield modeling to analyze impacts on surface water quality. The use of the PSIAC method was validated by providing additional references related to more recent research [PR 015619, p. 2]. Furthermore, the Coronado NF investigated the use of sediment transport models (such as HEC-6) and determined that given the type of system that exists in Barrel Canyon and the difficulty of applying sediment transport models to ephemeral systems running these models would not further inform the decision [PR 047005].

Recommended Remedy by Review Team Member (if any): No remedy required.

Review Team Member: Wayne Robbie, Ecosystem Analysis and Planning/ Watershed & Air.