



November 5, 2010

Derrick Willis
Northgate Environmental Management, Inc.
24411 Ridge Route Drive, Suite 130
Laguna Hills, California 92653

Re: Tronox Facility Beta Ditch Burrowing Owl Survey

Dear Mr. Willis,

On November 1, 2010, WRA senior wildlife ecologist Jeff Dreier conducted a habitat assessment and occupancy survey for Burrowing Owl (*Athene cunicularia*) within and adjacent to the Beta Ditch located on the Tronox facility near Henderson, Nevada. This survey effort was conducted to investigate a Burrowing Owl sighting in mid-October 2010 along the west end of the ditch. The sighting was reported by Devin Gordon of McGinley and Associates, representing the Nevada Division of Environmental Protection. Mr. Gordon was present during the habitat assessment and survey, and participated by discussing his sighting and his experience with the species in the region. The purpose of the survey was to determine the status of the owl in the vicinity of the Beta Ditch. If present, measures to minimize disturbance were to be considered.

The Beta Ditch runs west to east across the Tronox facility. It is approximately 10 feet wide with berms of soil on each side. The survey was conducted along approximately 500 feet of unvegetated ditch between the west fence line and densely-vegetated portions of the ditch to the east. Three concrete culvert entrances were investigated: one at the west fence line, and two at the 4th Street road crossing.

Burrowing Owl is a U.S. Fish and Wildlife Service Species of Conservation Concern. In addition, the species is protected under Nevada Revised Statutes 501 and Nevada Administrative Code 503 (Klute, et al. 2003). This species breeds throughout Nevada in salt desert scrub, Mojave shrub, and some sagebrush habitat, as well as in agricultural landscapes. It winters most frequently in the southern half of the state (Klute, et al. 2003). In southern Nevada, the burrowing owl breeding season is March through August. Burrowing owls tend to return to the same territory year after year and may use several burrows in that territory. There is usually one nest burrow and several other burrows (satellite burrows) that are used in one nesting season. Some breeding owls spend the entire year in the region, while others are only present during the breeding season. The males establish territories and prepare the burrows for use (Red Rock Audubon Society).

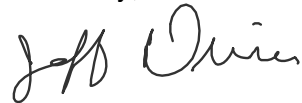
Survey methodology followed guidelines developed by the Burrowing Owl Consortium (1993) and adopted by the California Department of Fish and Game, corresponding to Phase I (habitat suitability) and Phase II (burrow survey) surveys as described in the accepted protocol. The Beta Ditch and adjacent areas were traversed on foot to determine the general suitability for

Burrowing Owl, to locate burrows (or other suitable substrates) for owls, and to search for owls or signs of presence. Owl sign consists of feathers, regurgitated pellets and/or whitewash (i.e., feces stains), and is typically found near the entrances to occupied burrows. Burrowing Owl foraging perches also often show these characteristics as well. All burrows and analogous substrates found were carefully examined for signs of owl occupation. In addition, the high points of berms, nearby cinder block walls, stakes, and the tops of the culverts were inspected for evidence of owl use.

No suitable burrow habitat was observed along the Beta Ditch. In addition, no evidence of owl foraging activity was found on potential perching sites. The large-diameter culverts provide unsuitable roost and/or breeding habitat because they do not exclude predators such as coyotes (*Canis latrans*). The tracks and scat of coyote were common in the ditch and near the culvert entrances.

Based on the results of this survey, proposed remediation activities in the vicinity of the Beta Ditch will not impact Burrowing Owls or their habitat. Mr. Gordon, representing the Nevada Division of Environmental Protection, concurred with these conclusions. Please call me if you have any questions.

Sincerely,



Jeff Dreier
Senior Wildlife Ecologist

References:

California Burrowing Owl Consortium. 1993. Burrowing Owl Survey Protocol and Mitigation Guidelines. April.

Klute, D.S., L.W. Ayers, M.T. Green, W.H. Howe, S.L. Jones, J.A. Shaffer, S.R. Sheffield, and T.S. Zimmerman. 2003. Status Assessment and Conservation Plan for the Western Burrowing Owl in the Western United States. US Department of Interior, Fish and Wildlife Service, Biological Technical Publication FWS/BTP-R6001-2003, Washington, D.C.

Red Rock Audubon Society. Urban Burrowing Owl Project. Web. 3 November 2010. <http://www.redrockaudubon.org/filing-cabinet/urban-burrowing-owl-project-overview/>