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Via Electronic Mail

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Re: 1200-A Permit Application, DOGAMI ID No. 06-0073, DEQ File # 119430
ORCA Comments

Dear DEQ Stormwater Permit Coordinator:

This office represents the Oregon Coast Alliance and its members living in Coos County (collectively "ORCA"). On behalf of ORCA, I submit these comments regarding the request for coverage of chromite mining operations and associated haul roads by Oregon Resources Corporation (ORC) at the West Bohemia, North Seven Devils, South Seven Devils, and West Section 10 sites under the 1200-A Industrial Stormwater General National Pollutant Discharge Elimination System (NPDES) Permit (1200-A Permit) and the information contained in ORC's Permit Application, DEQ File Number 119430; DOGAMI ID number 06-0073. Please notify me of any decisions related to the permit.

ORCA's mission is to preserve and protect the Oregon coast by working with coastal residents for sustainable communities, protection and restoration of coastal natural resources. ORCA's membership includes individuals who visit, recreate near, or live in the vicinity of the ORC chromite mining operations, as well as the rest of the Charleston-Bandon area. ORCA is concerned about the negative water quality impacts from operations at ORC's chromite mining facilities and associated roads and its failure to address properly these concerns in compliance with the Clean Water Act.

DEQ Should Require an Individual Permit for ORC's Operations

DEQ's 1200-A Permit is required for facilities with Standard Industrial Classification (SIC) code 14, Mining and Quarrying of Nonmetallic Minerals, Except Fuels, that may discharge stormwater. ORC's proposed operations consist of the

mining and processing of “heavy mineral sands.” ORC proposes that three minerals will be produced from the operations (chromite, garnet, and zircon) however chromite is the primary mineral to be mined at these facilities. ORC proposes to remove 700,000 tons of material annually during operations. Of the total material removed, ORC’s Joint Permit Application estimates the quantity of minerals to be mined as follows, chromite: 70,000 s/tons per annum; garnet: 17,000 s/tons per annum; zircon: 7,000 s/tons per annum. In other words, the primary purpose of the proposed operations is chromite mining. “Establishments primarily engaged in mining, milling, or otherwise preparing ferroalloy ores, except vanadium” are regulated under SIC code 1061. The United States Department of Labor, Occupational Safety & Health Administration specifically lists chromite mining as falling within SIC code 1061. SIC code 1061 is a subcategory of major group 10: Metal Mining. Metal mining activities are not covered by the 1200-A Permit.

ORC’s operations will involve the mining of not only chromite sands, but also the removal of other metals such as gold and platinum. ORC states that it will remove the gold and platinum from the ground and take it to the processing plant, but then will return these metals to the ground with the tailings.¹ The mining of metals such as gold and platinum fall within SIC code 10, which is not covered by the 1200-A General Permit. Similarly, chromite is the only ore of chromium. Oregon law sets for reclamation requirements for metal-bearing ore operations. OAR 632-035-0010 defines “nonaggregate minerals” as metal-bearing ores, including ore containing chromium. As a result, this facility does not qualify for the 1200-A Permit and should be required to complete an individual permit application for compliance with NPDES stormwater regulations.

- ▶ **Question # 1:** How has DEQ confirmed that ORC’s proposed chromite mining operations are a facility with primary Standard Industrial Classification code 14 and subject to coverage under the 1200-A Permit?

- ▶ **Question # 2:** How will DEQ insure that ORC’s operations do not include mining of heavy metals such as gold and platinum, which would not be covered by the 1200-A Permit?

DEQ’s 1200-A Permit allows for coverage of multiple non-metallic mining sites under single ownership where each site is less than 10 disturbed acres and where only mining activities are conducted. ORC’s application includes four mine sites under a single application. Of the four proposed mine sites, none has a disturbance area of less than 10 acres. *See* Erosion and Sediment Control Plan (April 2008), at 1-3 (summarizing the disturbance area for each site as follows, West Bohemia: 92.36 acres; North Seven Devils: 21.75 acres; South Seven Devils: 23.09 acres; West Section 10: 11.93 acres). Because each mine site is greater than 10 disturbed areas, the sites are not eligible for coverage under a single 1200-A Permit.

¹ DOGAMI’s 1973 report on the mineral resources of Coos County estimates totals of 0.1 ounce per ton of gold and 0.01 ounce per ton of platinum at these sites. Though difficult to calculate exactly due to fluctuating prices, the gold and platinum available would likely yield several million dollars per year.

OAR 340-045-0033(10)(c)(A)–(F) provide grounds for requiring an individual NPDES permit for stormwater discharges. These grounds include where a discharge or activity is a significant contributor of pollution or creates other environmental problems, or where other relevant factors indicate that an individual permit should be required. Given particular concerns regarding the potential for ORC’s operations to accelerate production and occurrence of trivalent and hexavalent chromium in groundwater and transport to surface waters, and the known toxicity rates associated with such releases, ORC’s chromite mining operation should be subject to individual permitting. Only an individualized permit can provide for adequate baseline analysis and monitoring of groundwater and surface waters in the mine area and down gradient locations to evaluate whether chromate or hexavalent chromium is flushed to surface water systems, wells, or springs during precipitation events.

Specifically, due to the hazardous nature of ORC’s mining operation, the probability of primary and collateral contaminants being deposited into Threemile and Fivemile creeks, where coastal steelhead are known to be present and which may also provide habitat for coho salmon, and ultimately the Pacific Ocean, ORCA believes that DEQ should deny ORC’s application. Alternatively, ORCA believes that ORC should obtain an individual permit, because the 1200-A Permit, which sets broad and unenforceable targets for compliance, does not adequately regulate stormwater pollutant discharges from chromite mining operations such as those proposed at the West Bohemia, West Section 10, South Seven Devils, and North Seven Devils sites.

Incomplete Application

DEQ prematurely released this permit application for public comment before the application was complete. *See* 1200-A Permit, Permit Coverage, Sec. 1.b.ii. ORC failed to provide all of the information necessary to allow a full review of the impacts of the proposed mining operation. For example, ORC failed to identify all points of discharge from the mining operation sites in its Stormwater Pollution Control Plan (SWPCP). Specifically, Figure 4 – South Seven Devils Outfall 004 Location – identifies one outfall, Outfall 004, at the north end of the large reestablished surface water conveyance. The figure shows a second reestablished surface water conveyance at the northeast corner of the mine site. ORC failed to identify the point where this surface water conveyance leaves the mine site as a discharge point or outfall. Similarly, the application identifies one outfall, Outfall 003, on Figure 3 – North Seven Devils Outfall 003 Location. Outfall 003 is not a point of discharge from the mine site. Figure 3 shows five water conveyances, but ORC failed to identify the points of discharge from the mine site as required by the Permit. Permit Sch. A.1.3.b.vii.

More importantly, this permit application covers the haul roads associate with the mining operations. DEQ stated in its Evaluation Report and Findings for 401 Certification for this project that the agency agrees with concerns regarding increased road use and risk of mechanical fluid spills due to the mining, reclamation, and mitigation activities and the potential for toxics to be carried in stormwater to wetlands and streams and eventually the ocean. ORC’s application fails to identify potential stormwater discharge points along the haul roads and access roads associated with this project.

Finally, the permit application does not describe proposed methods for controlling stormwater during mining operations. ORC proposes mine pit dewatering, which is not specifically covered by the operating permit from DOGAMI and must be specifically authorized. ORCA is aware that DEQ has issued a WPCF permit for the mining operations, however stormwater that may be discharged from the mine site during mining operations must be covered by a stormwater permit.

- ▶ **Question # 3:** Why has DEQ not required the applicant to provide all information directly requested by the 1200-A Permit application, specifically the information requested in the site description of the SWPCP?
- ▶ **Question # 4:** Why has DEQ not required the applicant to provide all information related to stormwater discharge from the associated haul roads and access roads for this chromite mining operation?
- ▶ **Question # 5:** Why has DEQ not required the applicant to provide information related to stormwater associated with mining operations and not limited only to reclamation activities associated with the mine sites?

Compliance with the Endangered Species Act

Threemile and Fivemile Creeks are within the Oregon Coast Coho Habitat areas (specifically the Coos Sub-basin of the Oregon Coast Coho ESU). Oregon Coast Coho are a threatened species protected under the Endangered Species Act (ESA). 73 Fed. Reg. 7816 (Feb. 11, 2008). Coastal Steelhead is a listed species of concern present in this area. Under the ESA, no one may “take” a listed species without written authorization. 16 U.S.C. §§ 1538, 1539. Take can include any act that kills or injures a threatened species, including activities that modify or degrade habitat or affect breeding habits. 65 Fed. Reg. 42,472 (July 10, 2000).

Pursuant to ESA requirements, the National Marine Fisheries Service (NMFS) conducted informal consultation and issued a report concerning the potential effects of chromite mining by ORC. The report established detailed requirements of ORC’s procedures and activities in order to comply with the ESA. NMFS determined that the proposed chromite mining will likely have the following impacts on Threemile and Fivemile Creeks: groundwater and surface water contamination, and increased turbidity and sediment from construction and removal of culverts on high gradient streams. These impacts have a negative effect on the behavior and survival of Oregon Coast Coho salmon. Hexavalent chromium is known to be acutely toxic to fish such as coho salmon fingerlings at concentrations of 200 ppb, and concentrations of just 16-21 ppb inhibit growth in trout and salmon fingerlings.² These water quality impacts will be caused, in part, from stormwater discharges, which will mobilize sediment and chemicals.

² See Eisler, Ronald, *Chromium Hazards to Fish, Wildlife, and Invertebrates: A Synoptic Review* (USFWS Jan. 1986) (finding 53% of salmon fingerlings dead over 12 weeks of exposure at 200 ppb, sub-lethal effects at concentrations of 16 to 21 ppb; maximum acceptable toxicant level of hexavalent chromium for rainbow trout at 51–105 ppb, trivalent chromium at 30–157 ppb).

NMFS's report sets forth specific measures to avoid impacts, including restricting construction to periods when channels are dry and implementing additional best management practices (BMPs) including structural erosion and sediment control measures to minimize sediment transport and turbidity plumes, diversion of road surface runoff to the mine site to prevent additional erosion and scour, and culvert design to withstand a 100-year storm to decrease probability of culvert failure. The SWPCP plan must meet the requirements of the NMFS report to ensure protection of Oregon Coast Coho salmon under the ESA.

- ▶ **Question # 6:** Has DEQ ensured that ORC's SWPCP complies with the findings of the NMFS report, and that the activities at these sites will not directly or indirectly contribute to increased or unsafe levels of contaminants entering surface waters in violation of the ESA standards?

ORC's Permit Application Lacks Essential Information

DEQ's Permit for mineral sands mining stormwater pollutant discharges is deficient. 40 C.F.R. § 122.26(c)(1) requires dischargers of storm water associated with industrial activity to apply for an individual permit or seek coverage under a promulgated storm water general permit. New sources must submit estimates for the pollutants or parameters listed in an effluent guideline. 40 C.F.R. § 122.26(c)(1)(G). These regulations apply to all dischargers in Oregon. 40 C.F.R. § 123.25.

DEQ's Permit fails to require the disclosure of the information necessary to allow DEQ and the public to determine whether a particular discharge qualifies for coverage under the 1200-A Permit. In contrast to the information required under the federal regulation, 40 C.F.R. § 122.26(c)(1)(c), DEQ's limited application fails to require the information necessary to determine which pollutants ORC's facilities will discharge, the quantities or concentrations of the pollutant discharges, the frequency of the discharges, or the impacts that the discharges will have on the tributaries to Threemile and Fivemile Creeks, and the Pacific Ocean.

- ▶ **Question # 7:** On what basis did DEQ determine that ORC would meet the benchmark values in the 1200-A Permit?
- ▶ **Question # 8:** On what basis did DEQ determine that ORC qualifies for coverage under the 1200-A Permit, rather than an individual permit for stormwater discharges?

The SWPC for the ORC Chromite Mines is Inadequate

The 1200-A Permit requires facilities to design and implement a Storm Water Pollution Control Plan ("SWPCP") that both accurately describes the site and planned operations and describes how the facility, through the use of specific "best management practices" (BMPs) will "eliminate or minimize the exposure of pollutants to storm water." Permit, Sch. A.3. Such measures must include stormwater BMPs, spill prevention and response procedures, a preventative maintenance program and an employee education program. Permit, Sch.A.3.b(i)-(iv). ORC's SWPCP fails to meet the Permit requirements.

A. *Site Controls*

ORC has failed to develop site controls that will eliminate or minimize the exposure of pollutants to stormwater or to remove pollutants from stormwater before it discharges to surface waters. For example, ORC names potential pollutants as fuels, oil and grease from mining equipment and trucking, as well as raw materials such as overburden and tailings from the processing plant in Coos Bay. ORC then states that the mining activity will be designed to discharge into the active mine pit. Further, ORC indicates that it will divert road surface water into active mine pits where it will contact groundwater. The Permit expressly prohibits activities that could adversely affect groundwater. Permit, Sch. A.4.c. DEQ may not issue coverage under the 1200-A Permit under these circumstances.

- ▶ **Question # 9:** Will DEQ require ORC to control stormwater runoff so as not to adversely affect groundwater as required by the 1200-A Permit?
- ▶ **Question # 10:** Will DEQ require ORC to demonstrate how stormwater from potential spill sites will be separated from all other stormwater that is directed to the groundwater pit?

ORC states that it will collect all stormwater in the active mine pit where it will contact groundwater, which together will be pumped out for ground application and infiltration. DEQ's Evaluation Report for 401 Certification states the Agency's concern that during winter rains, saturation levels of slow draining soils in the project area may not allow for infiltration as proposed. Soil sampling included in ORC's reports indicates that several hydric soil types exist on the mining sites and in the vicinity of haul roads. DEQ stated it was "not convinced" that ORC can control discharges even if mining activities were halted.

- ▶ **Question # 11:** How will DEQ ensure that, during times of high rainfall, the already saturated ground will not be incapable of filtering discharged stormwater and prevent un-separated, contaminated stormwater from discharging directly to surface waters?

ORC proposes to divert stream flows around the mine sites at North Seven Devils and South Seven Devils, and then restore the flow line after mining is completed.

- ▶ **Question # 12:** How has DEQ determined that the diversion methods will not create increased sedimentation or other pollutant runoff in light of the heavy machinery use, frequent truck traffic, and intensity of activity and ground disturbance in the mining areas?
- ▶ **Question # 13:** How has DEQ determined that the sedimentation and potential pollutants contained in the mine tailings and overburden reclamation material will not cause increased turbidity or pollutant loads in the reconstructed streams, Threemile and Fivemile Creeks, and the Pacific Ocean?

- ▶ **Question # 14:** How has DEQ ensured that the large stockpiles of biomass and overburden are not a source of pollutants that must be dealt with in the SWPCP?

B. Estimated Disturbed Surface Area

The Permit requires the applicant to “[e]stimate the maximum amount of surface area that, within the next five (5) years, will be stripped of vegetation and could contribute to stormwater discharges relative to the total area drained by each stormwater outfall.” Permit, Sch. A.3.b.v. ORC indicates on its application that there will be four outfalls. Outfalls 001 and 002 are located at the West Bohemia mine site. The West Bohemia mine site will disturb an estimated total impact area of 92.36 acres. ORC indicates that Outfall 001 will drain only the stripped 7.9-acre Mitigation Site A and approximately 10 additional acres that will slope toward the mitigation site. ORC states that Outfall 002 will discharge from a stripped area including the 4.4 acre Mitigation Site B and approximately 4 additional acres that will slope toward the mitigation site. This accounts for only 26.3 acres of the total 92.36 acres of disturbed area.

Outfall 003 is located near the North Seven Devils mine site.³ The North Seven Devils site will disturb an estimated total of 21.75 acres. ORC states that the stripped area that will discharge to Outfall 003 includes approximately 1 acre of temporary haul road footprints and 3.8 acres of land sloping towards the reconstructed conveyances. This accounts for only 4.8 acres of the total 21.75 acres of disturbed land at the North Seven Devils mine site.

Outfall 004 is the discharge from the South Seven Devils mine site. South Seven Devils will disturb 23.09 acres of land in total. ORC states that the stripped area that will discharge to Outfall 004 will include the approximately 23-acre reclamation site. This Outfall accounts for the entire disturbance area at this mine site.

- ▶ **Question # 15:** How will DEQ ensure that the reclamation of the disturbed areas not accounted for by ORC’s outfalls will not contribute to stormwater runoff and increased pollution and sedimentation of Threemile and Fivemile Creeks and the Pacific Ocean?
- ▶ **Question # 16:** How will DEQ ensure that ORC implements BMPs to control erosion and sediment?

C. Emergency Control Procedures

The application states that spills of petroleum products to land in amounts of 42 gallons or less do not need to be reported to DEQ. According to the application, it appears that this volume is deemed acceptable for a single spill occurrence.

³ Outfall 003 does not accurately represent the location of points of discharge from the North Seven Devils mine site. This is discussed further below in the context of monitoring.

- **Question # 17:** How has DEQ determined that a spill of 42 gallons of oil or less is not significant enough to warrant reporting?

DEQ Must Require Adequate Monitoring

DEQ must require ORC to monitor the discharge from the facility. Permit, Sch. B. With limited exceptions, each stormwater outfall at the facility must be monitored. *Id.*, Sch. B.2.b. ORC's application identifies Outfall 003 at a location near the North Seven Devils mine site. The identified outfall is not the discharge point from the site, but rather is a point further down the drainage, below the location of five discharge points from the mine site. ORC's application states that because the potential effluent characteristics will be similar for all locations and similar BMPs will be implemented, the actual points of discharge do not need to be sampled and monitored for contaminants. This is legally incorrect. The point source discharges from the mine site must be monitored.

First, the point identified as "Outfall 003" is not a point of discharge from the mine site. As a result, this location cannot substitute as a representative outfall for monitoring actual points of discharge from the mine sites. Second, the five identified discharge points from the North Seven Devils site include three points where temporary haul roads and associated culverts will be removed, in addition to two stream reconstruction sites. The potential effluent from road sites includes oil and grease, petroleum and fuel products, and other pollutants associated with road use. As a result, ORC's characterization of the potential effluents (turbidity) being similar for all locations is incorrect. Finally, the Permit exception for monitoring each outfall requires that the "determination of substantial similarity of effluent(s) must be based on past monitoring or an analysis of industrial activities and site characteristics." ORC's application references the Stormwater Assessment for West Beaver Hill Road and Haul Roads, which contains a soil survey map. (Figure 2). Based on the soil survey map, soil conditions at each of the five discharge points from the North Seven Devils site are not substantially similar. ORC's application does not provide the required analysis to justify use of representative outfalls supporting an exception to the discharge point monitoring requirement. DEQ should require ORC to sample and monitor discharge from each point of discharge.

DEQ identified several pollutants of concern in the agency's Evaluation Report and Findings on the application for 401 Certification for this project, including pH and toxics such as hexavalent chromium, as well as turbidity in the case that heavy rains do not allow slow draining soils to infiltrate as proposed. The Evaluation Report stated that monitoring of pH in receiving streams to establish background levels and any change due to discharges from mining activities should be required as part of the 1200-A Permit. DEQ stated that monitoring and contingency actions must be a required component of implementation of the stormwater plan, and included monitoring of pH, Manganese, Trivalent Chromium, and Hexavalent Chromium as conditions for its 401 Certification. ORC's application fails to set forth monitoring for hexavalent chromium, other metals and environmental contaminants, or any contingency plan as part of the SWPCP.

- ▶ **Question # 18:** Will DEQ include in the Permit requirements for monitoring of pH and other pollutants in receiving streams in order to establish background levels and any change due to mining activities, as stated would be required in the 401 Certification?
- ▶ **Question # 19:** What provisions in the Permit require monitoring adequate to demonstrate compliance with the applicable water quality criteria, and what contingency plan will DEQ require?
- ▶ **Question # 20:** Without monitoring requirements pertaining to hexavalent chromium, nitrate and nitrate nitrogen, heavy metals, chloride, phosphorus, and alkaline wastes, how can DEQ guarantee that stormwater runoff from ORC's mining sites is not discharging any of these pollutants and thereby endangering the health of important fish populations in Threemile Creek and Fivemile Creel and the Pacific Ocean?

The potential for hazardous storm water discharge as a result of the project will not end when the project is completed. Even after mining activities are completed, stormwater can potentially transport sediment and other pollutants discharged from the mine sites to surface waters. Such post-project pollution would violate the Clean Water Act and NPDES stormwater regulations. One assumption made by the applicant and DEQ is that restoration/mitigation of destroyed wetland regions would restore water absorption to present levels. A NOAA document entitled *Wetland Restoration, Creation, and Enhancement* (2003) noted that "monitoring [is] a long-term activity, not just something you do for the first year or two" and recommended that "[a]t a minimum, a site should be monitored until it meets all performance standards, which can take from several years to decades." In 2009, Kevin Moynahan, Assistant Director of the Wetlands and Waterways Conservation Division of the Oregon Department of State Lands stated, "[w]e're looking to improve our strategy for actively monitoring the success of [wetland] sites to determine if these activities are making a difference." In other words, the success of wetland mitigation has not yet been established. Further, a comprehensive database of 37,000 U.S. river and stream restoration projects shows no record of any mining-related stream-building project that could be called ecologically successful.⁴ Continued monitoring at ORC's mine sites is critical because if wetland mitigation is unsuccessful, rainwater absorption will not be restored to pre-project levels and pollution discharge could increase.

A related issue is the contour of the land after refilling with tailings. According to the Erosion and Sediment Control Plan, approximately 15 to 25 percent of the removed materials will be extracted in the separation process, leaving 75 to 85 percent of the material to be returned to the mine site as tailings. A 15 percent expansion factor is anticipated, which would restore the land near to its current levels. However, according to the Oregon Resources Corporation website description of the project, only 40 to 70 percent of the original material will remain after processing. Without adequate information regarding what portion of mined material will be

⁴ See McQuaid, John, *Mountaintop Mining Legacy: Destroying Appalachian Streams* (Yale Environment 360, July 2009); Jenkins et al., *Stream Restoration Databases and Case Studies: A Guide to Information Resources and Their Utility in Advancing the Science and Practice of Restoration* (Restoration Ecology Vol. 14, No. 2, pp. 177-86, June 2006).

returned to the mining site, DEQ cannot make conclusions regarding impacts to the effectiveness of reclamation efforts as they relate to protecting water quality.

Given the particular concerns with hexavalent chromium associated with ORC's proposed mining activities, monitoring of groundwater and surface water should continue through at least the first rainy season after mining activities are completed in order to ensure that hexavalent chromium concentrations are not exceeding acute or chronic levels in groundwater and surface waters as a result of stormwater discharge from mining activities.

- ▶ **Question # 21:** How will DEQ ensure that a fully functional wetland has been restored and that the wetland will provide the stormwater capture as envisioned by ORC's Stormwater Management Plan?
- ▶ **Question # 22:** How will DEQ ensure that sufficient material is returned to the mining site to restore the land to pre-mining levels and thereby prevent abnormally high levels of water accumulation and runoff?
- ▶ **Question # 23:** How will DEQ monitor post-fill compaction of the tailings and compaction effects on turbidity, surface flows, and pollutant discharges?

DEQ Is Not Appropriately Regulating All of the Pollutants that ORC's Mining Activities Will Likely Discharge

DEQ's one-size, fits-all approach to regulating stormwater pollutant discharges through a general permit is legally defensible only where DEQ sets effluent limitations for all the pollutants discharged from a given facility that have the reasonable potential to violate applicable water quality standards. EPA has established sector-specific requirements within its only industrial stormwater permit to account for the varying pollutants that different industries discharge in their industrial stormwater. EPA also regulates many more pollutants in its stormwater permits than DEQ chooses to regulate. For DEQ to justify its decision to establish benchmark values for only six pollutants, DEQ must demonstrate that only these six pollutants are found in the industrial stormwater discharge.

Nitrate and Nitrite Nitrogen are common byproducts of non-metallic mineral mining operations. See EPA, Final Multisector General Permit and Appendices (*available at* <http://cfpub1.epa.gov/npdes/stormwater/msgp.cfm>, last visited on April 23, 2010). Hexavalent chromium and trivalent chromium are byproducts of chromite sand mining operations that have both toxic and carcinogenic properties when present in water. Improper handling of these materials could result in spills to waters of the state and health effects to its residents and to plant and animal life. Moreover, other metals not included in the application could be released by the extraction process and returned to mining site in a form susceptible to movement by water. Groundwater testing shows elevated levels of aluminum, arsenic, manganese, as well as coliform bacteria and total dissolved solids, all of which could be exacerbated by mining activity. DEQ should require data proving that these substances are not being discharged into Threemile Creek and Fivemile Creek and that water quality standards for these waterways are being met.

Benchmark Compliance Evaluation

Pursuant to the new 1200-A Permit, DEQ requires a facility to evaluate the last four samples collected from each outfall monitored and to determine whether the geometric mean of those samples exceeds benchmarks. However, the facility is not required to do this until June 30th of the 4th year of permit coverage. Four years is an excessive amount of time before an evaluation of overall performance is required of a facility. Under this approach the samples from each outfall may exceed benchmarks for the first 12 monitoring periods, but as long as the last four samples during the four-year period are not, according to the geometric mean, higher than the benchmarks for the pollutant, the facility faces no new requirements. DEQ should not wait four years before enforcing stronger requirements if such requirements are necessary to insure compliance with applicable water quality standards.

- ▶ **Question # 24:** Why did DEQ decide to employ the Benchmark Compliance Evaluation only after the fourth year of permit coverage?

Conclusion

Given the risk of environmental problems associated with ORC's proposed chromite operations, which are unique to chromite mining and not similar to other aggregate mining and concrete plant operations, DEQ should require ORC to obtain an individual NPDES permit. Without more information about ORC's discharges of stormwater from its various mining operation locations, DEQ cannot reasonably determine that the 1200-A Permit appropriately applies to the ORC chromite operations. Nor can DEQ conclude that these facilities' discharges will meet either the pollution reduction requirements of the Permit or the applicable water quality standards. Further, based on ORC's failure to fully complete every portion of its 1200-A application, DEQ cannot grant ORC coverage under the 1200-A Permit. DEQ must therefore, at a minimum, require a completed application in addition to more detailed information before it can grant ORC coverage under the 1200-A Permit. If DEQ does grant ORC coverage under the 1200-A Permit, based on the minimal information and potential for ORC's activities to be a significant contributor of pollution and other environmental problems, DEQ's actions will be unlawful under the Clean Water Act and Oregon law. ORCA therefore urges DEQ to deny ORC coverage under the 1200-A Permit, and to revise its entire approach to industrial stormwater permitting.

Sincerely,

/s/ Courtney Johnson
Courtney Johnson
Staff Attorney
On Behalf of ORCA