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Governor's Office of Planning & Research

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STATE CLEARING HOUSE

Mr. David Carlson
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Subject: Davenport North Cement Kiln Dust Closure Project, Initial Study/Mitigated

Negative Declaration, SCH No. 2020110090, Santa Cruz County

Dear Mr. Carlson:

The California Department of Fish and Wildlife (CDFW) has reviewed the Initial Study/Mitigated Negative Declaration (IS/MND) prepared by the County of Santa Cruz (County) for the Davenport North Cement Kiln Dust Closure Project (Project), located in Santa Cruz County. CDFW is submitting comments on the IS/MND regarding potentially significant impacts to biological resources associated with the Project.

#### **CDFW ROLE**

CDFW is a Trustee Agency with responsibility under the California Environmental Quality Act (CEQA; Pub. Resources Code, § 21000 et seq.) pursuant to CEQA Guidelines section 15386 for commenting on projects that could impact fish, plant, and wildlife resources (e.g., biological resources). CDFW is also considered a Responsible Agency if a project would require discretionary approval, such as permits issued under the California Endangered Species Act (CESA), the Native Plant Protection Act, the Lake and Streambed Alteration (LSA) Program, and other provisions of the Fish and Game Code that afford protection to the state's fish and wildlife trust resources.

### PROJECT DESCRIPTION AND LOCATION

The proposed Project consists of activities to close the former Davenport Cement Plant at 700 Highway 1, approximately 0.5 miles north of Davenport, in unincorporated Santa Cruz County. Closure activities were based on Waste Discharge Requirement Order No. R3-2018-0001 issued by the Central Coast Regional Water Quality Control Board and will occur within the footprint of the cement plant.

During cement manufacturing, cement kiln dust (CKD), a byproduct of manufacturing cement, was dumped on-site within an area now called the North CKD Area. The proposed Project will minimize infiltration of water into the North CKD Area and minimize the production of contaminated leachate by: (1) grading the North CKD Area

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surface, (2) capping the CKD material, (3) remediation of a Retention Pond, and (4) improving drainage throughout the Project area.

### COMMENTS AND RECOMMENDATIONS

CDFW offers the following comments and recommendations to assist the County in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on biological resources.

# **COMMENT 1: Low-Density Polyethylene and Geosynthetic Clay Liner**

**Issue:** The IS/MND identifies that welded sheets of textured 60 mil low-density polyethylene liner will be installed to cap the CKD area and a geosynthetic clay liner will be installed within the North Pond. Low-density polyethylene and geosynthetic liners are composed of plastic, which eventually deteriorate and leach chemicals into the environment and negatively impact terrestrial and aquatic biological resources.

Evidence impact would be significant: Low-density polyethylene is the largest component of plastic produced globally and one of the most common polymers recovered as aquatic debris (Rochman et al. 2013). Even though low-density polyethylene degrades extremely slowly, UV radiation, temperature fluctuation, wave action, and wind deteriorate the material into smaller and smaller plastic particles. As the size of the plastic decreases, the number of wildlife species that could potentially ingest the plastic increases (Barnes et al. 2009; Horton et al. 2017). Once plastic is ingested, plastic can cause intestinal blockage, inflammation, and other metabolic changes (Almroth and Eggert 2019). Plastic components (e.g., phthalates and BPA) have also been identified to affect amphibian's reproduction development and disrupt the genetic process for sex determination (Oehlmann et. al 2009 and Ohtani et al. 2000).

**Recommendation:** CDFW recommends that the low-density polyethylene liner and geosynthetic clay liner are removed from the project description and replaced will an entirely natural liner (e.g., clay liner).

# **Comment 2: Water Quality Improvement Alternatives**

Issue: The proposed Project seeks to minimize contaminated leachate by using various engineered approaches but does not consider the use of natural vegetation or wetland and riparian restoration methods to minimize water infiltration into the North CKD Area. Leachate is considered a pollutant that is deleterious to fish and wildlife resources pursuant to Fish and Game Code, section 5650(a)(6). Based on information provided in the IS/MND, the Project location appears suitable for additional riparian and wetland opportunities (e.g., removing debris, re-contouring natural grades, and promoting native vegetation re-generation). Natural vegetation

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including riparian and wetland vegetation have the potential to provide superior water quality treatment to engineering methods alone and have the added benefit of providing habitat for California red-legged frog and other fish and wildlife species.

**Supporting Evidence:** Riparian vegetation improves stream water quality by removing sediment, organic and inorganic nutrients, and toxic materials (Belt and O'Laughlin 1994, Mitsch and Gosselink 2000, U.S. Department of Agriculture 2000, Mayer et al. 2006). Riparian buffers help keep pollutants from entering adjacent waters through a combination of processes including dilution, sequestration by plants and microbes, biodegradation, chemical degradation, volatilization, and entrapment within soil particles. As buffer width increases, the effectiveness of removing pollutants from surface water runoff increases (Castelle et al. 1992). There is substantial evidence showing narrow buffers are considerably less effective in minimizing the effects of adjacent development than wider buffers (Castelle et al. 1992, Brosofske et al. 1997, Dong et al. 1998, Kiffney et al. 2003, Moore et al. 2005).

**Recommendation:** CDFW recommends the Project IS/MND evaluate additional riparian and wetland restoration opportunities throughout the Project area to minimize water run-off and infiltration into the North CKD Area. Per CEQA Guidelines section 15126.6(e)(2), the incorporation of additional riparian and wetland restoration into the Project design could be the environmentally superior alternative. In addition, CDFW encourages and supports the Project incorporating additional riparian and wetland restoration activities, where feasible, into the Project design to accomplish water quality goals that can also benefit fish and wildlife resources.

## **Comment 3: Bypass Pipe Alternatives**

**Issue:** The existing North pond is an on-stream reservoir with approximately 2,000 linear feet of downstream stream channel maintained as a buried stream channel within a pipe. Maintaining the buried stream channel conditions contributes to historic loss of stream channel and riparian habitat. The proposed location of the relocated bypass pipe contains adequate space to daylight the creek as well as bypass flows around the North CKD Area. Instead, the Project proposes to maintain a buried stream channel. Daylighting the creek would allow natural creek processes to reestablish and increase riparian habitat for California red-legged frogs and benefit water quality (see Comment 2). Daylighting the creek may also be the environmentally superior alternative per CEQA Guidelines section 15126.6(e)(2).

**Evidence impact would be significant:** Stream and riparian habitats are critical to watershed integrity (see for example, Riparian Habitat Joint Venture 2004) and provides transitional zones between aquatic and upland environments. Unfortunately, habitat loss and fragmentation are now considered among the

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greatest threats to amphibian populations (Lannoo 2005, Cushman 2006). On a regional and state-wide scale numerous amphibian species and populations are in decline (Fellers et al. 2008). All 47 amphibian species occurring in the Pacific Northwest are either facultative or obligate stream-riparian associates with about a third being stream-riparian obligate species (Olson et al. 2007).

**Recommendation:** CDFW recommends that instead of installing a bypass pipe, which would convey water from the North Pond to No Name Creek, the Project daylight the creek to increase stream and riparian habitat for California red-legged frogs and other fish and wildlife species.

### **REGULATORY REQUIREMENTS**

## **California Endangered Species Act**

Please be advised that a CESA permit must be obtained if the Project has the potential to result in "take" of plants or animals listed under CESA, either during construction or over the life of the Project. Issuance of a CESA Permit is subject to CEQA documentation; the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If the Project will impact CESA listed species, early consultation is encouraged, as significant modification to the Project and mitigation measures may be required in order to obtain a CESA Permit.

CEQA requires a Mandatory Finding of Significance if a project is likely to substantially impact threatened or endangered species (CEQA section 21001(c), 21083, and CEQA Guidelines section 15380, 15064, 15065). Impacts must be avoided or mitigated to less-than-significant levels unless the CEQA Lead Agency makes and supports Findings of Overriding Consideration (FOC). The CEQA Lead Agency's FOC does not eliminate the Project proponent's obligation to comply with Fish and Game Code, section 2080.

## **Lake and Streambed Alteration Program**

Notification is required, pursuant to CDFW's LSA Program (Fish and Game Code, section 1600 et. seq.) for any Project-related activities that will substantially divert or obstruct the natural flow; change or use material from the bed, channel, or bank including associated riparian or wetland resources; or deposit or dispose of material where it may pass into a river, lake or stream. Work within ephemeral streams, washes, watercourses with a subsurface flow, and floodplains are subject to notification requirements. CDFW, as a Responsible Agency under CEQA, will consider the CEQA document for the Project. CDFW may not execute the final LSA Agreement until it has complied with CEQA (Public Resources Code section 21000 et seq.) as the responsible agency.

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### **FILING FEES**

CDFW anticipates that the Project will have an impact on fish and/or wildlife, and assessment of filing fees is necessary (Fish and Game Code, section 711.4; Pub. Resources Code, section 21089). Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW.

Thank you for the opportunity to comment on the Project's IS/MND. If you have any questions regarding this letter or for further coordination with CDFW, please contact Ms. Monica Oey, Environmental Scientist, at (707) 428-2088 or <a href="Monica.Oey@wildlife.ca.gov">Monica.Oey@wildlife.ca.gov</a>; or Mr. Wesley Stokes, Senior Environmental Scientist (Supervisory), at <a href="Wesley.Stokes@wildlife.ca.gov">Wesley.Stokes@wildlife.ca.gov</a>.

Sincerely,

Gray Erickson
Gregg Erickson
Regional Manager
Bay Delta Region

ec: State Clearinghouse

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