

Dr. Charles Dixon

Attached are remarks from Alto resident and wildlife biologist Dr. Charles Dixon regarding impacts to the native wildlife and their habitat should the proposed Alto concrete batch plant be permitted to be built and operate.

Wildlife Testimony Related to Roper Concrete Batch Plant

By Charles Dixon, PhD

The area surrounding the proposed cement batch plant is today quiet and peaceful for people, and is the reason I picked the area to purchase land and build a house over 20 years ago. Some preceded me and many followed. The area is teeming with wildlife from numerous species of migratory birds to an abundance of elk and mule deer. All will be negatively affected by the proposed concrete batch plant. The primary stressor will be the noise created by the plant, the associated vehicles and other activities. All animals, including humans, are stressed by noise. Noise fragments wildlife habitat similarly to the fragmentation caused by a physical barrier. Additionally, there will be airborne contaminants, both dust and gases (CO, NO_x, SO₂, various sizes of PM, VOC & possibly other pollutants). The dust will be taken into the animals' bodies as they breathe and feed in the areas. Gases will be inhaled by all nearby. Area animals will ingest the dust as they groom themselves that is collected on their bodies as they move around in their daily activities.

During the spring, male breeding birds sing to attract a mate, mostly during early mornings. The noise will negatively affect the male's ability to be heard over a significant area around the plant, thus the number of birds produced will decline. Areas around Mexican Spotted Owl nests are closed to human activity during the breeding season due to noise pollution problems. Noisy oil production activities near Lesser Prairie Chicken Leks (dancing grounds) are shut down during the mating season. These are but two examples where human activities are altered during the breeding and nesting season to allow successful reproduction.

Those who enjoy listening to the breeding birds singing will not have that pleasure near their homes, as the songs will be drowned out by noise from the plant. Birds that drink the waste water from cleaning the mixing tanks could be injured from cement in the water. Worst case, they could die as the cement hardens in their digestive tract. When they feed near the plant, dust containing numerous toxins will be ingested and could certainly lead to reduced health and/or a shortened lifespan. Area birds will breathe the dust and gas pollutants into their lungs. The effect of the gas pollutants on birds has not been studied. Cement dust will accumulate in the lungs decreasing lung capacity and possibly leading to other health issues.

The area directly north of the proposed site of the batch plant is currently used for loafing by mule deer, elk and other wildlife. This area will no longer be used due to noise and other activities thus a crucial part of their habitat will be eliminated and the size of their habitat reduced. The stress from the noise across the area surrounding the plant will cause the wildlife to expend more energy than they do currently or they will move from the

area. The animals will be more nervous because the subtle sounds around them are drowned out by more intense noise from the plant. The nervousness will be similar to that on windy days when slight disturbances result in mule deer and elk bolting and leaving the area at high speed. The wildlife will be more susceptible to predation because they are unable to hear approaching predators. In the noisy environment, wildlife of all types will expend greater energy due to greater stress and more frantic movements. Other wildlife daily vocalizations will be disrupted as well, thus, causing behavioral changes within the group, often greater aggressiveness between individuals. Noise also effects feeding times, often reducing time feeding and exposing them to greater predation pressure. All these factors will reduce wildlife health and numbers in the area.

Vocalizations are important in the mating process for many mammalian species and communication within a group. Elk are one species we are familiar with for their mating calls because of their majestic bugle, but other species are not so obvious. Their vocalizations are not as obvious to humans but just as important to their mating process. Elk mating will be disturbed by the noise from the batch plant and others will be disrupted to a greater extent than elk due to their softer vocalizations. Disruptions to mating seasons lead to extended breeding seasons, extended birthing seasons and greater chance of predation on new born young.

Dust particles (pollutants) will be spread across a very large area, especially on windy days. When the wild ungulates, both browsers and grazers and smaller mammals feed in the area, they too will ingest the dust from the plants they feed on. Mammalian wildlife in the area will breathe the dust particles and other airborne pollutants into their lungs negatively affecting their health. Small mammals will be negatively affected to a greater extent than larger animals partially because of their smaller size, but also because their entire body will constantly be in the dust as they move across the landscape on their daily activities.

All these negative factors will reduce wildlife health and numbers. This is not limited to wildlife, but to all living creatures. Some species may be extirpated from the immediate area.