

# Rosemont Copper Mine

## Objection Review

**Objection # (s):** 0007-BWhitehouse; 0011-CKestler; 0017-MStock; 0025-WBunting; 0047-DDowning; 0049-CDowning; 0051-QLewton; 0056-SWhitehouse; 0060-NMcCoy; 0066-JHoffman; 0071-MAnderson; 0077-DWeinstein; 0084-SSSR; 0095-SantaCruzCounty; 0119-JMeyer;

**Resource Area(s):** Transportation and Access – General (TRA-1)

### Objection Issue:

- 0051-3: ADOT and the USFS either doesn't know or doesn't care about the Federal Motor Carrier Safety Administration's (FMCSA) campaign advising motorists to stay out of a trucks blind spots...Furthermore ADOT and the USFS are ignoring the guidelines set forth by AASHTO for safe highway construction.
- 0007-5: In the Traffic and Safety impacts analysis in chapters 1 and 3, there are new arterial roads added to include some that are actually in our fire district where I am the current Fire Chief. The roads are Wentworth Road, and portions of East Sahuarita Rd. running west off of State Route 83 at mile marker 55.5. Our concerns about nearly 96 (one every 15 minutes per the EIS) heavy truck trips per day on our two lane roads would be dangerous, damaging, and cause a severe increase in emergency dispatches. Our taxpayers, who largely oppose this project would then be forced to help pay for the costs incurred. There also seems to be very vague information on where these trucks are going after they leave the Rosemont site. State Route 82 that is in Santa Cruz County and runs through Sonoita and Patagonia, now seems to be an added route to destinations unknown. These appear to be new additions to the FEIS.
- 0071-1: The EIS has brought up an entirely new and disturbing transportation plan that has had no public input. She specifically mentions (1) that mine related traffic on SR 83 (as described in the DEIS) would increase the need for helicopter medical evacuation from Sonoita and Patagonia; (2) the expanded analysis in the FEIS indicates the same issue could apply to the 45 miles from Rosemont to Nogales; (3) added commute time makes staffing of medical positions more difficult and decreases the hours available for patient care.
- 0077-1: We object to the failure to assess adequately the impact of the daily traffic of mine trucks from the entry/exit of the mine site on Highway 83 and thence to the I-10 Freeway. New information indicated that ore trucks may travel south on SR-83, then onto SR82 through Patagonia to the boarder at Nogales. The objector implies that this southern route is not addressed in the FEIS.

- 0084-33: The USFS fails to adequately respond to these issues (that the DEIS discussion is incomplete and inadequate regarding transportation) and the agency also failed to respond to the issue of whether SR83 should be analyzed as a Class I highway rather than a Class II, used in the DEIS and for all level of service traffic studies.
- 0095-2: I am particularly concerned with the analysis of traffic and safety impacts in Chapters 1 and 3 and the analysis of traffic and public safety impacts in the Hazardous Materials, Public Health and Safety, and Transportation sections in Chapter 3. Additional, truck traffic on both Highway 83 and Highway 82 in Santa Cruz County has me deeply concerned. It will create unacceptable traffic loads upon both the communities of Sonoita and Patagonia, negatively impacting their economies and degrading the quality of life in Supervisorial District 3 of Santa Cruz County, Arizona.
- 0119-1: There will be a traffic bottle neck during construction of the mine and construction of the four-lane construction road. Using the Forest Road (Number 231 ), south of the access road for mine construction traffic (Page 1,002) proposal of 37 bus round trips (74 trips) four round trips, heavy-load deliveries, (eight total), fifty found trips, semi-truck deliveries, (100 total).The mine access area removes the prime passing area from either direction of travel, which will lead drivers to pass in other areas which are less safe, due to frustration of slow vehicles.
- 0056-10: We find it imperative that the Rosemont mining ore transportation plans be scrutinized by the National Transportation Safety Board.
- 0017-8: There are so many possible harmful effects of the mine that are dealt with to an uncertain or inadequate degree: 7. negative impacts on road condition/traffic safety, which Pima County states are not adequately addressed by the mine's plans.
- 0049-3: The hazmat and traffic issues on State Route 83 have not been adequately addressed due to the increase of mine activities. Emergency responders may be unable to respond or transport patients.
- 0051-2: The FEIS does not address these safety standards between MP 45.5 to MP 52.5, and should.
- 0007-1: The winding, narrow, and designated scenic highway (State Route 83) is NOT appropriate for this kind of operation. There are no shoulders, secondary access to the site, water for firefighting issues, poor radio communications in the area, just for starters. This mine would be the ONLY operation of this magnitude in southern Arizona without a rail siding at the mine pit for hauling product to other places for refinement/smelting/processing.
- 0007-4: This is the wrong place for a new mine, and I truly believe the destruction of the local roadways has been grossly underestimated. ADOT seems to think these roads can handle this kind of abuse, I think they are wrong. I would like to have a answer about this part of the EIS, as it is the responsibility of the fire department in Corona de Tucson , funded by taxpayers in the fire district, to provide highway safety and rescue services to the area closest to this proposed mine.
- 0084-34: The USFS has ignored concerns regarding the safety of the "T" intersection, and failed to identify and analyze the inadequate design for the proposed intersection

from the perspective of traffic moving north on SR83. The FEIS fails to provide a detailed transportation plan, with the USFS promising such a plan sometime in the future.

- 0051-1: Page 50 of the FEIS in part reads as follows: " Mine related traffic on SR 83 during operation would consist of trucks carrying supplies to the project, trucks carry concentrate and copper cathodes ..." Copper Cathodes require using sulfuric acid. Rosemont Copper (the company) said publically they are NOT going to mine the oxide deposits. Was this statement meant to mislead the public? Is there language in the FEIS that would allow the company to mine the oxide deposit after all without full public comment?
- 0084-31: Table 2 on Page 50 of the FEIS lists " Large-truck trip per weekday data", the number of truck trips into and out of the mine. The title of this table is misleading: It should read "trip per day", not weekday. Headings of individual columns are also wrong and misleading. "Round trips per week " should read "Round trips per day". A similar table appears in the Draft ROD Record of Decision with the same mistakes. (Draft ROD, Table A-3.)
- 0066-3: Without more specific numbers regarding the amount of fuel that Rosemont Copper vehicles will be using and how that translates into fuel taxes, the suggestion that those taxes could pay for all the highway damage that would accrue from the heavy vehicle traffic is speculative at best.
- 0060-2: Impacts to tourism from the proposed Rosemont project, along with the six proposed mining operations in the Patagonia Mountains, would have significant and permanent adverse impacts on the economic well-being of the Sonoita, Elgin and Patagonia area. The cumulative effects of the traffic from all of the proposed mining activities will clog Highways 82 and 83, discouraging visitors and therefore, negatively affecting the area's tourist based economy.
- 0007-2: Accidents will definitely increase, as they are projecting up to 96 large truck trips per day (4 per hour) with the operation going 365 days a year for 20 years. Those numbers become staggering. This does not include employees traveling to the mine and transport of supplies and equipment.
- 0011-5: All the ore as well as equipment, chemicals and explosives will be transported by truck on a rural highway through areas predicted to be further growth zones for Tucson. The potential for accidents is enormous!
- 0025-8: ...the FEIS also does not state whether or not the significant increases in traffic volume, accidents, injuries, and deaths are "acceptable."
- 0047-3: Safety issues (from traffic on SR83) have not been adequately addressed in the FEIS. In my previously submitted comments I addressed safety concerns.

**Remedy Supplied by Objector (if any):**

0007-5: Revise the DEIS.

0071-1: A new round of public input should be opened for the expanded transportation plan.

0084-33: Provide an adequate analysis that properly considers this highway a Class I roadway, and revise the analysis. Consider reasonable mitigation for these impacts, including road improvements that incorporate additional passing lanes.

0095-2: Abandon the FEIS and prepare a revised DEIS.

0119-1: Widen the access road prior to mine construction, and do not use Forest Road 231.

0084-34: Provide an adequate analysis of the significant transportation safety impacts resulting from this project, and identify meaningful, adequate mitigation, such as the building of a railroad spur to the area, rather than relying on the existing roadway system. The USFS must also provide the promised "comprehensive transportation plan".

0084-31: These mistakes should be corrected and presented in a revised DEIS

0060-2: Explain, clarify, correct, and quantify the cumulative effects of these six proposed mining projects and the increased traffic they will produce, along with the proposed Rosemont project, on the Sonoita, Elgin and Patagonia economies, and this information should be presented for public review and comment in a revised DEIS.

**Law, Regulation and/or Policy:** FSM 7700 - Travel Management; FSH 7709\_59 - Road System Operations and Maintenance; Council on Environmental Quality (CEQ) Regulations at 40 CFR 1500-1508

### **Review Team Member Response:**

The objectors contend that the transportation and access analyses are inadequate and incomplete in regards to impacts on safety, road conditions, and negative effects on increased mining traffic to the public and local communities and that the FEIS includes new roads that the public had no input on.

Response to objection issues 0051-3, 0007-5, 0071-1, 0084-33, 0095-2, 0119-1, 0056-10, 017-8, 0049-3, 0051-2, 0007-1, 0007-4, 0084-34, 0051-1, 0084-31, 0060-0218, 0066-3, 0007-2, 0011-5, 0025,8, and 0047-3

### Inadequate Analysis:

Four comprehensive Traffic Analysis Reports [PR 012050, 015303, 015303, 017303, 018925] and six traffic analysis technical memorandums [PR 012099-012193, 012120] were utilized for analysis of mine related traffic. The purpose of these reports was to examine existing traffic conditions and to assess potential future traffic as a result of the proposed Project [PR 012050, p. 1].

These reports evaluated intersections, road segments, lane requirements, Level of Service, and crash data using four (4) analysis year periods for routes managed by Arizona Department of Transportation (ADOT) such as AZ SR 82, AZ SR 83, I-10 and several other routes managed by the Forest Service and Pima County most likely to be impacted by the proposed project. The

traffic analysis reports were prepared in accordance with latest ADOT “*Traffic Impact Analysis for Proposed Development*” guidelines, Section 240 of ADOT’s “*Traffic Engineering Policies, Guidelines, and Procedures*,” and the latest edition of the Institute of Transportation Engineers (ITE) “*Manual of Transportation Engineering Studies*” [PR 012050, p. 2; PR 015303, p. i; PR 017304, p. 1; PR 018925, p. 3]. The traffic analysis completed in June 2012 [PR 017304] was prepared in accordance with the guidelines from ADOT and the Transportation Research Board [PR 047511\_4, p. 932] using methodology in the Highway Capacity Manual [PR 017304, p. 4].

Roads in the analysis area are managed and maintained under different jurisdictions, such as the Forest Service, Pima County, and ADOT, or are privately controlled [PR 047511\_4, p. 923]. For Forest Service roads, the transportation analysis followed the guidance in FSH 7709.59, “Road System Operations and Maintenance” and FSM 7700, “Travel Management” [PR 145711\_4, p. 925]. For roads not under the jurisdiction of the Forest Service, the analysis followed guidance established by ADOT including documents mentioned above and the “Roadway Design Guidelines” (Arizona Department of Transportation 2007), with revisions and amendments, and the “Guidelines for Highways on Bureau of Land Management and U.S. Forest Service Lands” and Pima County Code 17.40 [PR 147511\_4, p. 929]. The “Rosemont Primary Access Road Traffic Impact Analysis,” [PR 015303] was prepared based on criteria set forth in part by the ADOT. These transportation reports were the basis for the transportation/access analysis in the FEIS [PR 047511\_4, p. 925].

The project incorporated extensive and relatively complicated traffic analysis based on extensive data and analysis that includes among many other elements; multiple year data sets, extensive future traffic predications, crash data, ADOTs permitting process, response to public comments, and various shipping possibilities, and various alternatives. Highways 82 and 83 were extensively analyzed in the traffic analyses. The analysis on the these highways addressed six intersection of Highway 83, the segment of Highway 83 between I-10 and its intersection with Highway 82. Other routes analyzed include I-10, SR10B, SR 80, SR 90 [PR 147511\_4, p. 922]. The Forest Service complied with agency and ADOT established guidelines for transportation analysis and analyzed many variables under different scenarios to disclose the possible impacts of the project on transportation.

#### Road Conditions:

The objectors contend that the negative impacts of the project on road conditions, particularly state highways were not adequately addressed. Impacts on road condition and all mitigation related to transportation are contained in Appendix B of the FEIS and the effectiveness of those mitigation measures is analyzed in Chapter 3 of the FEIS [PR 047511\_4, pp. 955-956].

Mitigation of the traffic impacts associated with the project and anticipated population growth on SR 83 is addressed through the mitigation measures that have been determined by ADOT. These actions include a 3-inch pavement overlay from the intersection of the primary access road to the junction with I-10; associated striping, raising of guardrails, and resigning; and paving of three existing pullouts to safely accommodate school buses [PR 047504, p. 29]. Other safety and condition mitigation measures on roads under ADOT jurisdiction such as improvements, guardrail, pavement overlays, shoulder buildup, paving bus pullouts, intersection upgrades, new

cattleguards, fencing, etc. will be included in the encroachment permit that will be administered by ADOT when the project is implemented [PR 047511\_2, p. 50]. Rosemont Primary Access Road Intersection: Traffic Analysis Report [PR 015303] was prepared specifically to support the ADOT permitting process.

In addition to mitigation measures required in encroachment permits required by ADOT, safety and other traffic related condition mitigation measures, the Forest Service will require Rosemont complete comprehensive transportation plan that will address improvements and maintenance of all roads on NFS lands when the project is implemented [PR 047504, pp. 40-41]. Condition mitigation for roads under state jurisdiction falls under the direction of ADOT and will be implemented and enforced under ADOT's permitting process for highway encroachment.

Review of the project finds that the Forest Service provided substantial traffic analysis and ensured appropriate consultation with ADOT in the development of the mitigation measures for road damage on state highways.

Expanded road system in FEIS:

The transportation analysis was expanded after the DEIS was completed. Based on public concerns over the DEIS, the Forest Service determined that the transportation analyses needed to be expanded to include other potential routes in order to disclose possible impacts from mine traffic. PSOMAS, June 2102 Expanded Transportation Analysis [PR 017304] was prepared in response to a request from the Forest Service on April 11, 2012 [PR 016935]. The FEIS expanded the bounds of the analysis with additional transportation issue statement and factors addressing transportation in both Chapters 1 and 3 of the FEIS [PR 047511\_4, p. 922]. The Forest Service appropriately addressed concerns raised over the transportation analysis in the DEIS by adding a transportation issue statement and expanding the analysis to include additional routes. This analysis disclosed the possible transportation impacts under a variety of new scenarios.

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

**Review Team Member:** Marjorie Apodaca, Engineering/Transportation

# Rosemont Copper Mine

## Objection Review

**Objection # (s):** 0013-DLieberthal; 0024-DBabson; 0084-SSSR; 0102-MMagruder; 0114-TMClark; 0119-JMeyer;

**Resource Area(s):** Transportation and Access – Mitigation (TRA-4)

**Objection Issue:**

- 0102-3: For five years, the objector has tried to have this "maintenance road" removed following construction as it would no longer serve a purpose. The "utility maintenance road" should be closed upon completion of the utility line construction. The "maintenance road" is adjacent to and parallel to Santa Rita Road. Most of this road is located in the extremely sensitive, Santa Rita Experimental Range where long-term environmental and climate studies have continued for over a century. Neither the electrical or water utilities require a "maintenance road" after construction, with the exception of two water pump stations that will need a short "driveway" spurs from Santa Rita Road to perform pump maintenance. Therefore, the road should be removed upon completion of construction of the water and electrical utilities. Removal would have obvious benefits by allowing early restoration of over 11 miles and 547 acres of disturbed land in the experimental range with significant reductions of environmental impacts.
- 0114-1: My primary objection is the lack of any meaningful mitigation to the increased mine related traffic on SR 83 and the decreased safety and LOS as a result. There is no mitigation for longer commute times other than Rosemont's restriction of delivery truck service away from prime commute hours.
- 0024-1: I think it incumbent upon ADOT to rethink mitigation plans for SR 83 with a focus on safety, as well as providing the Forest Service with a detailed mitigation plan for ALL the State highways being considered, complete with total cost and how much Rosemont will commit to pay.
- 0119-2: I feel that buses are an unreasonable means of transporting 1,250 construction workers to the job site. Bus commuting seems inappropriate as was the idea of employee carpooling in the DEIS, which has been deleted in the FEIS. If buses were used, where would employee parking lots be located? There must be analysis of these areas for safety environmental impacts, lighting, etc. The mine access area removes the prime passing area from either direction of travel, which will lead drivers to pass in other areas which are less safe, due to frustration of slow vehicles.
- 0084-35: The FEIS offers no meaningful mitigation to support traffic safety or help emergency response traffic. The current road system is inadequate and unsuitable for mining truck traffic unless it is significantly upgraded, including complete replacement of

several major sections, yet the USFS points to only minor changes required by ADOT, and is requiring nothing itself.

- 0013-1: The potential increase in personal injury and loss of life, as verified by the statistics which you accepted without contest, assure that accidents will occur on 83 which was in never constructed with mine traffic in anyone's mind's eye. This is a tremendously significant matter, but you have not offered any reasonable alternatives such as increasing the total width of 83 so that mining trucks, which are huge as compared to vehicle traffic contemplated in the construction of 83 can safely travel without risk.

**Remedy Supplied by Objector (if any):**

0102-3: Modify the FEIS and DROD to change the "utility maintenance road" to a "utility construction road" that will be restored to its natural state upon completion of the water and electrical utility corridor with short spurs used for access to water pumping well equipment, especially for the 11.5 miles within the Santa Rita Experimental Range (p. 4, 7, and lots of specific edits p. 16-26)

0114-1: Require more mitigation to eliminate these intolerable, unnecessary, situations on SR 83 before approving Rosemont's MPO.

0119-2: Add passing lanes on SR83 or do not approve this mine.

0084-35: Provide an adequate analysis of the significant transportation safety impacts resulting from this project, and identify meaningful, adequate mitigation, such as the building of a railroad spur to the area, rather than relying on the existing roadway system. The USFS must also provide the promised "comprehensive transportation plan".

**Law, Regulation and/or Policy:** Council on Environmental Quality (CEQ) Regulations at 40 CFR 1500-1508.

**Review Team Member Response:**

The objectors contend that the transportation and access analyses and mitigation measures for SR 83 are inadequate and that buses are an unreasonable means of transporting mine employees. The objectors also contend that the utility maintenance road will be not be needed and should be restored to a natural state at the completion water and electrical utility line construction.

Response to objection issues 0102-3, 0114-1, 0024-1, 0119-2, 0084-35, and 0013-1

Four comprehensive Traffic Analysis Reports [PR 012050, 015303, 015303, 017303, 018925] and six traffic analysis technical memorandums [PR 012099-012193, 012120] were utilized for analysis of mine related traffic. Detailed analysis of traffic impacts on SR 83 is contained in the Traffic Analysis Report [PR 012050]. In addition, the Rosemont Primary Access Road Intersection: Traffic Analysis Report [PR 015303] was prepared specifically to support the

Arizona Department of Transportation (ADOT) permitting process and expands the analysis along SR 83. It analyzes six intersections and the highway segments itself.

Traffic safety is a concern primarily along SR 83 between the primary access road and I-10, which would be the main transportation route for personnel and materials deliveries, and a potential route for out-hauled product from the mine. Therefore, impacts from mine traffic are focused on this segment of SR 83. Impacts to traffic safety are assessed in terms of traffic type and volume based on traffic modeling on SR 83 and extrapolation of those modeling results to accidents and fatalities. Qualitative assessments of traffic impacts were conducted using modeled “level of service” ratings. Transportation/Access resource section in Chapter 3 contains a detailed analysis of the impacts to level of service on SR 83 between I-10 and SR 82 [PR 045711\_4, p. 1002].

State routes are under the jurisdiction of ADOT. Mitigation of the traffic impacts associated with the project and anticipated population growth on SR 83 is addressed through the mitigation measures that have been determined by ADOT. These actions include a 3-inch pavement overlay from the intersection of the primary access road to the junction with I-10; associated striping, raising of guardrails, and resigning; and paving of three existing pullouts to safely accommodate school buses [PR 47504, p. 29].

The FEIS presents the suite of mitigation that ADOT provided to the Forest Service that would occur as a result of the encroachment permit process for SR 83 and other state routes [PR 047511\_6, p. B-90, Measure OA-TA-01]. The details of the mitigation measure clarify that Rosemont Copper will provide funding to ADOT and that ADOT will design and construct projects along SR 83 to mitigate traffic impacts following approval of the Forest Service ROD. Details of the mitigation measures were provided to the Forest Service by ADOT in a letter dated September 19, 2012 [PR 018784]. The Forest Service has incorporated these mitigation measures directly as described by ADOT into measure OA-TA-01 [PR 047511\_6, p. B-90].

As a part of the encroachment permit for the primary access road intersection with SR 83, ADOT has determined that roadway improvements are needed to mitigate the increased use of truck traffic from the mine on SR 83. ADOT has indicated that the needed improvements consist of a 3-inch overlay of SR 83 from I-10 to the primary access road intersection, installation of signs and guardrails to match the new pavement height and accommodate the proposed intersection, and paving of three existing school bus pullouts along SR 83. These improvements would be funded by Rosemont Copper and would not take place should the Rosemont Copper Project not occur. Temporary traffic impacts on SR 83 of approximately 120 days during the construction of these roadway improvements are anticipated. Traffic control would entail intermittent lane closures using flagging and pilot car operations during the daytime. The public would be kept informed through ADOT of any travel restrictions via local media outlets. Upon completion, future maintenance of the roadway improvements would be the responsibility of ADOT (Arizona Department of Transportation 2012b) [PR 047511\_4, p. 951].

The “Rosemont Primary Access Road Traffic Impact Analysis,” [PR 015303] analyzed impacts from traffic associated with the 1,250 mine employees. The use of buses and staging areas to transport employees was analyzed in detail in this report and was the bases for employee

transportation analysis in the FEIS. Employees bused from staging areas around I-10 to the north and Sonoita to the south, totaling approximately 37 bus trips. The exact locations of the staging areas would be undetermined until the locations of the majority of the workers' neighborhoods are known [PR 047511\_4, p. 951].

The Forest Service utilized detailed analysis which were developed in accordance with established guidelines for traffic analysis studies in the FEIS and incorporated the ADOT's mitigation measures for SR 83 directly into the Draft ROD.

The utility maintenance road is a combination of existing road that would be reconstructed and new road construction. The road would consist of two discrete segments: one from the plant site, over Lopez Pass, to a major wash on private land; and another from the supply well area near Sahuarita to the other side of the major wash, generally following the electrical transmission and water line location. Overall, this road would require more than 11.5 miles of new construction and 4.5 miles of reconstruction or upgrade to an existing road [PR 047511\_2, p. 47] For the most part this follows an existing road location. On the west side of the Santa Rita Mountains, a new portion of the utility maintenance road would be constructed within the utility corridor. This road would be a 14-foot-wide native surface road that generally parallels the Santa Rita Road. [PR 047511\_4, p. 803]

The impacts of the utility maintenance road are addressed in "Impacts Common to All Alternatives" [PR 047511\_4, p. 653] and intended use of the road after mine operations are complete are addressed in the FEIS and Response to Comment. The utility maintenance road would be closed to the public during construction and operation of the mine, and portions may be reopened to the public after closure, depending on safety concerns. The intent is restore public access over Lopez Pass. However, a section of this road crosses private land, and there is currently no legal right of public access. While the Coronado would work with the landowner to secure a permanent public easement for this segment of road, it is unknown at this time whether legal public access would be available postclosure. The portions of this road on private lands would remain after the pipeline and booster stations are removed. For sections on State land, ASLD would ultimately decide which portions would be retained, removed, or revegetated through their ROW permitting process [PR 047511\_2, p. 48; PR 047511\_4, p. 804].

Objectors recommend the utility access road be returned to a natural state upon completion of mine activities. Chapter 2 of the FEIS addresses specific reasons for keeping the road functionality after mine activity is complete. The primary access road and portions of the utility maintenance road would remain to access the waste rock/tailings landform for monitoring and maintenance. Roads may also remain on top of and around the toe of the waste rock/tailings landform to allow for postclosure monitoring activities and use of the land for grazing. Postmine land use of NFS lands would be the same for all action alternatives and would follow the direction in the forest plan that is in place at that time. Postmining/closure reclamation objectives for Rosemont Copper's private land could include dispersed recreation, wildlife habitat, and ranching [PR 047511\_2, p. 55]

The Forest Service adequately analyzed the effects of the utility access road and identified the need for road access after mine activities are complete. Postmine access needs identified in the FEIS would follow the direction in the forest plan.

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

**Review Team Member:** Marjorie Apodaca, Engineering/Transportation

# Rosemont Copper Mine

## Objection Review

**Objection # (s):** 0066-JHoffman; 0072-MFarr; 0084-SSSR; 0091-PimaCounty

**Resource Area(s):** Transportation and Access – Effects (TRA-5)

**Objection Issue:**

- 0066-1: The fact that traffic analysis has been updated to include anticipated truck and commuter trip numbers does nothing to relieve the residents in the Rosemont mine impact area of the inconvenience and safety hazards of this very large increase in traffic.
- 0072-1: As compared to the DEIS, the current version of the EIS greatly expands the roads that might bear the many truckloads of copper concentrate that would be generated by the proposed mine. The current plan (DEIS) now includes the possibility of concentrate shipments to Nogales, Naco and Douglas. He brings up several questions regarding the timing and need for expanding the analysis, and impacts should truck extensive traffic occur on some routes.
- 0091-4: The County and District object to the lack of disclosure of increased traffic impacts, including impacts to road pavement conditions; County roadways, including Sahuarita Road and Santa Rita Road; and questionable traffic safety analysis and insufficient mitigation to address traffic safety concerns, including the lack of disclosure in the FEIS of increased death rate details that were included in prior drafts of the EIS.
- 0084-32: The FEIS greatly expands the analysis area for transportation impacts, reflecting a significant change in the proposed action that was not previously available for public review and comment.

**Remedy Supplied by Objector (if any):**

0066-1: Rosemont Copper should be required to make major improvements to the old road over the pass to the west side of the mountain range to divert some of the heavy traffic away from SR 83. Rosemont Copper should be required to post a bond to cover most of the highway maintenance and repair for the portion of SR 83 on which their heavy vehicles travel in addition to the bond posted to cover reclamation. They should be required to fill in the mine pit with the tailings when operations cease.

0084-32: The FEIS introduces a new, greatly expanded transportation plan. The USFS must ensure that the mining plan of operations is reasonable and complete and provides all necessary information regarding where these mining products are going to be delivered prior to even considering the plan for approval.

**Law, Regulation and/or Policy: Review Team Member Response:** Council on Environmental Quality (CEQ) Regulations at 40 CFR 1500-1508

The objectors contend that the public had no input on the expanded transportation and access analyses in the FEIS and that this expanded transportation network reflects a significant change in the proposed action. They also contend that the transportation and access analysis does not disclose impacts to road pavement conditions on County roadways, including Sahuarita Road and Santa Rita Road and the safety analysis is questionable.

Response to objection issues 0066-1, 0072-1, 0091-4, and 0084-32

The analysis of transportation impacts was greatly expanded between the DEIS and FEIS in response to public comments. Based on public concerns over the DEIS, the Forest Service determined that the transportation analyses needed to be expanded to include other potential routes in order to disclose possible impacts from mine traffic. Specifically, the movement of truck traffic along numerous possible routes other than SR 83 was analyzed in the FEIS to account for the possibility of shipping of concentrate to a number of possible hubs for distribution or smelting, including the Port of Tucson, and the Mexican ports of entry at Nogales, Naco, and Douglas. Similarly, commuter traffic was assumed to potentially come from multiple directions along SR 83 (85 percent north, 15 percent south). PSOMAS, June 2102 Expanded Transportation Analysis [PR 017304] was prepared in response to a request from the Forest Service on April 11, 2012 [PR 016935]. The FEIS expanded the bounds of the analysis with additional transportation issue statement and factors addressing transportation in both Chapters 1 and 3 of the FEIS [PR 047511\_4, p. 922].

In expanding the network of roads analyzed in the FEIS, the Forest Service did not significantly change the proposed action of the project. The expanded transportation analysis was an appropriate response to public comments to fully disclose all the possible transportation impacts under a variety of new scenarios.

Public comments on the DEIS also indicated concern over smaller roads in the vicinity, specifically Sahuarita Road, Box Canyon Road, and Santa Rita Road. It was not considered realistic for truck traffic to make use of these smaller roads as they do not provide a reasonable connection to distribution points that is not already covered by the expanded traffic analysis; therefore, truck traffic was not analyzed on these smaller roads. In addition, it was determined that mine-related commuter traffic would be most likely to come from Tucson via SR 83, or from Sonoita/Patagonia via SR 83, and that it would be speculative to analyze commuter traffic on a wider network of roads, as information about the location of future employee housing is unknown (employees will determine their individual residential location, and no company sponsored housing will be provided). The FEIS discloses that use of alternative routes – particularly if SR 83 experiences noticeable impacts to the current level of service – could cause impacts to other roadways although these could not be analyzed [PR 047511\_4, p. 944] because it is not possible to estimate the level of use on these public roads at this time.

The analysis in the FEIS was not further expanded to analyze smaller roads in the project vicinity because previous transportation analyses and public input did not do not indicate a reasonable connection to distribution points not already covered in the expanded transportation analysis.

Four comprehensive Traffic Analysis Reports [PR 012050, 015303, 015303, 017303, 018925] and six traffic analysis technical memorandums [PR 012099-012193, 012120] were utilized for analysis of mine related traffic.

These reports evaluated intersections, road segments, lane requirements, Level of Service, and crash data using four (4) analyses year periods. The traffic analysis reports were prepared in accordance with latest Arizona Department of Transportation (ADOT) “*Traffic Impact Analysis for Proposed Development*” guidelines, Section 240 of ADOT’s “*Traffic Engineering Policies, Guidelines, and Procedures*,” and the latest edition of the Institute of Transportation Engineers (ITE) “*Manual of Transportation Engineering Studies*” [PR 012050, p. 2; PR 015303, p. i; PR 017304, p. 1; PR 018925, p. 3]. The traffic analysis completed in June 2012 [PR 017304] was prepared in accordance with the guidelines from ADOT and the Transportation Research Board [PR 047511\_4, p. 932] using methodology in the Highway Capacity Manual [PR 017304, p. 4]. The Rosemont Primary Access Road Traffic Impact Analysis contains an extensive crash analysis based on 5 years of crash data obtained by ADOT [PR 018925, p. 22-27].

The Forest Service complied with agency and ADOT established guidelines for transportation analysis and analyzed many variables under different scenarios to disclose the possible safety impacts of the project.

State routes are under the jurisdiction of ADOT. Mitigation of the traffic impacts associated with the project and anticipated population growth on SR 83 is addressed through the mitigation measures that have been determined by ADOT. These actions include a 3-inch pavement overlay from the intersection of the primary access road to the junction with I-10; associated striping, raising of guardrails, and resigning; and paving of three existing pullouts to safely accommodate school buses [PR 047504, p. 29].

The FEIS presents the suite of mitigation that ADOT provided to the Forest Service that would occur as a result of the encroachment permit process for SR 83 and other state routes [PR 047511\_6, p. B-90, Measure OA-TA-01]. The details of the mitigation measure clarify that Rosemont Copper will provide funding to ADOT and that ADOT will design and construct projects along SR 83 to mitigate traffic impacts following approval of the Forest Service ROD. Details of the mitigation measures were provided to the Forest Service by ADOT in a letter dated September 19, 2012 [PR 018784].

The Forest Service utilized detailed analysis which were developed in accordance with established guidelines for traffic analysis studies in the FEIS and incorporated the ADOT’s permitting requirements and mitigation measures directly into the ROD.

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

**Review Team Member:** Marjorie Apodaca, Engineering/Transportation