

**"Initial Rebuttal of Statement of Pete Raimondi, Which Was Received
by Poseidon Resources Corporation on April 2, 2009"**

(April 3, 2009)

Poseidon is pleased that, in his statement dated April 1, Dr. Raimondi commented favorably on the methods used by experts for Poseidon to evaluate impingement, as he states that:

“Generally I think this approach is a very interesting and potentially an appropriate method for comparison of impingement losses (or any sort of loss) to gains in production provided by the creation or restoration of wetland habitats.”

Yet, unfortunately, Dr. Raimondi quarrels with our experts’ application of their own methods, and concludes that Poseidon must provide many additional acres of mitigation wetlands (above and beyond the 55.4 acres in the Minimization Plan) to compensate for potential impingement losses at the CDP.

Unfortunately, Dr. Raimondi completed his evaluation significantly later than promised, and we received it just yesterday, hampering the ability of our experts to respond by today. Notwithstanding this prejudice, Poseidon respectfully disagrees with Dr. Raimondi, and urges the Board to approve the Minimization Plan with its robust mitigation commitment (up to 55.4 acres). The proposed mitigation is ample to offset impingement and entrainment associated with CDP operations, and very likely constitutes over-mitigation for potential loss and mortality at the proposed plant. This is so for many reasons, including the following principal points:

- No Prior Singular Dedication – Dr. Raimondi seems to assume that all of the biological productivity of the proposed wetlands has been pledged to mitigate for entrainment. He reportedly refers to the 55.4 acres as the “[m]itigation already required for entrainment impacts,” or words to that effect. But, curiously, he points to no permit provision, regulatory finding, or principle of science that walls off the proposed wetlands in this way. In fact, the commitment to create or restore up to 55.4 acres of wetlands did not result in the dedication of those wetlands to a singular biological function – compensation for entrained larvae. Wetlands are known to provide robust ecosystems that can serve multiple purposes such as compensating for impinged fish, as well as entrained species.
- The Proposed Wetlands Will Produce Fish in Amounts to Compensate Fully for Fish Lost to Potential Impingement – Dr. Raimondi has opined that juvenile and adult fish that will be present in the proposed 55.4 acres cannot be used to compensate for fish lost at the CDP. This is nonsensical. Poseidon is committing to restore or construct a massive wetlands – up to 55.4 acres – with many benefits. These wetlands plainly have the capacity to compensate for fish lost to impingement, as well as larvae lost to entrainment. Larvae and fish of myriad species will live there. Absent the wetlands, they would not exist. Of course, Poseidon is entitled to receive mitigation credit for the many values furnished by these wetlands.

- No Double Counting – Dr. Raimondi bases his objection on the allegation that Poseidon’s experts are double counting the mitigation acreage for two purposes that he apparently believes are mutually exclusive – entrainment mitigation and impingement mitigation. Thus, he argues, Poseidon must build many acres of other wetlands to mitigate for impingement. This argument is undermined by the actual data, which show that the species that predominate impingement are largely different than the species that predominate entrainment. In addition, there will be ample fish production in the planned wetlands to replace the loss of fish that predominate impingement. Dr. Raimondi’s hypothesis simply does not match up with the facts.
- Impingement Should Not Be Considered a Major Driver of Mitigation, as Impingement Losses Likely Will Be Small – Dr. Raimondi concludes that potential impingement at the CDP will be “significant.” He does not provide any real recognition that our experts’ impingement assessment is based on assumed values that artificially inflate impingement. This may seem odd, but these values were produced at the request of Regional Board staff, based on unfounded fears that impingement would be higher than our experts had said it would be. The calculations in accordance with staff input are based on the somewhat fantastic assumption that impingement associated with storm events expected to occur only once every 25 or 35 years, will occur annually, for an entire two-week period. Dr. Raimondi was provided proof that these storms indeed have 25- to 35-year recurrence intervals. Even with these unrealistic assumptions, the impingement estimate was still small, about 9 pounds per day, enough fish to feed 3 brown pelicans. Staff directed us to make calculations such as this, and then in the staff report suggest that we now agree that CDP impingement is significant. We have never agreed to that point and, in fact, continue to believe that impingement will be *de minimis*. Nevertheless, Poseidon has agreed to offset hypothetical impingement even at the inflated value (9 pounds per day).
- Impingement Will Be Reduced Over That Observed at the EPS Because The CDP Will Operate at Lower Flows – Dr. Raimondi agrees with our experts that “there may be a substantial reduction in impingement” when the EPS stops operating or, by inference, whenever the EPS does not provide enough discharge water to meet the CDP’s 304 MGD feedstock need. But, he does not square this acknowledgement with his conclusion that CDP impingement will be “significant.” And, he does not make any attempt to educate staff as to this point. Staff has resisted the long-established principle that reductions in flow result in reduced impingement. This common-sense notion long has been established at the EPS where the relationship between flow and impingement is “direct” and “significant.” An acknowledgement of this basic principle helps to demonstrate the *de minimis* nature of potential impingement, and supports a reasonable expectation of lower impingement when the EPS does not discharge enough water to meet the CDP’s feedstock needs.
- Poseidon Should Get Credit for Helping to Sustain the Ecosystem of Agua Hedionda Lagoon, Which Would Decline, Perhaps Dramatically, Without Continued Operation of the EPS Intakes – Dr. Raimondi made his assessment without a sufficient understanding of the situation at Agua Hedionda Lagoon, and the weight of his assessment should be reduced accordingly. Although perhaps counterintuitive at first blush, the ecosystem of the Lagoon

as it exists today did not exist prior to power plant operations that began in the 1950s. The ecosystem largely relies on the activities of humans, such as periodic dredging to keep water flowing to the intakes, and largely is a man-made system, providing an estuarine habitat and refuge that otherwise would be largely lower value mudflat. Thus, while no doubt the intakes entrain and impinge, much of the lost biomass might not exist without the intakes, and, most importantly, an entity with an economic incentive to keep the Lagoon in a condition that allows effective intake operation. There is no recognition in Dr. Raimondi's statement of this important context.

- Impingement Credit in the 49 Acres – Dr. Raimondi does not address the fact that, at his direction, the Coastal Commission required Poseidon to include 49 acres of wetlands in its plan, for a limited purpose, thereby reserving other demonstrable productivity for other purposes. The entrainment mitigation uses up the portion of biological production related to three lagoon species – gobies, blennies, and garibaldi. This mitigation commitment rules out counting towards impingement mitigation the presence of these three species in these acres. Many other fish, however, including many that are impinged (*e.g.*, topmelt), are expected to be produced or otherwise inhabit the 49 acres. The presence of juvenile and adult stages of these fish is available to serve as impingement credit.
- Impingement Credit in the 6.4 Acres – Dr. Raimondi does not address the fact that, at his direction, the Coastal Commission required Poseidon to include 6.4 acres of wetlands in its plan, for a limited purpose, thereby reserving other demonstrable productivity for other purposes. These 6.4 acre wetlands were required to compensate for entrainment of larvae of five, specific ocean-going species. This rules out counting towards impingement mitigation the presence of these five species in these acres. Many other fish, however, including many that are impinged, are expected to occur in the 6.4 acres. Juvenile and adult stages of such fish are available to serve as impingement credit. Included in such impingement credit are blennies, gobies and garibaldi since these 6.4 acres are not earmarked to provide entrainment mitigation for them.
- Adequacy of Impingement Mitigation – Dr. Raimondi does not take issue with Mr. Nordby's biomass calculations, and even acknowledges that "[t]here is nothing wrong with the use of averages as one estimate of effect." Mr. Nordby's estimates based on anticipated productivity values demonstrate that the proposed wetlands will produce ample fish biomass to offset potential CDP impingement. He based his calculations on a very conservative assumption of 4.7 kilograms per day ("kg/day") of impingement, corresponding to 1,715.5 kg/year. About 11.5 acres of intertidal mudflats and subtidal habitat are very likely to produce this much fish biomass of impinged species, as demonstrated by Mr. Nordby. 11.5 acres represents about 20 percent of the overall planned acreage. As is clear, the reality is that the proposed wetland will over-mitigate for impingement, and probably to a very substantial degree. Given the conservative nature of the Nordby analysis, and the mitigation scheme, it is unwarranted to artificially inflate the proposed acreage values through the statistical approaches described by Dr. Raimondi.
- Conservative Nature of Proposed Mitigation – It bears emphasis that the proposed mitigation is based on a number of conservative assumptions and a conservative scenario, providing the highest level of confidence as to the adequacy of the proposal. These points are either barely

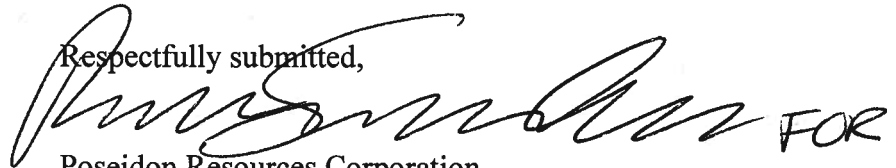
acknowledged by Dr. Raimondi, or he refuses to accept them altogether. Key points in this regard are as follows:

1. Stand-Alone Operations Used as a Conservative Basis: We understand that the Regional Board is authorizing only CDP operations while the EPS also continues to operate, at least intermittently. Our analysis, however, assumes that the CDP is operating independently of the EPS and ascribes to the CDP full mitigation responsibility for all entrainment and impingement associated with 304 million gallons per days (“MGD”) of flow (*i.e.*, the feedstock needs of the CDP). In reality, the EPS will continue to provide the CDP with a substantial percentage of its feedstock needs, and the EPS is responsible– not the CDP–for entrainment and impingement associated with meeting its cooling water needs. In this regard, our evaluation is very conservative.
2. Potential Impingement Likely Lower Than 4.7 Kg/Day: Our calculations based on the long-established relationship between flow and impingement suggest that actual impingement at the CDP is likely to be on the order of 1.5 to 2.2 kg/day. The 1980 study of impingement at the EPS established a “direct” and “significant” relationship between flow and impingement at the EPS. The 2004-2005 study is consistent with these earlier findings. Yet, we assumed a value of 4.7 kg/day after receiving substantial feedback from Regional Board staff that it wished us to explore various calculation methods. We do not want to be misunderstood that we embrace calculation methods that reject the flow-impingement relationship, or require the use of outlier data as if those events will re-occur with frequency. Our use of 4.7 kg/day value is very conservative and likely unrealistically overstates impingement.
3. No Compensatory Mortality Assumed: Dr. Raimondi alleges that our approach assumes compensatory mortality. Such is not the case. If we had assumed compensatory mortality, the mitigation acreage would have been much less than 55.4 acres. Compensatory mortality is the theory that natural systems can respond to larval losses without experiencing any loss at the juvenile and adult population stages. We actually assumed *proportional* loss across all life stages. That is why the 49 acres for goby, blenny and garibaldi larval mitigation is not also available to mitigate for impingement of juvenile and adult forms of these species. With this explained, we also wish to point out that most ecologists, including our experts, believe in compensatory mortality. In fact, without it, Agua Hedionda Lagoon would be depauperate – not the rich environment present there today. The assumption in our mitigation estimates, which ignore *compensatory* mechanisms, and assume *proportional* loss, is conservative.

4. Compensation Provided for All Potential Entrainment and Impingement – Staff acknowledge that there were no threatened or endangered species detected in the 2004-2005 field program. It also is the case that not all species detected in the field program have commercial and/or recreational value. Yet, our approach compensates regardless of the value, or lack thereof, of any species. We are even compensating for the loss of a fish that some persons refer to as the “sewer trout.” While we mean no disparagement to that fish, it is relevant to the point that we are not discriminating among fish, and are compensating for all. Our approach introduces yet another level of conservatism into the proposed mitigation.

We reserve the right to offer fuller commentary and response on Dr. Raimondi’s statement. While we appreciate staff’s offer to allow us this short window in which to add a statement to the Board package, the window was short indeed. What is clear is that Dr. Raimondi’s eleventh-hour statement should be accorded little weight by the Board, and should not prevent Board approval of the Minimization Plan.

Respectfully submitted,



FOR

Poseidon Resources Corporation