January 25, 2014

TO: Reviewing Officer

USFS Southwest Region 333 Broadway SE

Albuquerque, NM 87102

FROM: Alison Bunting

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RE: Rosemont Copper Project FEIS Objection

I hereby submit a formal objection to the proposed Rosemont Copper project in the Coronado National Forest, Nogales Ranger District. The responsible official is Jim Upchurch.

**Issue:** Impact of blasting at the proposed Rosemont Mine site on the historic structures at the Empire Ranch headquarters buildings on Las Cienegas National Conservation Area (LCNCA).

**FEIS Public Concern Statement:** 423: The Coronado National Forest should revise the EIS to provide a more robust analysis of noise impacts to humans, facilities and structures, livestock, and wildlife over a wider analysis area, and discuss appropriate mitigation measures to reduce those impacts. 424: The USFS should address impacts to private and historic structures from noise and vibration – particularly from blasting. Methods of mitigation and restoration should be discussed. 323: The EIS should include additional mitigation and preservation measures for cultural sites, and describe how applicable federal laws would be met.

In letter #12411 I stated that Mel Green, a respected structural engineer, provided expert commentary in 2008 that the ground disturbances from blasting will surely cause damage to the historic adobe buildings at Empire Ranch headquarters. Specifically, Mr. Green stated that "...the steady ground disturbances from blasting, similar to small earthquakes, would most likely precipitate the deterioration of the mortar between the adobe blocks. This loss of mortar has two effects. The first is the increased maintenance of the buildings through more frequent repointing of the adobe. Further there is a continuing cycling probable, almost a rocking of the block due to ground motion. While the amplitudes are small the continued vibration will have a deleterious effect on the adobe walls."

I also requested in letter #12411: "Further, before any work can commence on the mine, Rosemont Copper must be required put up a bond or some other financial instrument that guarantees that there will be funds available for repairs. The funds must be administered by a neutral, third party, nonprofit organization."

**USFS Response in FEIS Volume 2, Chapter 3, Noise (p. 984):** The USFS did not respond to my concern about possible damage from ground or air vibrations to the historic structures at the Empire Ranch headquarters by conducting requested additional studies by independent experts. Rather, they chose to accept the very limited study of airborne and ground vibrations conducted by a Rosemont contractor, Tetra Tech: "Airborne and ground vibrations caused by blasting were also modeled. Subsonic vibrations are of concern only with respect to property damage; therefore, results are compared only with the nearest residential receptor to the southeast (House A) and northeast (House H)..."

The USFS also ignored my mitigation request for set-aside funds for repairs to these historic structures should damage occur: "Impacts to historical structures at Empire Ranch are not anticipated. Please refer to the Noise section in Chapter 3 of the FEIS for more detailed information. Because the proposed project is not expected to impact these structures, there is not any mitigation for restoration required." (USFS Response Document 322)

**Objection:** The FEIS fails to acknowledge the legitimate concern of the possible impact on the historic adobe structures of the Empire Ranch. Rosemont contractor, Tetra Tech, only analyzed the airborne and ground vibrations at two sites and modeled results on this extremely limited data. As stated in the FEIS (Volume 2, Chapter 3, p. 963): "...geological conditions have a strong influence on the distance at which ground vibrations can be felt..." The two sites analyzed lie north and west of the Empire Ranch buildings and no determination or comparison of the geologic conditions of these sites and the Empire Ranch site was made.

Further, as stated in the FEIS (Volume 2, Chapter 3, p. 963): "At a high enough level, airborne vibrations can rattle loose objects or windows. At even higher intensities, the potential exists for cosmetic damage, such as cracks in stucco, paint, or plaster." The very limited analysis conducted does not take into account the potential impact of adobe structures that are over 140 years old.

Also, a statement in the USFS Response document 424 is factually incorrect: "The Empire Ranch headquarters is more than 8 miles distant from the mine operations area." The straight line distance from Empire Ranch Headquarters to the proposed site of the mine pit is approximately 6 miles, as measured on Google Earth.

Finally, I strongly object to the USFS response to a reasonable mitigation step-- a bond or some other financial instrument that guarantees that there will be funds available for repairs. USFS response document 322 states: "Because the proposed project <u>is not expected</u> to impact these structures, there is not any mitigation for restoration required." Since the USFS is not **certain** that the project will impact the structures how can the USFS cavalierly state that ..."not any mitigation for restoration required."

**Remedy:** The USFS must conduct an independent study on the potential effect of airborne and ground vibrations on the historic headquarters buildings at the Empire Ranch on the Las Cienegas National Conservation Area. In addition, before any work can commence on the mine, Rosemont Copper must be required put up a bond or some other financial instrument that guarantees that there will be funds available for repairs. The funds must be administered by a neutral, third party, nonprofit organization.

The USFS should abandon this version of a FEIS and prepare and circulate for public review and comment a Revised DEIS or Supplemental Draft EIS.

Sincerely,

Alison Bunting

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