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Comments: To: Coronado National Forest, U.S. Forest Service

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Submission Date: April 19, 2026

Subject: Objections to the Final Environmental Impact Statement (FEIS) and Draft Record of Decision (ROD) for the South32 Hermosa Critical Minerals Project - Unresolved Deficiencies from DEIS Comments and New Gaps in Analysis

Introduction As a 20-year resident of Santa Cruz County with expertise in engineering and experience in energy, transportation and mining, I submit these formal objections to the Final Environmental Impact Statement (FEIS) and Draft Record of Decision (ROD) for the South32 Hermosa Critical Minerals Project, released in March 2026. My previous detailed rebuttal to the Draft Environmental Impact Statement (DEIS), submitted on June 21, 2025, raised numerous specific deficiencies regarding environmental, traffic, safety, socioeconomic and scenic integrity impacts. The FEIS and Draft ROD fail to adequately address or resolve the vast majority of those concerns, despite the required "hard look" under NEPA, NFMA, and the Coronado National Forest (CNF) Forest Plan.

Instead, the FEIS largely adopts South32's preferred alternatives with minimal additional mitigation or site-specific analysis, while introducing or confirming new unanalyzed impacts. Two particularly glaring new deficiencies are:

- 1.The complete absence of any regional impact plan or cumulative analysis for the new primary access road (PAR) constructed through NFS land, which directs mine-related traffic (including heavy haul trucks) through Nogales, resulting in unassessed air quality degradation and safety risks to that community and surrounding routes.
- 2.The redirection of treated dewatering water to new infiltration basins and discharge points in the preferred alternative, which the FEIS claims will "recharge the aquifer" but which analysis shows will not effectively do so, leading to permanent net loss and altered hydrology.

These omissions, combined with the unaddressed issues from my DEIS comments, render the FEIS and Draft ROD legally insufficient. I urge the Forest Service to reject the Draft ROD, require supplemental analysis, and ensure full compliance before any authorization.

General Concerns with the FEIS The FEIS continues the DEIS's pattern of underestimating cumulative impacts on the CNF "Sky Island" ecosystem, optimistic assumptions without empirical validation, inadequate public engagement and failure to analyze long-term (30-70+ year) effects. It does not incorporate or respond substantively to the site-specific studies I requested in June 2025. Key unresolved deficiencies include incomplete cumulative impact analysis (still omitting other mines like Rosemont and Barksdale), reliance on generic mitigations and lack of alignment with scenic integrity objectives for the Patagonia-Sonoita Scenic Road. The selected alternative (primary access road, updated dry-stack tailings, power line and altered water discharge) minimizes some localized impacts but shifts burdens regionally without analysis.

#### Objection 1: Air Quality and Emissions (Unresolved from DEIS)

Summary: The FEIS Response Report fails to address Air Quality and Emissions. All dust, manganese, emissions data accuracy, carbon, cement, and exploration concerns raised previously remain unaddressed with site-specific, real-time data or enforceable limits. The FEIS's claim of "fewer air quality impacts" under the selected alternative lacks supporting modeling for mineral-rich dust or cumulative regional effects. That includes real-time monitoring of the on-site conveyance system and dust from transport. This violates NEPA's requirement for a detailed project description and analysis of direct, indirect, and cumulative impacts, including air-quality

modeling, site-specific data, enforceable limits, and cumulative effects (40 CFR 1502.14, 1502.16). On NFS land, the absence of supporting modeling and unresolved concerns prevent meaningful evaluation of mineral-rich dust, manganese, carbon emissions, and cumulative regional effects to air quality and public health. The FEIS must include site-specific, real-time data, enforceable limits, supporting modeling for mineral-rich dust and cumulative regional effects, and real-time monitoring of the on-site conveyance system and dust from transport before advancing. This issue also ties directly to the manganese regulation, monitoring gaps, and Plan of Operations suitability gaps raised previously and remains unaddressed.

Gap: The Report does not address dust, manganese, emissions data accuracy, carbon, cement, or exploration concerns; the lack of site-specific, real-time data or enforceable limits; the unsupported FEIS claim of "fewer air quality impacts"; the absence of modeling for mineral-rich dust or cumulative regional effects; or real-time monitoring of the on-site conveyance system and dust from transport.

Why it must be addressed: NEPA and EPA regulations require detailed air-quality analysis, site-specific modeling, real-time data, and enforceable limits on NFS land to evaluate direct, indirect, and cumulative impacts to air quality, public health, and regional resources.

Recommended Remedies: Include site-specific, real-time data and enforceable limits for all dust, manganese, carbon, cement, and exploration-related emissions; provide supporting modeling for mineral-rich dust and cumulative regional effects under the selected alternative - and require real-time monitoring of the on-site conveyance system and dust from transport before finalizing the FEIS.

Discussion: The FEIS did not address this issue at all under NEPA or related regulations.

#### A. What the Response Report Actually Says:

The Forest Service's Comment Analysis and Response Report contains no consolidated statement and no response whatsoever to the Air Quality and Emissions. Searches of the FEIS document for "air quality," "emissions," "dust," "manganese," "emissions data accuracy," "carbon," "cement," "exploration," "real-time monitoring," "on-site conveyance system," "dust from transport," "mineral-rich dust," "cumulative regional effects," or "fewer air quality impacts" return zero relevant hits addressing the concerns, modeling, or gaps. "Air quality" or "emissions" appears only incidentally in general project descriptions without any new site-specific data, real-time monitoring, enforceable limits, or modeling to support the claim of "fewer air quality impacts." No additional studies or data resolve the dust, manganese, carbon, cement, exploration, or cumulative-effects deficiencies identified in the DEIS.

The FEIS therefore carries forward the exact same unaddressed air-quality and emissions concerns and the unsupported claim of "fewer air quality impacts" that were criticized in the DEIS.

#### B. Why This Is Inadequate Under NEPA and Other Regulations:

NEPA (40 CFR 1502.14, 1502.16) explicitly requires a detailed project description and analysis of direct, indirect, and cumulative impacts. For air emissions on National Forest System (NFS) land, this includes sufficiently detailed air-quality analysis so the public and decision-makers can evaluate:

- \*Dust, manganese, emissions data accuracy, carbon, cement, and exploration concerns with site-specific, real-time data or enforceable limits

- \*Supporting modeling for mineral-rich dust and cumulative regional effects

- \* Real-time monitoring of the on-site conveyance system and dust from transport.

The DEIS specifically flagged air quality and emissions and the need for:

- \*Resolution of all dust, manganese, emissions data accuracy, carbon, cement, and exploration concerns with site-specific, real-time data or enforceable limits

- \*Supporting modeling to justify the claim of "fewer air quality impacts" under the selected alternative

- \*Real-time monitoring of the on-site conveyance system and dust from transport.

None of this was supplied or analyzed in the FEIS. The FEIS's claim of "fewer air quality impacts" "inadequately represents the air-quality and cumulative impacts" - exactly as raised previously - and the Response Report offers no correction.

Additional NEPA violation on Forest Service land (air quality and public health):

- \*Unresolved dust and manganese emissions on NFS land threaten air quality in nearby communities and conflict with the Coronado National Forest 2018 Land and Resource Management Plan's air-quality and resource-

protection objectives.

\*Without site-specific modeling or real-time monitoring, cumulative regional effects and public-health risks cannot be evaluated.

\*NEPA cumulative-impact analysis (40 CFR 1508.1(g)(3)) and Forest Service policy require explicit assessment of air-quality impacts on NFS lands. The FEIS is silent.

Industry standards ignored:

\*EPA air-quality guidelines (including dispersion modeling and risk-assessment protocols) and ADEQ permitting standards require site-specific, real-time data, enforceable limits, and modeling for mineral-rich dust, manganese, and cumulative regional effects.

\*Best practices for mining operations mandate continuous real-time monitoring of conveyance systems and transport dust to ensure protectiveness. The absence of these elements does not satisfy this standard.

C. Bottom Line:

This is a clear NEPA failure: the agency simply ignored a substantive issue that demanded the minimum site-specific data, modeling, and real-time monitoring needed for a credible "hard look." The FEIS still relies on the same unaddressed dust, manganese, carbon, and emissions concerns and the unsupported claim of "fewer air quality impacts" that prevent meaningful evaluation of air-quality, cumulative, and public-health impacts on Forest Service Land.

#### Air Objection 1A - Insufficient Analysis of Impacts to Air Quality-Related Values (AQRVs)

Summary: The FEIS fails to address the core DEIS air-quality comment that the USFS has not analyzed or assessed impacts to air quality-related values (visibility, deposition, PSD increments) in Class II areas or nearby wilderness. The Response Report only discusses monitoring and dust suppression; it never supplies the missing AQRV analysis required by NEPA, NFMA, the Coronado LRMP, and the FLAG Report. This violates the agency's substantive duty to protect air resources on National Forest System lands.

Gap: The FEIS Response Report contains no new AQRV modeling, deposition analysis, or PSD-increment assessment for Class II areas or nearby wilderness (Mount Wrightson and Miller Peak).

Why it must be addressed: NEPA (40 CFR 1502.14, 1502.16) and NFMA require a hard look at direct, indirect, and cumulative impacts to air quality-related values. The Coronado LRMP explicitly mandates protection of visibility and other AQRVs in wilderness areas. The USFS's own FLAG Report states that AQRV analysis applies to both Class I and Class II areas in NEPA documents.

Recommended Remedies: The FEIS must include a full AQRV analysis (visibility, nitrogen and mercury deposition and PSD increments) for all nearby Class II wilderness and sensitive areas, using appropriate modeling (not just the Q/D screen).

Discussion:

A. What the Response Report Actually Says:

The County's FEIS Response Report discusses only monitoring specificity, real-time dashboards, and adaptive mitigation triggers for PM10 / PM2.5 and metals. It never mentions air quality-related values, visibility, deposition, PSD increments, or the FLAG Report. Searches for "AQRV," "visibility," "deposition," "PSD increment," "wilderness," or "FLAG" return zero relevant hits in the air-quality section.

B. Why This Is Inadequate Under NEPA and Other Regulations:

The DEIS relied on a cursory Q/d screen limited to far-field Class I areas and fugitive dust. The FEIS carries the same deficiency forward. No analysis was added for:

\*Near-field and far-field deposition of mercury, nitrogen, or metals on soils, waters, or vegetation.

\*Visibility impairment in Mount Wrightson or Miller Peak Wilderness.

\*PSD increment consumption for PM and NOx in Class II areas. The EPA's May 30, 2025 objection to the ADEQ permit further underscores that even the stationary-source permitting process was inadequate; the FEIS cannot lawfully rely on it.

C. Bottom Line:

This is a clear NEPA failure. The FEIS Response Report ignored a substantive DEIS comment that demanded the minimum AQRV analysis required by the agency's own guidance and the Coronado LRMP. Without it, the

USFS cannot demonstrate compliance with its duty to protect air resources on National Forest lands.

#### Air Objection 1B - Failure to Analyze Public Health Impacts of Hazardous Air Pollutant (HAP) Emissions

Summary: The FEIS fails to address the DEIS comment that the project's hazardous air pollutant emissions (beyond manganese) were never analyzed for public-health impacts. The Response Report is silent on HAPs. This violates NEPA's requirement for a hard look at human-health effects.

Gap: No HAP health-risk assessment for acetaldehyde, formaldehyde, benzene, chromium or other listed HAPs appears in the FEIS or Response Report.

Why it must be addressed: NEPA requires analysis of public-health impacts from air toxics (40 CFR 1502.16). The DEIS disclosed multiple HAPs but performed no health-risk modeling beyond manganese. The FEIS Response Report never corrects this omission.

Recommended Remedies: The FEIS must include a full HAP risk assessment (cancer and non-cancer) for all emitted hazardous air pollutants using current EPA and ATSDR methodologies.

#### Discussion:

##### A. What the Response Report Actually Says:

The air-quality section discusses only PM<sub>10</sub> / PM<sub>2.5</sub>, metals monitoring and adaptive mitigation. It never mentions "hazardous air pollutants," "HAPs," "manganese modeling," or public-health risk assessment.

##### B. Why This Is Inadequate Under NEPA:

The DEIS claimed manganese was below ATSDR Minimal Risk Levels and then assumed all other HAPs posed no risk. This is scientifically invalid: different HAPs have different toxicities, exposure pathways, and risk thresholds (e.g., benzene is a known carcinogen; chromium has a far lower MRL than manganese). The FEIS adds no new modeling or analysis.

##### C. Bottom Line:

The FEIS Response Report simply ignored the DEIS comment. Without a proper HAP health-risk assessment, the USFS cannot demonstrate that the project will not harm public health in Patagonia and surrounding communities.

#### Air Objection 1C - Inadequate Analysis of Air Quality Impacts from Truck Hauling Near Patagonia

Summary: The FEIS fails to address the DEIS comment on localized air-quality and public-health impacts from heavy truck hauling in and near the Town of Patagonia and now along the Preferred Route effectively through the City of Nogales. The Response Report mentions traffic management only in general terms and never analyzes mobile-source emissions as a spatially distinct source.

Gap: No localized modeling of diesel-truck NO<sub>x</sub>, PM, or diesel particulate matter along haul routes through or adjacent to Patagonia.

Why it must be addressed: NEPA requires analysis of direct and localized impacts from mobile sources (40 CFR 1502.16). Heavy ore trucks (62-330 daily trips) on roads near residential and tourist areas create concentrated exposure that cannot be captured by project-wide modeling.

Recommended Remedies: The FEIS must include route-specific, near-field modeling of truck emissions (NO<sub>2</sub>, PM<sub>2.5</sub>, diesel soot) with public-health risk assessment for receptors in Patagonia.

#### Discussion:

##### A. What the Response Report Actually Says:

The Report discusses dust suppression and traffic management but never addresses truck-specific localized impacts, near-field modeling or public-health consequences for Community residents.

##### B. Why This Is Inadequate:

Aggregate modeling treats truck exhaust as a uniform background source. It does not evaluate concentrated exposure along haul corridors where trucks pass homes, schools and recreation areas. This is the exact deficiency flagged in the DEIS comment.

##### C. Bottom Line:

The FEIS Response Report left the truck-hauling gap unaddressed. Without localized mobile-source analysis, the

USFS cannot show that air-quality and health impacts on the Town of Patagonia have been adequately evaluated.

#### Air Objection 1D - Inadequate Background Concentrations and Analysis of Short-Term NO<sub>2</sub> Impacts

Summary: The FEIS and the County's April 15, 2026 FEIS Response Report fail to correct the DEIS's use of an arbitrary, non-representative background NO<sub>2</sub> concentration. The Response Report is silent on this modeling flaw.

Gap: Background NO<sub>2</sub> concentration remains based on the distant Alamo Lake monitor instead of local rural/industrial conditions.

Why it must be addressed: Accurate background data is required for credible NAAQS compliance modeling under NEPA and the Clean Air Act.

Recommended Remedies: The FEIS must use site-specific or regionally appropriate background NO<sub>2</sub> concentrations that reflect existing and planned sources in the Patagonia Mountains area.

#### Discussion:

##### A. What the Response Report Actually Says:

No mention of NO<sub>2</sub>, background concentrations, or short-term modeling deficiencies appears anywhere in the air-quality section.

##### B. Why This Is Inadequate:

The DEIS selected a 20 µg/m<sup>3</sup> background from a non-industrial monitor 150+ miles away. Local sources (exploration, construction, mobile sources) make this inappropriate for short-term (1-hour) NO<sub>2</sub> spikes from diesel trucks and equipment.

##### C. Bottom Line:

The FEIS Response Report ignored a specific DEIS modeling deficiency. Without corrected background data, the FEIS cannot demonstrate compliance with the NO<sub>2</sub> NAAQS or protect public health from short-term exposures.

#### Objection 2: Water Resources and Impacts (Unresolved from DEIS + New Gap)

Summary: The FEIS Response Report fails to address Water Resources and Impacts. The DEIS concerns regarding total water extraction (including dewatering), misleading "75% less water use" claims, wet flotation risks, acid leaching and trade-offs with critical minerals are not resolved. The FEIS confirms dewatering of ~2,790 AF / year but still understates SCAMA overdraft and regional cumulative effects with other mines. New Critical Gap - Water Redirection to Ineffective Basins: The FEIS's preferred alternative redirects treated dewatering water to new infiltration basins and discharge points "high in the Patagonia Mountains." While claimed to "recharge the aquifer and provide water for wildlife," the FEIS provides no site-specific hydrogeologic modeling, infiltration testing or evidence demonstrating effective recharge. These basins appear to result in surface or shallow discharge that will not meaningfully return water to the aquifer (net loss of ~34,000 AF over project life per FEIS data), exacerbating the cone of depression, spring depletion and downstream impacts on Harshaw Creek and the Santa Cruz watershed. This violates NEPA's requirement for a detailed project description and analysis of direct, indirect, and cumulative impacts, including long-term hydrologic effects, aquifer recharge efficacy, and mitigation of net water loss (40 CFR 1502.14, 1502.16). On NFS land, the unresolved water extraction, misleading claims, and ineffective redirection prevent meaningful evaluation of overdraft, cumulative effects, spring depletion, and watershed impacts. The FEIS must resolve all DEIS water concerns, provide site-specific hydrogeologic modeling and infiltration testing for the new basins, demonstrate effective recharge, analyze alternative discharge scenarios, and fully mitigate net loss (~34,000 AF) - including immediate independent USGS-style studies of actual recharge efficacy - before advancing. This issue also ties directly to the groundwater, climate change, and Plan of Operations suitability gaps raised previously and remains unaddressed.

Gap: The Report does not address DEIS concerns on total water extraction (including dewatering), misleading "75% less water use" claims, wet flotation risks, acid leaching, or trade-offs with critical minerals; the understated SCAMA overdraft and regional cumulative effects; or the new critical gap on water redirection to ineffective infiltration basins (no site-specific hydrogeologic modeling, infiltration testing, evidence of effective recharge, or

mitigation of net loss of ~34,000 AF).

Why it must be addressed: NEPA and Forest Service regulations require detailed analysis of water resources on NFS land, including total extraction, recharge efficacy, cumulative hydrologic effects, and mitigation of net loss, to evaluate direct, indirect, and cumulative impacts to aquifers, springs, and downstream watersheds and ensure compatibility with aquifer-protection objectives.

Recommended Remedies: Resolve all DEIS water concerns; provide site-specific hydrogeologic modeling, infiltration testing, and evidence demonstrating effective recharge for the new infiltration basins; analyze alternative discharge scenarios; fully mitigate the net loss of ~34,000 AF; and conduct immediate independent USGS-style studies of actual recharge efficacy before finalizing the FEIS.

Discussion: The FEIS did not address this issue at all under NEPA or related regulations.

#### A. What the Response Report Actually Says:

The Forest Service's Comment Analysis and Response Report contains no consolidated statement and no response whatsoever to the Water Resources and Impacts. Searches of the FEIS document for "water resources," "water extraction," "dewatering," "2,790 AF," "75% less water use," "wet flotation," "acid leaching," "SCAMA overdraft," "cumulative effects," "infiltration basins," "water redirection," "hydrogeologic modeling," "infiltration testing," "recharge efficacy," "net loss," "cone of depression," "Harshaw Creek," "Santa Cruz watershed," or "USGS-style studies" return zero relevant hits addressing the concerns, new critical gap, or mitigation. "Dewatering" or "water use" appears only incidentally in general project descriptions or hydrology sections without any new data, modeling, infiltration testing, or resolution of misleading claims. Infiltration basins or recharge is referenced in passing under environmental mitigation or operations sections, but never with site-specific hydrogeologic modeling, evidence of effective recharge, alternative scenarios, or mitigation of net loss (~34,000 AF). No additional studies or data resolve the DEIS deficiencies or the new critical gap identified in the FEIS. The FEIS therefore carries forward the exact same unresolved DEIS water concerns and the new critical gap on ineffective water redirection that were criticized in the DEIS.

#### B. Why This Is Inadequate Under NEPA and Other Regulations:

NEPA (40 CFR 1502.14, 1502.16) explicitly requires a detailed project description and analysis of direct, indirect, and cumulative impacts. For water resources on National Forest System (NFS) land, this includes sufficiently detailed hydrologic analysis so the public and decision-makers can evaluate:

- \*Total water extraction (including dewatering of ~2,790 AF/year), misleading "75% less water use" claims, wet flotation risks, acid leaching, and trade-offs with critical minerals

- \*SCAMA overdraft and regional cumulative effects with other mines

- \*Site-specific hydrogeologic modeling, infiltration testing, and evidence of effective recharge for new infiltration basins and discharge points high in the Patagonia Mountains

- \*Mitigation of net loss (~34,000 AF over project life), cone of depression, spring depletion, and downstream impacts on Harshaw Creek and the Santa Cruz watershed.

The DEIS (and new FEIS data) specifically flagged water resources and the need for:

- \*Resolution of total water extraction, misleading claims, wet flotation risks, acid leaching, and trade-offs with critical minerals

- \*Accurate assessment of SCAMA overdraft and cumulative effects

- \*Site-specific hydrogeologic modeling, infiltration testing, evidence of effective recharge, alternative discharge scenarios, and full mitigation of net loss.

None of this was supplied or analyzed in the FEIS. The redirection of treated dewatering water to ineffective basins "inadequately represents the long-term hydrologic impacts" - exactly as raised previously - and the Response Report offers no correction.

Additional NEPA violation on Forest Service land (aquifer and watershed protection):

- \*The unresolved water extraction and ineffective infiltration basins on NFS land directly conflict with the Coronado National Forest 2018 Land and Resource Management Plan's emphasis on aquifer protection and watershed integrity.

- \*The net loss of ~34,000 AF exacerbates overdraft, spring depletion, and downstream impacts without demonstrated recharge efficacy.

\*NEPA cumulative-impact analysis (40 CFR 1508.1(g)(3)) and Forest Service policy require explicit assessment of long-term hydrologic effects on NFS lands. The FEIS is silent.

Industry and scientific standards ignored:

\*USGS and EPA hydrogeologic guidelines require site-specific modeling, infiltration testing, and independent verification (USGS-style studies) to demonstrate effective aquifer recharge before approving redirection or discharge schemes.

\*Best practices for mining dewatering and water management mandate full mitigation of net loss, accurate cumulative-effects analysis, and avoidance of surface/shallow discharge that fails to return water to the aquifer. Vague claims of "recharge...for wildlife" without data do not satisfy this standard.

C. Bottom Line:

This is a clear NEPA failure: the agency simply ignored a substantive issue (including a new critical gap) that demanded the minimum hydrologic modeling, recharge verification, and mitigation of net loss needed for a credible "hard look." The FEIS still relies on the same unresolved DEIS water concerns and the unsupported ineffective redirection that prevent meaningful evaluation of overdraft, cumulative effects, aquifer recharge, and watershed impacts on Forest Service Land.

### Objection 3: Traffic and Roadway Impacts (Unresolved from DEIS + New Gap)

Summary: The FEIS Response Report fails to address Traffic and Roadway Impacts. DEIS concerns about mine traffic on Harshaw Road, cumulative regional impacts, HazMat trucks, Flux Canyon Road design, mixed-use safety and sustainable practices remain inadequately analyzed. The FEIS endorses the ~7.6-mile primary access road (PAR) on NFS land (Flux Canyon / Barriles Tank alignment with new construction and bridge) as the preferred alternative to "bypass Patagonia," but provides no updated, transparent traffic modeling incorporating full production volumes or expansions. New Critical Gap - Regional Impact Plan for New Road Directing Traffic Through Nogales: The FEIS contains no regional cumulative traffic impact plan or analysis for the PAR's downstream effects. By routing heavy haul trucks, supplies, concentrates, explosives and personnel onto NFS and connecting county / state roads that direct traffic through Nogales (and associated routes), the project imposes unstudied increases in truck volumes on Nogales-area infrastructure. This will result in significant air quality degradation (additional diesel PM2.5, mineral dust, and manganese emissions affecting the border community already in an impaired locality) and safety risks (mixed-use conflicts, accident potential on routes shared with local residents, school buses and cross-border traffic). No cost-benefit, air dispersion modeling or emergency response analysis specific to Nogales has been performed, despite NEPA's mandate for cumulative and regional effects. This omission directly conflicts with CNF scenic and recreational objectives and increases public liability. This violates NEPA's requirement for a detailed project description and analysis of direct, indirect, and cumulative impacts, including updated traffic modeling, regional cumulative effects, air-quality and safety analysis, and enforceable mitigation (40 CFR 1502.14, 1502.16). On NFS land, the inadequate analysis and new critical gap on downstream Nogales impacts prevent meaningful evaluation of traffic volumes, mixed-use safety, air-quality degradation, and scenic/recreational conflicts. The FEIS must provide updated, transparent traffic modeling incorporating full production volumes and expansions; resolve all DEIS traffic and roadway concerns; and include a full regional traffic impact plan with Nogales-specific air dispersion modeling, cost-benefit analysis, emergency response analysis, safety audits, air monitoring, and alternative routing options (modeled on Rosemont EIS standards) before advancing. This issue also ties directly to the roadway design, air quality and emissions, and scenic-integrity gaps raised previously and remains unaddressed.

Gap: The Report does not address DEIS concerns on mine traffic on Harshaw Road, cumulative regional impacts, HazMat trucks, Flux Canyon Road design, mixed-use safety, or sustainable practices; the lack of updated, transparent traffic modeling for the ~7.6-mile PAR; or the new critical gap on regional cumulative traffic impacts through Nogales (no traffic impact plan, air dispersion modeling, cost-benefit analysis, emergency response analysis, safety audits, air monitoring, or alternative routing options).

Why it must be addressed: NEPA and Forest Service regulations require detailed traffic and roadway analysis on NFS land, including updated modeling, cumulative regional effects, and site-specific safety/air-quality assessments, to evaluate direct, indirect, and cumulative impacts and ensure compatibility with scenic, recreational, and public-safety objectives.

Recommended Remedies: Provide updated, transparent traffic modeling incorporating full production volumes and expansions; resolve all DEIS traffic and roadway concerns; and include a full regional traffic impact plan with Nogales-specific air dispersion modeling, cost-benefit analysis, emergency response analysis, safety audits, air monitoring, and alternative routing options (modeled on Rosemont EIS standards) before finalizing the FEIS.

Discussion: The FEIS did not address this issue at all under NEPA or related regulations.

A. What the Response Report Actually Says:

The Forest Service's Comment Analysis and Response Report contains no consolidated statement and no response whatsoever to the Traffic and Roadway Impacts. Searches of the FEIS document for "traffic," "roadway impacts," "Harshaw Road," "cumulative regional impacts," "HazMat trucks," "Flux Canyon Road," "primary access road," "PAR," "Barriles Tank," "Nogales," "regional traffic impact plan," "air dispersion modeling," "emergency response," "safety audits," or "alternative routing" return zero relevant hits addressing the concerns, new critical gap, or mitigation. "Primary access road" or "Flux Canyon" appears only incidentally in unrelated sections (vegetation, hydrology, or general operations) without any updated traffic modeling, full production volumes, or downstream Nogales analysis. No additional studies or data resolve the DEIS deficiencies or the new critical gap on Nogales-area impacts identified in the FEIS. The FEIS therefore carries forward the exact same inadequately analyzed DEIS traffic and roadway concerns and the new critical gap on regional impacts through Nogales that were criticized in the DEIS.

B. Why This Is Inadequate Under NEPA and Other Regulations

NEPA (40 CFR 1502.14, 1502.16) explicitly requires a detailed project description and analysis of direct, indirect, and cumulative impacts. For the primary access road and associated traffic on National Forest System (NFS) land, this includes sufficiently detailed traffic and roadway analysis so the public and decision-makers can evaluate:

- \*Mine traffic on Harshaw Road, cumulative regional impacts, HazMat trucks, Flux Canyon Road design, mixed-use safety, and sustainable practices,

- \*Updated, transparent traffic modeling incorporating full production volumes and expansions for the ~7.6-mile PAR,

- \*Regional cumulative traffic impact plan for downstream effects through Nogales (including air dispersion modeling for diesel PM2.5, mineral dust, and manganese; cost-benefit analysis; emergency response analysis; safety audits; and alternative routing options).

The DEIS (and new FEIS data) specifically flagged traffic and roadway impacts and the need for:

- \*Adequate analysis of mine traffic on Harshaw Road, cumulative regional impacts, HazMat trucks, Flux Canyon Road design, mixed-use safety, and sustainable practices,

- \*Updated, transparent traffic modeling for the PAR,

- \*A full regional traffic impact plan with Nogales-specific analysis.

None of this was supplied or analyzed in the FEIS. The endorsement of the PAR as the preferred alternative to "bypass Patagonia" "inadequately represents the traffic, roadway, air-quality, and cumulative impacts" - exactly as raised previously - and the Response Report offers no correction.

Additional NEPA violation on Forest Service land (scenic, recreational, and public safety):

- \*The PAR on NFS land and its downstream routing through Nogales directly conflict with the Coronado National Forest 2018 Land and Resource Management Plan's scenic and recreational objectives.

- \*Unstudied increases in truck volumes create mixed-use safety risks and air-quality degradation in an already impaired border community without cost-benefit, air dispersion modeling, or emergency response analysis.

- \*NEPA cumulative-impact analysis (40 CFR 1508.1(g)(3)) and Forest Service policy (FSM 7700 Transportation System, 36 CFR 212) require explicit assessment of regional traffic and roadway impacts on NFS lands. The FEIS is silent.

Industry and regulatory standards ignored:

- \*AASHTO Geometric Design of Highways and Streets, mine-haul-road guidelines, and NEPA cumulative-effects requirements mandate updated traffic modeling, regional impact plans, air dispersion modeling, safety audits, and alternative routing options for projects affecting NFS and connecting public roads.

- \*Rosemont EIS standards and best practices for major mining transportation require full regional cumulative

traffic studies, Nogales-specific air monitoring, and emergency response analysis to protect public safety and air quality. The absence of these elements does not satisfy this standard.

C. Bottom Line:

This is a clear NEPA failure: the agency simply ignored a substantive issue (including a new critical gap) that demanded the minimum updated traffic modeling, regional impact plan, and Nogales-specific analysis needed for a credible "hard look." The FEIS still relies on the same inadequately analyzed DEIS traffic and roadway concerns and the unsupported downstream impacts through Nogales that prevent meaningful evaluation of cumulative effects, mixed-use safety, air-quality degradation, and scenic/recreational protection on Forest Service Land.

Objection 4: Infrastructure and Safety (Unresolved from DEIS)

Summary: The FEIS Response Report fails to address Infrastructure and Safety. HazMat transport risks, emergency/fire response plans, chemical accidents, wildfire ignition from operations / vehicles / powerlines, transmission/gas line corrosion and EV / automation implementation details remain vague or unaddressed with failure-rate data, site-specific plans, or liability allocation. The FEIS adds no new robust analysis for the PAR or power line on NFS land. This violates NEPA's requirement for a detailed project description and analysis of direct, indirect, and cumulative impacts, including infrastructure safety, emergency response, wildfire risk, and enforceable mitigation (40 CFR 1502.14, 1502.16). On NFS land, the vague and unaddressed infrastructure and safety elements prevent meaningful evaluation of HazMat risks, wildfire ignition potential, line corrosion, chemical accidents, and EV/automation implementation. The FEIS must provide failure-rate data, site-specific plans, liability allocation, and robust new analysis for the PAR and power line before advancing. This issue also ties directly to the traffic and roadway impacts, utility lines and scenic integrity, and air quality gaps raised previously and remains unaddressed.

Gap: The Report does not address HazMat transport risks, emergency/fire response plans, chemical accidents, wildfire ignition from operations/vehicles/powerlines, transmission/gas line corrosion, EV / automation implementation details, or the lack of failure-rate data, site-specific plans, liability allocation, and new robust analysis for the PAR or power line on NFS land.

Why it must be addressed: NEPA and Forest Service regulations require detailed infrastructure and safety analysis on NFS land, including failure-rate data, site-specific emergency and wildfire plans, and liability allocation, to evaluate direct, indirect, and cumulative risks to public safety, wildfire-prone areas, and NFS resources.

Recommended Remedies: Provide failure-rate data, site-specific emergency/fire response plans, chemical-accident protocols, wildfire-ignition mitigation (including from operations, vehicles, and powerlines), transmission/gas line corrosion analysis, EV/automation implementation details, liability allocation, and robust new analysis for the PAR and power line before finalizing the FEIS.

Discussion: The FEIS did not address this issue at all under NEPA or related regulations.

A. What the Response Report Actually Says:

The Forest Service's Comment Analysis and Response Report contains no consolidated statement and no response whatsoever to the Infrastructure and Safety. Searches of the FEIS document for "HazMat," "hazardous materials," "emergency response," "fire response," "chemical accidents," "wildfire ignition," "transmission line," "gas line," "corrosion," "EV," "automation," "failure-rate data," "site-specific plans," "liability allocation," "PAR," or "power line" return zero relevant hits addressing the risks, plans, or gaps. \* "Infrastructure" or "safety" appears only incidentally in general project descriptions without any new failure-rate data, site-specific plans, liability allocation, or robust analysis for the PAR or power line. Emergency response, wildfire, or HazMat issues are referenced in passing under environmental mitigation or operations sections, but never with specific data, protocols, or corrosion/EV/automation details. No additional studies or data resolve the deficiencies identified in the DEIS. The FEIS therefore carries forward the exact same vague and unaddressed infrastructure and safety elements that were criticized in the DEIS.

B. Why This Is Inadequate Under NEPA and Other Regulations:

NEPA (40 CFR 1502.14, 1502.16) explicitly requires a detailed project description and analysis of direct, indirect,

and cumulative impacts. For infrastructure on National Forest System (NFS) land, this includes sufficiently detailed safety analysis so the public and decision-makers can evaluate:

- \*HazMat transport risks, emergency/fire response plans, and chemical accidents

- \*Wildfire ignition from operations, vehicles, and powerlines

- \*Transmission/gas line corrosion

- \*EV/automation implementation details

- \*Failure-rate data, site-specific plans, and liability allocation.

The DEIS specifically flagged infrastructure and safety and the need for:

- \*Resolution of HazMat transport risks, emergency/fire response plans, chemical accidents, wildfire ignition from operations / vehicles / powerlines, transmission / gas line corrosion, and EV / automation implementation details

- \*Failure-rate data, site-specific plans, and liability allocation

- \*New robust analysis for the PAR and power line on NFS land.

None of this was supplied or analyzed in the FEIS. The continued vagueness "inadequately represents the infrastructure and safety impacts" - exactly as raised previously - and the Response Report offers no correction.

Additional NEPA violation on Forest Service land (public safety and wildfire protection):

- \*Infrastructure elements on NFS land (PAR, power line, and operations) increase wildfire ignition risks in a wildfire-prone area and conflict with the Coronado National Forest 2018 Land and Resource Management Plan's safety, scenic, and resource-protection objectives.

- \*Without site-specific plans, failure-rate data, or liability allocation, chemical accidents, HazMat incidents, and corrosion risks cannot be evaluated.

- \*NEPA cumulative-impact analysis (40 CFR 1508.1(g)(3)) and Forest Service policy require explicit assessment of infrastructure safety on NFS lands. The FEIS is silent.

Industry and regulatory standards ignored:

- \*DOT HazMat regulations (49 CFR), NFPA wildfire-mitigation standards, and PHMSA pipeline-corrosion guidelines require failure-rate data, site-specific emergency response plans, chemical-accident protocols, and liability allocation for mining infrastructure.

- \*Best practices for NFS projects (including EV / automation and power-line safety) mandate robust, quantitative analysis to prevent ignition and ensure public safety. Vague commitments without data or plans do not satisfy this standard.

C. Bottom Line:

This is a clear NEPA failure: the agency simply ignored a substantive issue that demanded the minimum failure-rate data, site-specific plans, and robust analysis for infrastructure and safety needed for a credible "hard look." The FEIS still relies on the same vague and unaddressed HazMat, wildfire, corrosion and emergency-response elements that prevent meaningful evaluation of public safety, wildfire risks, and liability on Forest Service Land.

Objection 5: Tailings and Reclamation (Unresolved from DEIS)

Summary: The FEIS Response Report fails to address Tailings and Reclamation. Long-term dry-stack tailings risks, backfill contamination and reclamation feasibility (including scenic integrity compliance) are still insufficiently analyzed. The updated secondary tailings facility on NFS land lacks updated stability modeling for 70-year operations. This violates NEPA's requirement for a detailed project description and analysis of direct, indirect, and cumulative impacts, including long-term tailings stability, backfill contamination, reclamation feasibility, and scenic integrity (40 CFR 1502.14, 1502.16). On NFS land, the insufficient analysis and lack of updated stability modeling prevent meaningful evaluation of long-term environmental risks, post-closure burdens, and scenic-integrity compliance. The FEIS must include detailed long-term dry-stack tailings risk assessments, updated stability modeling for 70-year operations, backfill contamination analysis, and reclamation feasibility plans (including scenic integrity compliance) before advancing. This issue also ties directly to the Tailings Storage Facility (TSF) and Acid-Generating Waste gaps, subsidence, and scenic-integrity gaps raised previously and remains unaddressed.

Gap: The Report does not address long-term dry-stack tailings risks, backfill contamination, reclamation feasibility (including scenic integrity compliance), or the lack of updated stability modeling for the secondary tailings facility on NFS land for 70-year operations.

Why it must be addressed: NEPA and Forest Service regulations require detailed analysis of tailings and reclamation on NFS land, including long-term stability modeling, contamination risks, and scenic integrity compliance, to evaluate direct, indirect, and cumulative impacts and ensure successful post-closure restoration.

Recommended Remedies: Include detailed long-term dry-stack tailings risk assessments, updated stability modeling for 70-year operations, backfill contamination analysis, and reclamation feasibility plans (including scenic integrity compliance) before finalizing the FEIS.

Discussion: The FEIS did not address this issue at all under NEPA or related regulations.

A. What the Response Report Actually Says: The Forest Service's Comment Analysis and Response Report contains no consolidated statement and no response whatsoever to the Tailings and Reclamation. Searches of the FEIS document for "tailings," "dry-stack," "backfill contamination," "reclamation feasibility," "scenic integrity," "stability modeling," "secondary tailings facility," or "70-year operations" return zero relevant hits addressing the risks, analysis, or gaps. "Tailings" or "reclamation" appears only incidentally in general project descriptions without any new stability modeling, backfill analysis, or scenic compliance data. No additional studies or data resolve the deficiencies identified in the DEIS. The FEIS therefore carries forward the exact same insufficient analysis of long-term dry-stack tailings risks and reclamation that were criticized in the DEIS.

B. Why This Is Inadequate Under NEPA and Other Regulations:

NEPA (40 CFR 1502.14, 1502.16) explicitly requires a detailed project description and analysis of direct, indirect, and cumulative impacts. For the secondary tailings facility and reclamation on National Forest System (NFS) land, this includes sufficiently detailed analysis so the public and decision-makers can evaluate:

- \*Long-term dry-stack tailings risks and stability modeling for 70-year operations

- \*Backfill contamination, \* Reclamation feasibility, including scenic integrity compliance

The DEIS specifically flagged tailings and reclamation and the need for:

- \*Sufficient analysis of long-term dry-stack tailings risks, backfill contamination, and reclamation feasibility (including scenic integrity compliance)

- \*Updated stability modeling for the secondary tailings facility on NFS land for 70-year operations.

None of this was supplied or analyzed in the FEIS. The insufficient analysis "inadequately represents the long-term tailings and reclamation impacts" - exactly as raised previously - and the Response Report offers no correction.

Additional NEPA violation on Forest Service land (scenic integrity and post-closure restoration):

- \*The updated secondary tailings facility on NFS land threatens the Coronado National Forest 2018 Land and Resource Management Plan's scenic integrity and reclamation objectives.

- \*Without updated stability modeling or detailed reclamation plans, long-term risks to environmental resources and scenic compliance cannot be evaluated.

- \*NEPA cumulative-impact analysis (40 CFR 1508.1(g)(3)) and Forest Service policy require explicit assessment of tailings and reclamation on NFS lands. The FEIS is silent.

Industry standards ignored:

- \*Modern mining guidelines (EPA and ICMM tailings management standards) require updated stability modeling for long-term dry-stack facilities (especially 70-year operations), backfill contamination analysis, and full reclamation plans to achieve scenic integrity compliance.

- \*Vague or unupdated analysis does not satisfy this standard.

C. Bottom Line:

This is a clear NEPA failure: the agency simply ignored a substantive issue that demanded the minimum long-term stability modeling and reclamation feasibility analysis needed for a credible "hard look." The FEIS still relies on the same insufficiently analyzed dry-stack tailings risks, backfill contamination, and reclamation that prevent meaningful evaluation of long-term impacts and scenic integrity on Forest Service Land.

Objection 6: Exploration and Land Use (Unresolved from DEIS)

Summary: The FEIS Response Report fails to address Exploration and Land Use. Drilling pad, exploration road, fencing/berm, trail replacement, and utility right-of-way impacts on biodiversity, recreation, and scenic values are not resolved with site-specific restoration or wildlife corridor plans. This violates NEPA's requirement for a detailed project description and analysis of direct, indirect, and cumulative impacts, including land-use changes,

biodiversity protection, recreation access, and scenic integrity (40 CFR 1502.14, 1502.16). On NFS land, the lack of site-specific restoration and wildlife corridor plans prevents meaningful evaluation of fragmentation, habitat disruption, recreational displacement, and scenic degradation. The FEIS must include site-specific restoration plans, wildlife corridor protections, and full analysis of drilling pad, exploration road, fencing/berm, trail replacement, and utility right-of-way impacts before advancing. This issue also ties directly to the utility lines and scenic integrity, road construction and environmental impacts, and scenic-integrity gaps raised previously and remains unaddressed.

Gap: The Report does not address drilling pad, exploration road, fencing/berm, trail replacement, or utility right-of-way impacts on biodiversity, recreation, and scenic values, or the absence of site-specific restoration or wildlife corridor plans.

Why it must be addressed: NEPA and Forest Service regulations require detailed analysis of exploration and land-use activities on NFS land, including site-specific restoration and wildlife corridor plans, to evaluate direct, indirect, and cumulative impacts to biodiversity, recreation, and scenic resources.

Recommended Remedies: Include site-specific restoration plans, wildlife corridor protections, and full analysis of drilling pad, exploration road, fencing/berm, trail replacement, and utility right-of-way impacts on biodiversity, recreation, and scenic values before finalizing the FEIS.

Discussion: The FEIS did not address this issue at all under NEPA or related regulations.

A. What the Response Report Actually Says:

The Forest Service's Comment Analysis and Response Report contains no consolidated statement and no response whatsoever to the Exploration and Land Use. Searches of the FEIS document for "drilling pad," "exploration road," "fencing," "berm," "trail replacement," "utility right-of-way," "biodiversity," "recreation," "scenic values," "site-specific restoration," or "wildlife corridor plans" return zero relevant hits addressing the impacts or gaps. "Exploration" or "land use" appears only incidentally in general project descriptions without any new data on site-specific restoration or wildlife corridor plans. No additional studies or data resolve the deficiencies identified in the DEIS. The FEIS therefore carries forward the exact same unresolved impacts to biodiversity, recreation, and scenic values from exploration and land-use activities that were criticized in the DEIS.

B. Why This Is Inadequate Under NEPA and Other Regulations:

NEPA (40 CFR 1502.14, 1502.16) explicitly requires a detailed project description and analysis of direct, indirect, and cumulative impacts. For exploration and land-use activities on National Forest System (NFS) land, this includes sufficiently detailed analysis so the public and decision-makers can evaluate:

- \*Drilling pad, exploration road, fencing/berm, trail replacement, and utility right-of-way impacts on biodiversity, recreation, and scenic values

- \*Site-specific restoration plans

- \*Wildlife corridor protections

The DEIS specifically flagged exploration and land use and the need for:

- \*Resolution of drilling pad, exploration road, fencing/berm, trail replacement, and utility right-of-way impacts on biodiversity, recreation, and scenic values

- \*Site-specific restoration or wildlife corridor plans.

None of this was supplied or analyzed in the FEIS. The unresolved impacts "inadequately represent the exploration and land-use effects" - exactly as raised previously - and the Response Report offers no correction.

Additional NEPA violation on Forest Service land (biodiversity, recreation, and scenic values):

- \*Exploration and land-use activities on NFS land (drilling pads, roads, fencing, and rights-of-way) fragment habitats, displace recreation, and degrade scenic values, directly conflicting with the Coronado National Forest 2018 Land and Resource Management Plan's biodiversity, recreation, and scenic objectives.

- \*Without site-specific restoration or wildlife corridor plans, cumulative fragmentation and access impacts cannot be evaluated.

- \*NEPA cumulative-impact analysis (40 CFR 1508.1(g)(3)) and Forest Service policy require explicit assessment of land-use changes on NFS lands. The FEIS is silent.

Industry and regulatory standards ignored:

- \*Forest Service land-use and wildlife guidelines (FSM 2600 and 2800) and best-practice biodiversity standards

require site-specific restoration plans and dedicated wildlife corridor protections for exploration roads, drilling pads, fencing, and rights-of-way to minimize fragmentation and maintain scenic and recreational values.

\*Vague or unaddressed impacts without these elements do not satisfy this standard.

C. Bottom Line This is a clear NEPA failure: the agency simply ignored a substantive issue that demanded the minimum site-specific restoration and wildlife corridor plans needed for a credible "hard look." The FEIS still relies on the same unresolved drilling pad, exploration road, fencing / berm, trail replacement, and utility right-of-way impacts that prevent meaningful evaluation of biodiversity, recreation and scenic values on Forest Service Land.

#### Objection 7: Socioeconomic and Community Impacts (Unresolved from DEIS)

Summary: The FEIS Response Report fails to address core socioeconomic and community-impact issues raised in the DEIS, including contractor qualifications, specific road upgrades to FR5521 and FR4687, noise and light pollution affecting nearby residents and recreational users, and long-term Harshaw Road maintenance responsibilities. Searches of the FEIS document...return zero relevant hits addressing the impacts or gaps. These omissions violate NEPA's requirement for a detailed analysis of direct, indirect, and cumulative socioeconomic and community impacts (40 CFR 1502.14, 1502.16), and prevent meaningful evaluation of safety, quality of life, and community cost burdens. The FEIS provides no site-specific commitments, no enforceable mitigation, and no analysis of how these unresolved issues will affect residents, road users, or county infrastructure. As with the exploration and land-use omissions, the agency simply ignored a substantive issue that demanded a "hard look."

Gap: The Response Report does not address contractor qualifications for road construction, blasting, hauling, and high-volume industrial traffic, required upgrades to FR5521 and FR4687 to safely accommodate mine-related traffic, noise and light pollution impacts on residents, recreationists, and wildlife, and Harshaw Road maintenance responsibilities, cost-sharing, or long-term burden on Santa Cruz County

No new data, analysis, or commitments appear in the FEIS to resolve these DEIS-identified deficiencies.

Why it must be addressed: NEPA requires a detailed analysis of socioeconomic and community impacts, including safety and infrastructure impacts from industrial traffic; community cost burdens from road degradation; quality-of-life impacts from noise and light pollution; and contractor qualifications affecting public safety and environmental compliance. The DEIS specifically flagged the need for clear contractor qualifications and oversight; specific road upgrades to FR5521 and FR4687; analysis of noise and light pollution; and defined Harshaw Road maintenance responsibilities. None of these were supplied or analyzed in the FEIS. As with the land-use omissions, the FEIS "carries forward the exact same unresolved impacts...that were criticized in the DEIS."

Recommended Remedies: Before finalizing the FEIS, the Forest Service must include contractor qualification standards and oversight requirements; site-specific engineering and safety upgrades for FR5521 and FR4687; quantitative noise and light pollution analysis with enforceable mitigation; and a clear, enforceable Harshaw Road (and now Flux Canyon) maintenance and cost-sharing plan.

Discussion: The FEIS did not address this issue at all under NEPA or related regulations.

#### A. What the Response Report Actually Says

The Forest Service's Comment Analysis and Response Report contains no consolidated statement and no response whatsoever to contractor qualifications, FR5521/FR4687 upgrades, noise/light pollution, or Harshaw Road maintenance responsibilities. Searches of the FEIS document...return zero relevant hits addressing the impacts or gaps. Searches for "contractor," "FR5521," "FR4687," "noise," "light," "Harshaw Road maintenance," "road responsibility," or "community impacts" return no relevant analysis or commitments. These topics appear only incidentally in general project descriptions, without any new data or mitigation. No additional studies or information resolve the deficiencies identified in the DEIS. Thus, the FEIS carries forward the same unresolved socioeconomic and community impacts that were previously identified.

#### B. Why This Is Inadequate Under NEPA and Other Regulations:

NEPA requires detailed analysis of socioeconomic and community impacts, Under 40 CFR 1502.14 and 1502.16, the FEIS must analyze:

\*Direct impacts (traffic safety, noise, light, contractor performance)

\*Indirect impacts (road degradation, emergency response delays)

\*Cumulative impacts (long-term county maintenance costs, increased industrialization of Harshaw Road)

The FEIS provides none of this.

Contractor qualifications are a public-safety issue. High-volume industrial hauling, blasting, and road construction require:

\*Qualified contractors

\*Safety standards

\*Oversight mechanisms

The FEIS contains no such requirements, leaving the public without assurance that road work and hauling will be conducted safely.

FR5521 and FR4687 upgrades are essential for safe mine traffic. The DEIS identified the need for:

\*Widening

\*Surfacing improvements

\*Sight-distance corrections

\*Drainage and erosion controls

The FEIS provides no engineering detail, no commitments, and no analysis of safety risks if upgrades are not completed.

Noise and light pollution impacts remain unanalyzed. Nearby residents, recreationists, and wildlife will experience:

\*24-hour lighting

\*Heavy-truck noise

\*Blasting and construction noise

The FEIS includes no quantitative modeling, no thresholds, and no enforceable mitigation.

Harshaw Road (and now Flux Canyon Road) maintenance responsibilities are undefined. Harshaw Road is a county asset and Flux Canyon will be seen as the same. Without a defined maintenance and cost-sharing plan, Santa Cruz County taxpayers may bear:

\*Increased maintenance costs

\*Accelerated pavement degradation

\*Emergency-response burdens

NEPA requires disclosure of these foreseeable socioeconomic impacts.

Pattern of omission mirrors other FEIS failures

As with the exploration and land-use issue, the agency simply ignored a substantive issue that demanded the minimum...needed for a credible "hard look." The same failure applies here.

#### C. Bottom Line

This is a clear NEPA failure. The FEIS ignores contractor qualifications, FR5521 / FR4687 upgrades, noise and light pollution and Harshaw / Flux Canyon Road maintenance responsibilities - all of which are essential to evaluating socioeconomic and community impacts. Without site-specific analysis and enforceable commitments, the FEIS does not provide the "hard look" required by NEPA and leaves the public unable to assess safety, quality-of-life impacts, or long-term county cost burdens.

#### Objection 8: Long-Term and Regional Impacts (Unresolved from DEIS)

Summary: The FEIS Response Report fails to address long-term and regional impacts associated with extended 30-70 year production, full-chain lifecycle effect, and subsidence risks. Searches of the FEIS document...return zero relevant hits addressing the impacts or gaps. These omissions violate NEPA's requirement for a detailed analysis of direct, indirect, and cumulative impacts over the full operational and post-closure timeframe (40 CFR 1502.14, 1502.16; 1508.1(g)(3)). The FEIS provides no credible long-term modeling, no regional cumulative-impact assessment, and no site-specific subsidence analysis. As with the exploration and land-use omissions, the agency simply ignored a substantive issue that demanded a "hard look."

Gap: The Response Report does not address the extended 30-70 year production impacts on water, air, transportation, and community infrastructure; full-chain lifecycle analysis (exploration ? construction ? production ? closure ? post-closure); subsidence risks associated with underground mining and long-term geotechnical instability; or regional cumulative impacts across the Patagonia Mountains, Sonoita Creek watershed and

downstream communities. No new data, modeling, or commitments appear in the FEIS to resolve these DEIS-identified deficiencies.

**Why It Must Be Addressed:** NEPA requires a detailed analysis of long-term and regional impacts, including multi-decade operational effects on groundwater, surface water, air quality, and habitat; full lifecycle impacts, including closure, reclamation, and post-closure monitoring; subsidence risks and geotechnical stability over the life of the mine; and regional cumulative impacts across watersheds, wildlife corridors, and transportation networks. The DEIS specifically flagged the need for long-term production modeling; full-chain lifecycle analysis; subsidence risk assessment; and regional cumulative-impact evaluation. None of this was supplied or analyzed in the FEIS. As with other unresolved issues, the FEIS "carries forward the exact same unresolved impacts...that were criticized in the DEIS."

**Recommended Remedies:** Before finalizing the FEIS, the Forest Service must include a 30-70 year operational impact model for water, air, transportation, and community infrastructure; a full-chain lifecycle analysis covering exploration through post-closure; a site-specific subsidence risk assessment with enforceable mitigation; and a regional cumulative-impact analysis covering the Patagonia Mountains, Sonoita Creek watershed, and downstream communities

**Discussion:** The FEIS did not address this issue at all under NEPA or related regulations.

#### A. What the Response Report Actually Says

The Forest Service's Comment Analysis and Response Report contains no consolidated statement and no response whatsoever to extended production impacts, lifecycle analysis, or subsidence risks. "Searches of the FEIS document...return zero relevant hits addressing the impacts or gaps." Searches for "long-term," "70-year," "lifecycle," "subsidence," "regional impacts," "post-closure," or "geotechnical" return no relevant analysis or commitments. These topics appear only incidentally in general project descriptions, without any new data or mitigation. No additional studies or information resolve the deficiencies identified in the DEIS. Thus, the FEIS carries forward the same unresolved long-term and regional impacts that were previously identified.

#### B. Why This Is Inadequate Under NEPA and Other Regulations

NEPA requires long-term and cumulative-impact analysis. Under 40 CFR 1502.14, 1502.16, and 1508.1(g)(3), the FEIS must analyze:

- \*Multi-decade operational impacts
- \*Post-closure and long-term monitoring requirements
- \*Regional cumulative impacts across watersheds and ecosystems

The FEIS provides none of this.

Extended 30-70 year production impacts are foreseeable and significant. Long-term production affects:

- \*Groundwater drawdown and aquifer recovery
- \*Air emissions and dust generation
- \*Transportation infrastructure degradation
- \*Wildlife displacement and habitat fragmentation

The FEIS does not model or disclose these impacts.

Full-chain lifecycle analysis is required for a credible "hard look." Lifecycle analysis must include:

- \*Exploration impacts
- \*Construction and production impacts
- \*Closure and reclamation
- \*Post-closure monitoring and long-term liabilities

The FEIS provides no lifecycle modeling and no post-closure commitments.

Subsidence risks remain unanalyzed. Underground mining can cause:

- \*Surface cracking
- \*Road and infrastructure damage
- \*Altered hydrology
- \*Safety hazards for recreationists and wildlife

The FEIS contains no geotechnical modeling, no subsidence maps, and no mitigation.

Regional cumulative impacts are entirely missing. The Patagonia Mountains and Sonoita Creek watershed are

already stressed by:

- \*Historical mining

- \*Ongoing exploration

- \*Climate-driven water scarcity

NEPA requires regional cumulative-impact analysis. The FEIS is silent.

Pattern of omission mirrors other FEIS failures.

As with the exploration and land-use issue, the agency simply ignored a substantive issue that demanded the minimum...needed for a credible "hard look." The same failure applies here.

C. Bottom Line:

This is a clear NEPA failure. The FEIS ignores extended 30-70 year production impacts, full-chain lifecycle analysis, and subsidence risks - all essential to evaluating long-term and regional consequences. Without multi-decade modeling, lifecycle analysis and geotechnical assessment, the FEIS does not provide the "hard look" required by NEPA and leaves the public unable to assess long-term environmental, hydrological, and community risks.

#### Objection 9: Regulatory and Planning Compliance (Unresolved from DEIS)

Summary: The FEIS Response Report fails to address core regulatory and planning-compliance issues raised in the DEIS, including the integration of U.S. Department of Transportation (DOT) safety principles, the requirement for ongoing EIS update schedules, and the application of IRMA/ICMM best-practice standards for responsible mining. Searches of the FEIS document...return zero relevant hits addressing the impacts or gaps. These omissions violate NEPA's requirement for a detailed and transparent analysis of regulatory compliance, safety planning, and long-term operational governance (40 CFR 1502.14, 1502.16). The FEIS provides no evidence of alignment with federal safety frameworks, no schedule for updating the EIS as conditions evolve, and no incorporation of internationally recognized mining standards.

Gap: The Response Report does not address integration of DOT safety principles for heavy-truck operations, hazardous materials, and roadway risk management; required schedules for updating the EIS as operations expand or conditions change; or adoption of IRMA (Initiative for Responsible Mining Assurance) or ICMM (International Council on Mining & Metals) best practices for safety, transparency, and community protection. No new data, commitments, or regulatory crosswalks appear in the FEIS to resolve these DEIS-identified deficiencies.

Why It Must Be Addressed: NEPA requires a detailed analysis of regulatory compliance and planning frameworks, including safety standards applicable to transportation, hazardous materials, and industrial traffic; long-term planning mechanisms such as EIS update schedules; best-practice frameworks that ensure transparency, accountability, and community protection. The DEIS specifically flagged the need for DOT safety integration; a schedule for EIS updates; and IRMA / ICMM best-practice alignment. None of this was supplied or analyzed in the FEIS. As with other unresolved issues, the FEIS carries forward the exact same unresolved impacts...that were criticized in the DEIS.

Recommended Remedies: Before finalizing the FEIS, the Forest Service must include a DOT-aligned safety framework for heavy-truck operations, hazardous materials, and roadway risk management; a defined schedule and triggers for EIS updates throughout the project lifecycle; and a crosswalk demonstrating alignment with IRMA/ICMM best practices, or a justification for deviations

Discussion: The FEIS did not address this issue at all under NEPA or related regulations.

#### A. What the Response Report Actually Says

The Forest Service's Comment Analysis and Response Report contains no consolidated statement and no response whatsoever to DOT safety principles, EIS update schedules, or IRMA/ICMM best-practice integration. Searches of the FEIS document...return zero relevant hits addressing the impacts or gaps. Searches for "DOT," "Department of Transportation," "EIS update," "update schedule," "IRMA," "ICMM," "best practices," or "responsible mining" return no relevant analysis or commitments. These topics appear only incidentally in general project descriptions, without any new data or mitigation. No additional studies or information resolve the deficiencies identified in the DEIS. Thus, the FEIS carries forward the same unresolved regulatory and planning-

compliance issues previously identified.

B. Why This Is Inadequate Under NEPA and Other Regulations:

NEPA requires analysis of regulatory compliance. Under 40 CFR 1502.14 and 1502.16, the FEIS must analyze:

- \*Applicable safety regulations

- \*Planning frameworks

- \*Compliance mechanisms

The FEIS provides none of this.

DOT safety principles are essential for heavy-truck and hazardous-material operations. DOT safety frameworks address:

- \*Vehicle standards

- \*Driver qualifications

- \*Hazardous-material handling

- \*Roadway risk management

The FEIS does not integrate these principles or explain how compliance will be ensured.

EIS update schedules are required for long-term projects. A multi-decade mining project requires:

- \*Defined update intervals

- \*Trigger-based revisions (e.g., production changes, new data, new impacts)

- \*Public transparency

The FEIS contains no update schedule and no mechanism for incorporating new information.

IRMA / ICMM best practices are industry standards for responsible mining. IRMA and ICMM frameworks require:

- \*Transparency

- \*Community engagement

- \*Safety and environmental performance

- \*Independent verification

The FEIS does not reference these standards or provide a crosswalk showing alignment.

Pattern of omission mirrors other FEIS failures.

As with the exploration and land-use issue, the agency simply ignored a substantive issue that demanded the minimum...needed for a credible "hard look." The same failure applies here.

C. Bottom Line

This is a clear NEPA failure. The FEIS ignores DOT safety principles, EIS update schedules and IRMA / ICMM best practices - all essential to evaluating regulatory compliance, long-term planning, and responsible mining operations. Without these elements, the FEIS does not provide the "hard look" required by NEPA and leaves the public unable to assess safety, transparency, or long-term governance.

Conclusion and Requested Actions The FEIS and Draft ROD fail to remedy the deficiencies I identified in my June 21, 2025 DEIS rebuttal and introduce two major new gaps: (1) no regional impact plan for the NFS PAR directing traffic through Nogales and its resultant air and safety impacts; and (2) redirection of dewatering water to new basins that will not recharge the aquifer. These omissions violate NEPA, NFMA and CNF Forest Plan requirements for a hard look at cumulative, site-specific, and long-term effects.

I respectfully request that the Forest Service:

- \*Extend or reopen the objection period for full public review of these gaps.

- \*Prepare a supplemental EIS with the specific studies requested in my DEIS comments plus the two new analyses identified above.

- \*Reject the Draft ROD until all deficiencies are resolved with enforceable, funded mitigation and independent verification.

- \*Engage directly with Santa Cruz County communities (including Nogales) and fund any required regional studies.

South32 must be held to the highest standards for this critical-minerals project on public lands. The CNF's biodiversity, scenic integrity, water security, and resident safety must take precedence.

Respectfully Submitted,  
Jay Thompson  
Rio Rico, Santa Cruz County, Arizona