



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Post Office Box 1306

Albuquerque, New Mexico 87103

In Reply Refer To:
FWS/R2/ES-HC/EC/042608

OCT 06 2009

Colonel Thomas H. Magness, IV
District Engineer, Los Angeles
U. S. Army Corps of Engineers
P.O. Box 532711
Los Angeles, California 90053-2325

Dear Colonel Magness:

I have reviewed the comments of our Arizona Ecological Services Field Office (Field Office), dated September 11, 2009, regarding Permit Application Number SPL-2004-01399-MB. The applicant, CalPortland Cement, requests authorization for the discharge of dredged and/or fill material into 0.833 acres of waters of the United States (WUS) through direct open pit limestone mining activities and haul road construction. In addition, 0.819 acres of WUS would be indirectly and permanently impacted due to truncation of upstream flows. These activities would be authorized under Section 404 of the Clean Water Act (33 U.S.C. 1344) and located on 150 acres east of Old Sonoita Highway in Sections 19 and 30, T17S, R17E, Pima County, Arizona.

The proposed project would consist of open pit limestone mining activities at two sites, the east and west quarries, and would include construction of a haul road. The proposed project would result in the discharge of dredged and/or fill material into 0.833 acres of WUS through direct mining activities and haul road construction. The haul road between the two quarry sites would be 30 feet wide and cross Davidson Canyon Wash at grade. The discharge of dredged or fill material into Davidson Canyon Wash and specified contributing tributaries have potential for adverse impacts to downstream aquatic and riparian resources.

Pursuant to Part IV 3(b) of the 1992 404(q) Memorandum of Agreement between our agencies, I have determined the proposed work described in this permit application will have substantial and unacceptable impacts on aquatic resources of regional and national importance. The U.S. Fish and Wildlife Service (Service) believes that the proposed project could impact valuable riparian and stream habitats. In addition to direct impacts, disturbances within upland areas cause ecological impacts to downstream aquatic areas. A number of federally listed species and Arizona Game and Fish Department (AGFD) Wildlife of Special Concern occur within or near the proposed project site.

The Service has numerous concerns relative to the proposed project's potential for direct and, indirect impacts to important species, aquatic and riparian habitats in and near the proposed

project site. In addition the project lacks analysis of alternatives and the appropriate application of mitigation sequencing. These concerns are specified below:

Stream and Riparian Habitat - The Arizona Department of Environmental Quality has designated Davidson Canyon Wash as an Outstanding Water downstream of the proposed project area. Davidson Canyon Wash is a tributary to Cienega Creek, which is also a designated Outstanding Water. This designation means that Davidson Canyon Wash must be afforded the highest level of protection and that no degradation of water quality is permitted. Resources of significant ecological value occur within Davidson Canyon Wash and the Cienega Creek watershed, including springs, perennial stream stretches, and riparian areas. These resources provide habitat for a diversity of fish and wildlife species, including two endangered fish, the Gila topminnow (*Poeciliopsis occidentalis occidentalis*) and Gila chub (*Gila intermedia*), as well as critical habitat for the chub. Protection of riparian areas is a significant concern to the Service due to the regional scarcity of these ecosystems within the desert southwest, especially the State of Arizona.

Wetland and riparian ecosystems provide essential wildlife habitat functions disproportionate to their occurrence within the landscape. Unfortunately, riparian ecosystems have suffered significant adverse impacts over the past century. While the proposed project site does not fall directly within the perennial or riparian areas of Davidson Canyon Wash or Cienega Creek, we are concerned that impacts from this proposed project would negatively affect these areas. The permit application states the proposed project would alter one and eliminate seven unnamed ephemeral tributaries into Davidson Canyon Wash through excavation activities and truncated storm water flows. In arid and semi-arid regions, ephemeral and intermittent streams provide much of the ecological and hydrological connectivity in a landscape, contributing important sources of sediment, water, nutrients, seeds, and organic matter for downstream systems. The disturbance or loss of ephemeral and intermittent streams can have dramatic physical, biological, and chemical impacts throughout the entire watershed and can lead to the degradation of downstream ecosystems.

Downstream ecological impacts can also occur from disturbance within the upland areas of a watershed. Of the 43.96 acres that would be impacted due to the proposed project, much of it is in upland areas. The permit application states that limestone would be mined at a rate of 100,000 to 300,000 tons per year, and overburden materials and waste would be mined at 10,000 to 30,000 tons per year, with most of the waste material being used for pit reclamation. Even with reclaiming the mine sites using the waste material, it would be inevitable that the mine pits would not be completely reclaimed, as approximately 10 times the amount of limestone would be removed as there is waste material to replace it. This alteration of the upland habitat would modify storm water flow and runoff.

The lower reaches of Cienega Creek are the principal feature of Pima County's 4,100-acre Cienega Creek Natural Preserve. Moreover, within Pima County, all of Davidson Canyon Wash and Cienega Creek are considered Important Riparian Areas by Pima County's Sonoran Desert Conservation Plan.

Federally Listed Species - Two endangered fish, the Gila topminnow and Gila chub, as well as critical habitat for the chub, are found downstream of Davidson Canyon Wash and Cienega Creek.

Foraging resources for the endangered lesser long-nosed bat (*Leptonycteris curasoae yerbabuena*) are present within and around the project site, and a recently discovered mine adit within 500 yards of the project area provides roosting habitat for the Mexican long-tongued bat (*Choeronycteris mexicana*), and possibly other species, including the lesser long-nosed bat.

The endangered Pima pineapple cactus (*Coryphantha scheeri* var. *robustispina*) can be found within 5 miles of the project site, as well as the salvage restricted (defined by Arizona Department of Agriculture rules) San Carlos wild-buckwheat (*Eriogonum capillare*). Another salvage restricted plant, the needle-spined pineapple (*Echinomastus erectocentrus* var. *erectocentrus*) cactus is found within the proposed project area.

Arizona Game and Fish Department Wildlife Species of Concern - Several AGFD Wildlife of Special Concern have been known to occur within 5 miles of the proposed project site, including Gila longfin dace (*Agosia chrysogaster chrysogaster*), Northern gray hawk (*Buteo nitidus maxima*), Mexican long-tongued bat, Sonoran desert tortoise (*Gopherus agassizii* (Sonoran population)), lowland leopard frog (*Rana yavapaiensis*), and brown gartersnake (*Thamnophis eques megalops*).

All bat species are protected within Arizona by state regulations, and the mining activity as proposed (especially blasting) in proximity to these roosts may affect bat species using this site by altering the structural and microclimatic integrity of the roost sites.

Alternatives Analysis - The application does not include an assessment regarding the availability of practicable, less damaging alternatives to the proposed discharge of dredged or fill material in WUS. In addition, the application does not include a clear demonstration of the unavailability of such alternatives, which are necessary to authorize a non-water dependent activity in special aquatic sites (pool and riffle) as defined in the Section 404(b) (1) Guidelines for the Specification of Disposal Sites for Dredged or Fill Material. We are concerned about potential impacts to the downstream aquatic and riparian resources.

Compensatory Mitigation - The applicant proposed in-lieu-fee mitigation at a three to one ratio for direct and indirect impacts. However, the application did not include or document any efforts to avoid or minimize impacts of the project proposal. We believe that demonstration of avoidance and minimization of impacts should precede the development of a mitigation plan. Unavoidable indirect and secondary aquatic/wetland impacts should be assessed and included in the determination of mitigation requirements.

Special Aquatic Sites and Resources of Regional and National Importance - This permit application does not provide documentation that any effort has been made to avoid or minimize impacts of the proposed project, or that other less damaging alternatives have been considered. Considering: 1) the lack of alternatives analysis; 2) the absence of appropriate mitigation

sequencing; 3) concerns for threatened and endangered species; 4) concerns for valuable and important flora and fauna; and, 5) particularly, the lack of demonstration that the downstream resources will not be susceptible to indirect and secondary impacts, it is the assessment of the Service that the proposed project would impact resources of regional scarcity and national significance.

I encourage you to fully consider our concerns and implement the recommendations of the Service and to resolve any differences of opinion with our Field Office personnel. We will work diligently with you to resolve differences; but, as a matter of procedure, reserve the right to request a higher level review.

Your cooperation in this matter is greatly appreciated. If you have any questions, please contact Nancy Gloman, Assistant Regional Director, Ecological Services, Region 2, at 505-248-6671.

Sincerely,

A handwritten signature in black ink, appearing to read "Benj. H. Magness". The signature is fluid and cursive, with a large initial "B" and a long, sweeping underline.

Regional Director

Colonel Thomas H. Magness, IV

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cc: Supervisor, Ecological Services Field Office, Albuquerque, Phoenix, AZ
Assistant Supervisor, Ecological Services Field Sub-office, Tucson, AZ
U.S. Army Corps of Engineers, Regulatory Branch, Tucson, AZ Attention: Marjorie Blaine