WRITTEN STATEMENT OF STEPHEN DOBROTT, B.S. On Behalf of Turner Ranch Properties, LP, owner of the Ladder Ranch

Before the Mining and Minerals Division of the New Mexico Energy, Minerals & Natural Resources Department on the Application of New Mexico Copper Corporation for a Permit to Operate the Copper Flat Mine in Sierra County, New Mexico

October 23-24, 2018

On July 18, 2012, New Mexico Copper Corporation (NMCC), a wholly-owned subsidiary of THEMAC Resources Group, Ltd., submitted to the Mining and Minerals Division of the New Mexico Energy, Minerals and Natural Resources Department an application for a permit to operate the Copper Flat Mine in Sierra County, New Mexico, under the New Mexico Mining Act. The application has since been supplemented. I respectfully submit this written statement, under section 19.10.9.905.E NMAC, on behalf of Turner Ranch Properties, LP, which owns the Ladder Ranch located adjacent to the Copper Flat Mine. My written statement discusses my qualifications and presents the concerns of the Ladder Ranch over several pertinent issues relevant to the issuance of the mining permit. I will summarize my written statement with oral testimony during the hearing to be held on October 23 and 24, 2018 in Truth or Consequences, New Mexico. The slides that I will present with my testimony are Ranches Exhibit 1.

On behalf of the Ladder Ranch, I appreciate the opportunity to submit this written statement, and to testify before the Division.

My statement will focus on the following issues:

- The effects of **noise from blasting** on Ladder Ranch business operations, wildlife and conservation programs;
- The effects of ground vibration on Ladder Ranch facilities, infrastructure and conservation programs;
- The effects of dust on all ranch operations, wildlife, personnel, and guests;
- The cumulative effects of all projected actions of the mine on **wildlife** movement, breeding and population management;
- The effects of potential water loss on bison ranching;
- The effects of the mine on Ladder Ranch outfitting business;
- The effects of the mine on Ladder Ranch ecotourism business;
- The effects of bright light from the mine on our dark skies;

- The effects of water draw down on Ladder Ranch water resources from the projected "cone of depression" emanating from the mine pit;
- The effects of potential **ground water pollution** from the mine's tailings storage facility and waste rock piles.

I. QUALIFICATIONS

I have a Bachelor of Science degree from University of Arizona, majoring in wildlife biology. I've also received specialized training from US Fish & Wildlife Service in refuge management, wildlife management, endangered species propagation, and habitat management. I also received fire suppression training and prescribed fire management training. I was also trained in rangeland evaluation and monitoring.

I worked for the Victorio Company as a Range and Wildlife Specialist on the Gray Ranch in southwest New Mexico for 5 years. I inventoried range and wildlife resources. I also inventoried all stock water resources. I developed range management plans and recommended stocking capacities. I developed and managed big game hunting programs. I planned and supervised various range management programs including prescribed burning for rangeland improvement.

After that, I worked for the Gray Land and Cattle Company as a Game Manager and commercial hunt program coordinator under different ownership for 3 more years. I was responsible for promoting and supervising big game hunting programs. I planned and implemented game surveys and research on rare and endangered species.

Next, I worked for the United States Fish and Wildlife Service for 6 years as a Refuge Biologist. As Refuge Biologist, I was responsible for the recovery of the endangered masked bobwhite on the Buenos Aires National Wildlife Refuge, in Arizona. I participated in the development of the Refuge Master Plan and start-up of the new refuge. In coordination with the Arizona Game and Fish Department, I planned and implemented the reintroduction of pronghorn to the refuge. I was responsible for all the biological surveys on the refuge. I also planned and conducted biological surveys in Sonora, Mexico related to the recovery of the endangered masked bobwhite.

After that, I managed the Ladder Ranch, a 157,000-acre ranch managed for bison and wildlife with special emphasis on imperiled species. I worked there in that capacity for 24 years. I was responsible for all aspects of managing the ranch including hiring employees, annual budgeting and administrative duties, coordinating native species recovery programs, hunting and fishing programs, and raising bison for market. I also coordinated eco-tours with other ranch operations.

I am currently the Ambassador for Ted Turner Expeditions. I promote and participate in the eco-tourism business on Turner properties in New Mexico. My job is to connect people with nature by introducing them to some of the finest and best managed ranch properties in the Southwest. I guide tours on Ladder Ranch and Armendaris Ranch. I also assist with tour development and the training of tour guides. I have done this since March 2017.

My current resume is Ranches Exhibit 2. It is accurate and up to date.

II. INTERESTS OF THE LADDER RANCH

The management of the Ladder Ranch is based on its mission "To manage and enhance Turner lands in an economically sustainable and environmentally sensitive manner while emphasizing the conservation of native species and habitats."

The Ladder Ranch is in western Sierra County, located near the towns of Cuchillo on the north and Hillsboro on the south. The Ladder Ranch is located just north and east of the Copper Flat Mine. Approximately 8 miles including the mine production well fields bound the ranch on the south. Most critical is the 4-mile stretch of boundary adjacent to the proposed expanded mine pit, due to its close proximity to the Ladder Ranch headquarters and base of operations. Another critical area is the Avant Pasture, which livestock and wildlife use for grazing and browsing, and which is immediately to the east and hydrologically downgradient of the proposed waste rock piles and other mine facilities.

What makes the Ladder Ranch sustainable from a business perspective is the diversity and quality of rangelands, the wildlife, and water resources that occur there. The ranch consists of 157,000 acres of private land, 100,600 acres of National Forest and wilderness lands, 20,079 acres of state lands, and 11,480 acres of BLM lands totaling 289,159 acres, or 451.81 square miles. Its proximity to the Black Range watersheds, and elevations from 4,500 feet to 10,000 feet, provide a suite of biological life zones unmatched on any one property in New Mexico. Thus, the biological diversity on the ranch is remarkable and highly regarded by biologists and ecologists alike.

III. SURFACE WATER RESOURCES

The ranch is incised by five semi-perennial creek systems, from north to south, the Cuchillo Creek, Palomas Creek, Seco Creek, Cave Creek, and Las Animas Creek that drain into the Rio Grande Basin. Each contributes greatly to the biological richness of the ranch. Of the five creeks, Las Animas is the most notable for its biodiversity and importance to the Ladder Ranch.

The Las Animas and Cave Creek stream system is crucial and is the life blood of the ranch. Its surface and ground waters supply pristine dependable water for central ranch

operations including administrative facilities, employee and guest housing, livestock, farm irrigation, wildlife and imperiled species, all within 3 to 4 miles distance of the Copper Flat Mine. Notably, Las Animas Creek has been nominated as one of New Mexico's Scenic Waterways and its environmental importance has been documented in scientific publications and the book *River of Spirits* (2017), a natural history of New Mexico's Las Animas Creek, which I co-authored. This remarkable riparian corridor has also been designated as an Important Bird Area by the Audubon Society. Among the creek's most unique features are the ancient Arizona sycamore trees that occur only on this creek within the entire Rio Grande Basin.

Biological significance of Las Animas Creek:

Las Animas Creek provides stream-side (riparian) vegetation and food used by waterfowl and migrating and breeding bird populations unique to the Southwest. This riparian corridor connects migrating birds along the Rio Grande with the upper reaches of the Black Range. Food cover and good quality water along this reach is used by many bird species, including the yellow-billed cuckoo currently listed as a threatened species by the U.S. Fish and Wildlife Service.

Las Animas Creek currently supports four native species of fish, the Rio Grande chub, the Rio Grande sucker, the Rio Grande cutthroat trout, and the long-fin dace. These species depend on pristine water for reproduction and the production of macroinvertebrate food sources made possible by these waters.

Springs along Las Animas:

Within the area nearest to the Copper Flat Mine are several natural springs including Animas Warm Spring, the Manager House Spring, Garden Tank Spring, and Myers Animas Spring, as well as several unnamed springs and seeps along Las Animas Creek.

IV. GROUNDWATER RESOURCES

Within the area closest to the Copper Flat Mine are 5 livestock wells, 3 irrigation wells and 3 domestic wells. These are, west to east, Myers Well, John Cross Well, Wanda Well, Evans Well, and Feedlot Well. The irrigation wells from east to west are Shipping Pens Well, Higgins Well, and Orchard Well. The domestic wells are at headquarters.

In the Avant Pasture in the southeast section of the ranch is the Feedlot Well. Along with the Evans Well, it is used to supply "drinkers" for quail and stock tanks used by bison and large game for drinking. It also provides water to two important conservation facilities, the endangered Bolson tortoise facility where young tortoises are raised and the Feedlot steel rim water storage that is used for maintaining threatened Chiricahua leopard frogs. These water sources are an important component of our eco-tours due to the variety of visible wildlife that they provide for our guests.

V. WILDLIFE

Wildlife abounds on the Ladder Ranch. Healthy populations of elk, mule deer, Coues white tail deer, pronghorn, javelina, black bear, mountain lion, turkey and three species of quail occur there. Fifty-seven species of mammals and over 250 species of birds have been recorded on the ranch (Exhibit 3). Each suite of species is considered a biological treasure and an economical asset to the ranch. Bison are managed as livestock and coexist with other wildlife species ranch-wide. Achieving a balance between conservation and sustainable businesses has been the goal for 25 years.

VI. HABITAT CONSERVATION PROGRAMS

Specific conservation programs have been developed on the Ladder Ranch in accordance with its mission statement and the desire to "save everything," or, at least give it our best effort.

The non-profit Turner Endangered Species Fund partners with United States Fish and Wildlife Service and New Mexico Game and Fish Department in imperiled species restoration projects like the Federally listed Chiricahua leopard frog, the Mexican gray wolf, Bolson tortoise, and yellow-billed cuckoo. Its mission is "to conserve and restore imperiled species, with an emphasis on promoting wild, working landscapes." Additionally, the Turner Biodiversity Division works closely to restore less imperiled species like the Rio Grande cutthroat trout and other native fish to the Las Animas Creek stream system.

The propagation of the threatened Chiricahua leopard frog depends on pristine and reliable ground water. Pristine water is essential for the frog propagation facility at headquarters, notably the water storage facility supplied by water from the Feedlot Well. Pristine water quality and reliable flow is also important to this species in the wild on Cave and Las Animas Creeks. The captive endangered Bolson tortoise also depends on pristine reliable ground water. The threatened yellow-billed cuckoo depends on pristine reliable surface water in Las Animas Creek for its natural habitat.

VII. BUSINESS ENTERPRISES

Since 1992, the Ladder Ranch has been raising and selling bison meat commercially in markets and restaurants. The ranch also conducts big game hunts for mule deer and elk through Turner Ranch Outfitting. The ranch also is a popular destination for guests of Ted Turner Expeditions, an eco-tourism enterprise based in Truth or Consequences. Guests who visit the Ranch for the day will stay at our sister property, the Sierra Grande Lodge, an 18-room historic hotel in Truth or Consequences. Each enterprise depends on healthy well managed environments to operate successfully and to accomplish their objectives in concert with each other. It is important to note that all these businesses

contribute to the economy of Sierra County through taxes and purchases of goods and services. The Ladder Ranch has been doing this on a sustainable basis for 25 years, and it will continue to do so for the foreseeable future.

VIII. COMMUNITY OUTREACH AND YOUTH DEVELOPMENT

For 25 years the Ladder Ranch has hosted numerous programs for local and region-wide youths, such as the Native American Natural Resource Management Practicums that focuses on preserving tribal connections with the land and wildlife and encouraging youth to stay in school and go on to higher learning. To date, over 500 Native American youths from South West tribes have spent time on the Ladder Ranch learning about its conservation programs. Through the Turner Youth Initiative, the ranch has been a focal point for opportunities for local youth, such as high school biology classes and the Boys and Girls Club of Truth or Consequences. Last Friday, 30 students from Socorro and their teachers visited the ranch to see and experience the vast landscapes, historical sites and wildlife.

The riparian environments are tremendous outdoor class rooms that offer our youth a chance to connect with nature and learn the importance of sustainable ecosystems. Las Animas Creek is high on the list for providing a sense of connectivity to the importance of water and the resulting habitats and wildlife it can support for future generations.

IX. LADDER RANCH CONCERNS

According to the BLM's draft Environmental Impact Statement, the Copper Flat Mine will pump about 7,000-acre feet per year of ground water (almost 2 billion gallons), threatening water supplies on the Ladder Ranch, adjacent ranches, Hillsboro, and downstream users along the Rio Grande. Hydrologists project that the mine will eventually reduce the flow in Las Animas Creek at some point after mining begins and potentially eliminate the flow entirely after mine closure.

The mine will dump over 100 million tons of polluted waste into a 500-acre pond, the tailings storage facility, just over 11 miles west of Caballo Reservoir. Contaminants from the mine could leak into the ground water and pollute Ladder Ranch. If a major failure of the tailings facility occurred, spilled tailings could reach the Rio Grande, threatening drinking water supplies as far south as El Paso.

Blasting will be heard and felt at the Ladder Ranch, disrupting the ranch's solitude, affecting the eco-tourism business, and potentially damaging its historic buildings and pipelines. The experience of overnight eco-tour guests will be disrupted by the sound of blasting from the mine just 3 miles distant from the guest house. The ranch biking tours will also be disturbed by the blasting. Nearby captive animals within conservation program facilities may be sensitive to the effects of blasting noise or vibrations, causing potential harm to these state and federally sanctioned programs.

The prevailing southwest winds will bring dust to the Ladder Ranch headquarters 3 miles directly downwind of the mine. The resulting drift of airborne pollutants could harm imperiled species conservation programs.

Our remarkable dark skies will be lit up by the mine's lights, damaging one of the region's best star gazing and photographing locations. Mine lights will thus adversely affect the quality of experience we offer through our eco-tourism business.

Ladder Ranch and neighboring water wells and springs adjacent to and downstream of the mine will also see significant draw down in static water levels resulting in hardship for the ranch and lower Las Animas water users.

One of New Mexico's last remaining populations of the Chiricahua leopard frog, listed by the U.S. Fish and Wildlife Service as threatened, will be at risk due to the projected draw-down of Las Animas Creek. The lowering of the water table caused by the "cone of depression" from constant groundwater pumping during operations and evaporation of the pit lake after mine closure will be devastating to the important biodiversity that occurs there. Native fish and frogs, and riparian obligate species such as the federally listed yellow-billed cuckoo, which depend on the cottonwood gallery forest, will be jeopardized.

Any impairment in quality or depletion in quantity of water derived from ranch domestic, livestock, and irrigation wells or springs would significantly impact these business enterprises and wildlife. Any draw-down of the water table from the projected "cone of depression" emanating from the mine pit, or potential contamination of the water resources from mine facilities, would be a disaster.

Ladder Ranch businesses and established programs could potentially collapse. Without reliable and sufficient clean water, bison ranching on the southern portion of the ranch would be seriously compromised. The habitats of native fish and rare wildlife found along Las Animas Creek could be lost. Without abundant game within this area, our outfitting business would be significantly affected. Without a healthy vibrant ecosystem to show our guests, the Ladder Ranch eco-tourism business would be significantly affected.

The Ladder Ranch urges the Mining and Minerals Division to consider the projected and irreversible impacts that the Copper Flat Mine will have on the Ladder Ranch, its neighbors, local ranchers and farmers, and all downstream water users in the lower Rio Grande. Issuing this permit flies in the face of those who understand the importance of our limited ground water resources and the potential costs of pumping 7,000-acre feet

per year of ground water from this aquifer, especially during this time of uncertain precipitation, of continuing drought conditions in the Southwest, and of changing climate. Issuance of this permit would be at the expense of potentially forever altering the existing unique Las Animas Creek ecosystem.

The Ladder Ranch understands the importance and complexities involved in managing self-sustaining natural ecosystems. It is doubtful that the Copper Flat Mine would ever achieve a sustainable ecosystem, as required by the New Mexico Mining Act, without massive and perpetual expenditure for reclamation and restoration.

Therefore, the Ladder Ranch stands opposed to the issuance of this permit. If the permit is issued and the Copper Flat Mine is allowed to operate, the ranch's water, unique environment, quiet and scenic open spaces, clean air, dark skies; its historic buildings; its diversity of wildlife, bison, hunting, and ecotourism; and its conservation programs could all be affected in ways that would be devastating and irreversible.

I declare under penalty of perjury that the foregoing is true and correct.

Stephen J. Dobrott

Ambassador

Ted Turner Expeditions