

January 31, 2008

*Via E-Mail*

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**RE: Draft Health Risk Assessment Report, Pacific Steel Casting Company, 1333  
Second Street, Berkeley, California 94710, dated September 24, 2007**

Thank you for providing the opportunity for public review and comment on the September 24, 2007, Draft Health Risk Assessment Report (HRA) for Pacific Steel Casting Company (PSC). As a community member who lives down the street from PSC, I am very concerned about the health impacts of ongoing emissions from the facility. This letter serves as my comments on the HRA, submitted as part of the public comment period. I urge the Bay Area Air Quality Management District (BAAQMD) and Office of Environmental Health Hazard Assessment (OEHHA) not to approve the HRA as submitted. My concerns are as follows:

**HRA Uses Inadequate and Incorrect Emissions Data**

Air dispersion modeling based on incorrect emissions data result in invalid modeling estimates of community exposure. BAAQMD and PSC failed to adequately address community and City of Berkeley concerns, submitted in writing and at the February 2007 community meeting, about the draft PSC Emissions Inventory Report. While some positive changes were made to the draft emissions inventory data to address inadequacies, other problems remain, including but not limited to:

- *Carbon Adsorption Efficiencies for Plants 1 and 2 are based on incorrect estimates:* According to BAAQMD and PSC representatives at the January 2008 community meeting, carbon adsorption unit efficiencies for Plants 1 and 2 were based on Plant 3 carbon unit efficiencies. The Plant 3 carbon unit efficiencies were calculated based on actual measurements of stack emissions. Carbon adsorption efficiency depends on a variety of factors, including the composition of the emissions and the trigger for and frequency of carbon change out. Binders and thus related VOC emissions vary between the three plants. In addition, the trigger for the carbon unit change outs on Plants 1 and 2 is based on odor levels, a subjective and variable trigger; carbon change out on Plant 3 is

based on actual measured emissions. Therefore, it is inaccurate to apply the adsorption efficiencies from the Plant 3 unit to the carbon adsorption units on Plants 1 and 2.

- *1989 data are out of date:* PSC and BAAQMD have failed to adequately justify the use of 1989 emissions data.
- *Fugitive emissions are not accounted for:* PSC asserts that the plants maintain a negative pressure, and there are no fugitive emissions. This is directly contradicted by conversations I have had with BAAQMD staff who have verbally expressed concerns about fugitive emissions at the plants stemming from opened doors during breaks or shift changes and (or) due to plant employees' potential failure to consistently maintain appropriate operational procedures necessary for all abatement devices to operate at estimated efficiency levels.

### **Operations of Carbon Adsorption Units on Plants 1 and 2 Must Be Changed To Be Protective of Human Health**

As discussed above, odors are the trigger for carbon change outs on Plants 1 and 2. BAAQMD operating permits for these units should be revised to require continuous or frequent monitoring of emissions and to set a carbon change out based on objective, measurable breakthrough concentrations of specific chemicals of potential concern in order to be protective of human health and the environment. Please also disclose what the triggers for carbon changeouts in Plant 3 are, and the rationale for those criteria.

### **The HRA Fails to Adequately Account for Emissions-Related Health Risks**

The HRA does not fully account for the potential additive, cumulative, or synergistic cancer and noncancer effects from chemicals of potential concern from PSC. Research is increasingly demonstrating that low-level chronic chemical exposure can have different health effects than high-level acute exposures; that the exposures to chemical mixtures can have different impacts than exposure to any of the same chemicals individually; and that health effects can vary with the relative timing and duration of exposure to different chemicals or chemical mixtures.

### **HRA Must Differentiate Between BAAQMD Notification Levels and Measures of Adverse Effects**

The HRA conflates exceedence of BAAQMD criteria for public notification with risk assessment results indicative of adverse health impacts. The HRA and all summaries and public materials must clearly explain and differentiate between these two issues when, for example, the Hazard Index is greater than 1.

### **BAAQMD Public Notification Levels are Too High**

Public Notification Levels vary between Air Quality Management Districts across California. BAAQMD notification levels are higher than in some other Districts. PSC should be required to notify impacted community members of any adverse health impacts, not simply those that exceed an arbitrary notification level set by BAAQMD.

### **The HRA Does Not Account for All Potential Health Hazards from PSC Emissions**

The HRA does not take into consideration all emissions from PSC. For example, fine particulate matter (PM<sub>10</sub>, PM<sub>2.5</sub>) are widely recognized to pose a health hazard, regardless of chemical composition, yet the HRA only accounts for hazardous emissions based on composition, not particle size. In addition, the HRA does not take into account potential adverse health impacts from acute and (or) chronic exposure to noxious odors from PSC. The HRA also only accounts

for stationary emissions sources, failing to assess the potential health impacts of emissions from mobile sources.

**HRA Must to Present Modeling Results More Clearly**

The HRA should include clear isoconcentration maps of air dispersion modeling predictive concentrations out to non-detect levels and related cancer risk and non-cancer hazard index values down to no adverse impact levels.

**Predictive Modeling Based on Theoretical Future Conditions are Irrelevant to HRA**

While predictive modeling of emissions concentrations based on theoretical future plant conditions may be useful to PSC's planning and decision making, they have no place in the HRA. Until abatement devices are in place and operational and actual emissions can be measured, they should not be considered in the HRA.

**There is No Safe Level of Lead Exposure**

Environmental health experts widely recognize that there is no safe level of lead exposure. The communities downwind of PSC have many families with children as well as childcare facilities. The HRA needs to clearly state that exposure to PSC lead emissions at any level is unsafe.

**Community Meeting & Meeting Notice Are Not Sufficient Public Notice**

The January 2008 community meeting and the meeting notice should not be used as the required public notification to the impacted community. The written notification needs to be presented succinctly and in plain language. It must also clearly communicate where the HRA predicts adverse impacts, not just what neighborhoods exceeded BAAQMD community notification criteria. The neighborhood around PSC contains many multi-unit residences; please be sure that the notice goes out to all units and is presented in Spanish as well as English.

**Require HRA Update if Applicable Exposure Level Criteria are Revised**

Please require the HRA to be updated at any point in the future that applicable and relevant health-based exposure limit criteria used in the HRA are revised by the state or federal government.

**Please Explain Next Steps**

Please clearly explain the next steps in the HRA process, including what would trigger an update or revision of the Emissions Inventory Report and (or) the HRA. The draft HRA must be revised to address the issues mentioned above, in addition to the issues included in comments from the City of Berkeley and the West Berkeley Alliance. Due to community concerns about PSC emissions, I hope that the response to public comments can be completed in a timely manner. (BAAQMD response to community comments on the Emissions Inventory report was released almost six months after the Emissions Inventory Report was finalized by PSC, an unreasonably long delay) Please note that as a neighbor, I strongly support PSC's continued operation in West Berkeley. However, I believe that the facility must implement the best available technologies, continue to reduce the use of toxics materials, and improve operational practices to eliminate measurable hazardous emissions that can impact the health and well being of both PSC workers as well as community members.

Thank you again for you ongoing work on this matter.