Pacific
Environmental
Advocacy
Center

10015 S.W. Terwilliger Boulevard
Portland, Oregon 97219
phone: 503-768-6727
fax: 503-768-6642

www.peaclaw.org

August 25, 2006

Jerry Ebersole
Oregon Department of Environmental Quality
Air Quality Division
811 SW 6th Avenue
Portland, OR 97204

Re: Supplemental Comments on DEQ's Proposed Implementation of CAMR

Dear Mr. Ebersole:

On behalf of the Northwest Environmental Defense Center, Columbia Riverkeeper, Friends of the Columbia Gorge, Northwest Environmental Advocates, Oregon Center for Environmental Health, Oregon Toxics Alliance, Oregon Physicians for Social Responsibility, Oregon Natural Resources Council, and Sierra Club (collectively, "Commenters"), the Pacific Environmental Advocacy Center ("PEAC") submits these supplemental comments regarding the Oregon Department of Environmental Quality's ("DEQ") revised proposal for implementing the Clean Air Mercury Rule ("CAMR") in Oregon.[1] Specifically, Commenters submit comments on DEQ's Proposed Alternate Rule, Option 5 (referred to in these comments as "Option 5"). Commenters also submit comments in support of the Citizens' Proposal for the Reduction of Mercury Emissions in Oregon (referred to in these comments as the "Citizens' Proposal").

At the outset, Commenters thank DEQ for its willingness to consider its previous proposal for implementing the CAMR in Oregon. In Commenters' experience, DEQ rarely agrees to reconsider agency proposals after they have been released for public comment. Commenters view Option 5 as a considerable improvement over the other proposed options and appreciate that DEQ has made an effort to improve Oregon's implementation of the CAMR.

Unfortunately, Option 5 still does not do enough to limit mercury emissions and protect public health and the environment. First, Option 5 will allow Portland General Electric ("PGE") to trade mercury credits with power plants in other states. This trading program is unlawful, economically unsound, and morally wrong. Second, Option 5 fails to require the PGE Boardman facility to achieve emissions limitations that are already technologically achievable. Third,

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[1] Commenters also hereby incorporate by reference the previous comments that they submitted to DEQ on June 26, 2006. These supplemental comments assume that DEQ and the EQC will consider both sets of comments as they move forward with developing a mercury rule for Oregon.

Option 5 allows PGE Boardman far too much time to install pollution controls.

Because Option 5 fails in these respects, Commenters have presented a Citizens' Proposal that would eliminate mercury trading, establish more stringent emissions limitations, and require PGE to order equipment within a reasonable time. Commenters urge DEQ to support the Citizens' Proposal before the EQC and to make the Citizens' Proposal the operative rule for Oregon's implementation of the CAMR.

I. SUMMARY OF DEQ'S REVISED PROPOSAL – OPTION 5

Under proposed Option 5, PGE Boardman will first be required to install mercury emissions monitoring equipment by 2008 and certify its operation by 2009. PGE will also be required to submit a Mercury Emission Reduction Plan to DEQ for approval by 2009.

Option 5 then establishes a 2012 deadline for mercury reductions. Starting July 12, 2012, PGE Boardman will be required to implement its approved control strategy, which must either achieve 90 percent mercury capture or limit mercury emissions to 0.6 pounds per trillion Btu of heat input. After establishing this date-certain deadline for emission control, Option 5 then provides PGE Boardman "compliance flexibility" in meeting the deadline. If PGE demonstrates that it is not "practical" to install mercury control equipment by 2012, due to supply limitations or other extenuating circumstances, DEQ may extend PGE's compliance deadline by one year. Also, if PGE demonstrates that the control equipment fails to perform after installation, DEQ may grant PGE a "temporary alternative mercury emission limit" while PGE works on system improvements. This "temporary" emission limit may be applicable for two years. If PGE demonstrates after system improvements that 90 percent mercury control is not achievable, DEQ may develop a "permanent" alternative emissions limit. Thus, the proposed rules provide PGE several opportunities to avoid or delay strict compliance with the deadline and ultimately the standard itself.

Option 5 also retains an interstate trading scheme, which significantly weakens the proposed rule. By opting into the federal cap and trade program, Oregon will be given a mercury allowance of 152 pounds per year through 2018, and 60 pounds per year in 2018 and thereafter. DEQ proposes to give 137 of the 152 pounds to PGE Boardman in each of the years 2010, 2011, and 2012. Starting in 2013, PGE Boardman will be given 35 pounds per year in mercury credits.

It is important to note how these "Hg Emission Standards" and "Hg Allowance Allocations" provisions of the proposed rule work together, as DEQ's description of the rule's requirements is somewhat misleading. In DEQ's summary of its revised proposal, entitled "Oregon's Proposed Clean Air Mercury Rule," available at http://www.deq.state.or.us/aq/mercury/docs/summary.pdf, DEQ describes its rule as requiring PGE Boardman to achieve specific mercury emissions limits. Nothing in the rule language,

however, directly requires Boardman to meet a "pounds per year" mercury emissions limit. For example, on page 2 of DEQ's summary document, DEQ states that Option 5 will require PGE to "[r]educe mercury to 137 lbs/year" by 2010. The rule does not contain any such requirement. Presumably, DEQ makes this statement because DEQ intends to give PGE 137 mercury credits for three years, starting with 2010. PGE must therefore buy pollution credits if it needs more than the allotted 137 credits, but the rule does not *require*, as DEQ suggests, PGE to reduce its emissions or install any control technology by 2010.

Similarly, DEQ states that PGE Boardman would be required to "[r]educe mercury emissions to 26 lbs/year" by 2012, though nothing in the language of the proposed rule actually requires PGE Boardman to meet this emissions limitation. Rather, 26 pounds/year is simply DEQ's estimate of the expected emissions after the application of 90 percent control measures. Additionally, by allowing PGE 35 credits during years in which PGE is supposed to have reduced its emissions to 26 pounds/year, DEQ is effectively making 35 pounds per year the applicable emissions limitation. Thus, when taken together, the "Hg Emission Standards" and "Hg Allowance Allocations" provisions of the proposed rule are actually weaker than DEQ's supporting documents describe. And, as explained further below, this trading scheme results in significant ongoing subsidies to PGE based not on going beyond emissions standards but on merely complying with them.

Finally, rather than take the opportunity for Oregon to act as a leader in environmental protection, DEQ has included a provision to allow new power plants to be built in Oregon. Option 5 proposes to set aside 15 pounds per year for new power plants from 2010 through 2017 and 12 pounds per year starting in 2018 and thereafter.

II. DEQ HAS FAILED TO ADEQUATELY ASSESS MERCURY DEPOSITION AND ITS IMPACTS ON HEALTH AND THE ENVIRONMENT

In the previous set of comments, Commenters noted that DEQ had failed to conduct any meaningful assessment of localized mercury deposition from the Boardman plant. Commenters also criticized DEQ for relying on deposition studies that had been criticized by the EPA Inspector General for failing to accurately consider potential mercury hotspots caused by power plant emissions.

While DEQ did take some steps in its revised proposal to review the studies specifically mentioned by Commenters, DEQ has still not conducted a meaningful assessment of localized mercury deposition from the Boardman facility or from other power plants that will benefit from any Oregon trading program. The revised Attachment G notes that, based on the Steubenville Study, it is likely that the PGE Boardman plant accounts for 10-15 percent of the mercury deposition near the Boardman plant, but fails to analyze what that means for human health and the environment. Revised Attachment G similarly acknowledges that the Steubenville Study

shows that EPA underestimated localized mercury deposition in the Ohio River Valley by 26 percent,[2] but again, provides no analysis of what the revised mercury deposition figures mean for the residents of the Ohio River Valley. This failure to provide meaningful analysis of deposition is a significant flaw in DEQ's rulemaking proposal.

In addition, DEQ has not assessed the impacts of mercury deposition from the Boardman facility on tribal members. Studies show that subsistence fishers face increased risks from mercury deposition, due to their high fish consumption rates. In 2003, T.M. Sullivan and others published a report that concluded that risks associated with emissions from coal-fired power plants "could be two orders of magnitude higher for subsistence fisher populations."[3] EPA has already concluded that Native Americans along the Columbia River face much higher health risks as a result of their consumption of fish from the Columbia River.[4] In addition, at least two studies from the Columbia River show that sturgeon - a type of fish commonly consumed by Columbia River tribal members - have elevated mercury levels in their tissue. With these studies in mind, DEQ cannot blithely assert that mercury has only minimal local impacts without proving that to be the case.

DEQ has also downplayed the risks of mercury despite widespread documentation that mercury presents significant risks to women and children. In its 1997 Mercury Study Report to Congress, EPA concluded that between 1-3 percent of women of childbearing age in the United States are exposed to unsafe levels of mercury.[5] The study documented that even more children are exposed to unsafe levels of mercury. *Id.* Thus, in 1997, EPA's report showed that as many as 7 *million* women and children are exposed to unsafe mercury levels as a result of eating

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[2] DEQ notes that EPA had estimated that coal-fired power plants would account for 44 percent of the localized mercury deposition in the Ohio River Valley, but the Steubenville Study showed that coal-fired power plants (and other coal combustion units) were responsible for 70 percent of local and regional wet mercury deposition.

[3] T.M. Sullivan *et al.*, "Assessing the Mercury Health Risks Associated with Coal-Fired Power Plants: Impacts of Local Depositions" p. 1 (2003). Attached to these comments as Exhibit 1. The authors of the study rely on EPA methodology to estimate localized deposition and therefore, as the Steubenville Study shows, likely underestimated localized mercury deposition as a result.

[4] Commenters have already provided DEQ with copies of the EPA/CRITFC study assessing these impacts. Commenters also provided DEQ with copies of the studies showing that sturgeon have high levels of mercury in their tissue.

[5] The study is available at http://www.epa.gov/mercury/report.htm.

mercury-contaminated fish.[6] More recent studies estimate that as many as 630,000 children born in the United States each year may be at risk of neurological impairment due to high mercury levels in their mothers' blood.[7] As Commenters explained in their previous set of comments, these exposures have significant health and economic consequences. DEQ must consider these consequences in proposing a rule that would allow PGE and other power plants to escape immediate and meaningful pollution control requirements.

Finally, before proposing a program that would allow PGE to trade with power plants in other states, DEQ must assess the impacts that such trading will have in other states. DEQ has not undertaken any assessment of the impacts that mercury is already having on humans, birds and wildlife exposed to mercury from local power plant deposition. Indeed, DEQ acknowledges that bituminous coal - the common type of coal burned in the eastern U.S. - results in higher levels of localized mercury deposition than the type of coal burned by PGE. Yet, in proposing a trading program that would allow eastern power plants to escape mercury reductions, DEQ fails to consider the impacts that those power plants' emissions will have on already affected local communities.

Throughout the record, DEQ seems to be utterly unconcerned about the significant health and environmental effects of mercury emissions from power plants. While DEQ may be correct that these emissions are but part of a larger problem, that is hardly justification for DEQ to place PGE's financial interests above other concerns. Commenters hope and expect that DEQ will further improve its proposed rule to, at long last, place human health concerns above PGE's economic interests.

III. DEQ AND THE EQC SHOULD REJECT ANY PROPOSAL TO ALLOW TRADING OF MERCURY CREDITS

In its rulemaking proposals, including its revised (and, in many ways, improved) Option 5, DEQ has proposed to allow "trading" of mercury credits. This trading scheme, however, is impermissible under both the CAA and Oregon's SIP. DEQ's trading proposal is also entirely

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[6] Environmental Working Group, *Mercury Falling: An Analysis of Mercury Pollution from Coal-Burning Power Plants* (Nov. 1999). This study was attached to the June 26, 2006 comments.

[7] Kathryn R. Mahaffey, *et al.*, Blood Organic Mercury and Dietary Mercury Intake: National Health and Nutrition Examination Survey, 1999 and 2000, 112 Envtl. Health Persps. 562 (Apr. 2004). *See also* Kathryn R. Mahaffey, Methylmercury: Epidemiological Update. Presentation at Fish Forum 2004, available at http://www.ewg.org/issues_content/mercury/ppt/Fish_Forum_2004.ppt.

inconsistent with the underlying purposes of cap-and-trade programs, as it does not provide any economic incentives for PGE to go beyond the regulatory requirements that DEQ has proposed and instead simply offers PGE a subsidy in the form of mercury credits. DEQ's trading program is also unconscionable, as it would allow Oregon businesses to benefit financially from allowing other power plants in other states to avoid reducing their mercury emissions and thus force citizens in other states to remain exposed to localized mercury deposition from highly polluting power plants. For these reasons, Commenters urge the DEQ to abandon its plans to allow mercury trading.

A. The CAA Does Not Authorize Trading of Hazardous Air Pollutants

In their first set of comments, Commenters explained how EPA's regulation of mercury emissions from coal-fired power plants conflicts with the plain requirements of the CAA. For the purposes of these supplemental comments, Commenters will focus specifically on how the CAA does not allow interstate trading of mercury and how DEQ's proposal to allow mercury trading is therefore inconsistent with the CAA and thus unlawful.

In 2005, the EPA finalized rules for regulating mercury emissions from coal-fired power plants under Section 111 of the CAA. At the same time, EPA finalized rules to allow interstate trading of mercury emissions. To support its decision to allow interstate trading, EPA essentially argued that it has authority to use trading as a regulatory tool, because Section 111 of the CAA does not expressly prohibit trading. EPA also attempted to equate intra-source bubbling (in which a single source can increase emissions at one part of a facility so long as it reduces air emissions at another part of the same facility) with interstate trading. Both of EPA's justifications fail, however, under the CAA and existing Supreme Court precedent, as discussed below. DEQ's proposal to allow interstate trading therefore has no legal support and cannot lawfully proceed.

1. The CAA Does Not Authorize Trading Under Section 111

The CAA does not permit mercury trading under Section 111. Under Section 111, EPA must establish nationwide *uniform* emission standards for new or modified stationary sources. These "standards of performance" (which are also known as "new source performance standards" or "NSPS") must reflect the "degree of emission limitation achievable through the application of the best system of emission reduction which . . . has been adequately demonstrated." CAA § 111(a)(1); 42 U.S.C. § 7411(a)(1). Section 111 makes clear that these technology-based standards must be achieved by *every* source subject to the standards, as demonstrated by the statute's repeated use of the term "any" when discussing which sources are subject to NSPS. For example, Section 111(d) requires states to submit plans for establishing NSPS for emissions of air pollutants from "*any* existing source." CAA § 111(d)(1)(A); 42 U.S.C. § 7411(d)(1)(A) (emphasis added). Section 111(e) is similarly clear that all sources must comply with NSPS

when it states that "it shall be unlawful for *any* owner or operator of *any* new source to operated *such* source in violation of any [applicable NSPS]." 42 U.S.C. § 7411(e) (emphasis added). Finally, Section 111(j), which allows a source to receive a waiver from the NSPS where it can show that an alternate system of control will achieve greater pollution controls, also confirms that, absent a source-specific waiver, NSPS apply uniformly to all regulated sources. 42 U.S.C. § 7411(j). The text of Section 111 thus makes clear that NSPS apply to each source of pollution. The DEQ's proposal to opt into nationwide trading would allow certain sources to escape the uniform pollution controls mandated by Section 111 by providing facilities with the ability to buy pollution credits rather than install pollution controls. This is inconsistent with the statute and thus unlawful.

Neither EPA nor DEQ can find any statutory support in Section 111 for interstate trading. While the CAA allows trading in limited circumstances, those circumstances do not apply to mercury controls under Section 111. For example, the CAA establishes a complex *interstate* trading program for emissions of pollutants that contribute to acid rain. 42 U.S.C. §§ 7651-7651*o*. The CAA also allows for *intra-source* trading for certain sources of HAPs and for pollutants in certain kinds of ozone nonattainment areas. 42 U.S.C. §§ 7511a(c)(6)-(8), 7412(g)(1). Courts have also found that certain parts of the statute implicitly authorize *intra-source* trading, but have repeatedly stressed that such trading "must be within the same source." *Alabama Power Co. v. Costle*, 636 F.2d 323, 402 (D. C. Cir. 1980); *see also Chevron, U.S.A., Inc. v. Natural Resources Defense Council*, 467 U.S. 837, 860-61 (1984) (defining source as "any *discrete, but integrated,* operation which pollutes."). DEQ's Option 5 (as well as its other proposed options), which would allow for interstate trading in mercury, without express authorization for such trading under the statute, goes well beyond any trading program authorized under the CAA and is therefore unlawful.

DEQ may attempt to convince the EQC that mercury trading is permissible because Section 111 does not expressly prohibit trading as a component of NSPS. This argument, however, must fail. The Supreme Court has made clear that Congress' silence in the CAA does not translate into consent for programs that Congress did not expressly authorize. *Whitman v. Am. Trucking Ass'ns.*, 531 U.S. 457 (2001). In *American Trucking*, industry challenged EPA's establishment of National Ambient Air Quality Standards ("NAAQS") for ozone, arguing that the CAA required EPA to include cost considerations in its NAAQS determination. The Court flatly rejected this argument, finding that the statute's plain requirement that EPA set NAAQS "to protect public health" with "an adequate margin of safety" did not allow EPA to consider costs. *Id.* at 465 ("Were it not for the hundreds of pages of briefing respondents have submitted on the issue, one would have thought it fairly clear that this text does not permit the EPA to consider costs in setting the standards.") (citing CAA § 109(b)(1)). Throughout the *American Trucking* decision, the Court made clear that Congress must clearly evince its intent to allow the regulatory schemes of one part of the CAA to become incorporated into other parts of the statute. *Id.* at 468 ("Congress, we have held, does not alter the fundamental details of a regulatory

scheme in vague terms or ancillary provisions--it does not, one might say, hide elephants in mouseholes."); *see also id. (*citing *General Motors Corp. v. United States*, 496 U.S. 530, 538, 541 (1990) ("refusing to infer in certain provisions of the CAA deadlines and enforcement limitations that had been expressly imposed elsewhere"). Thus, as the Supreme Court has made clear, unless Congress has expressly authorize interstate trading in Section 111 of the CAA, neither EPA nor DEQ may incorporate interstate trading into that part of the statute on the basis that Congress has authorized it elsewhere.

2. Legislative History Shows that Congress Did Not Intend for Section 111 to Encompass Trading Programs that Would Enable Pollution Sources to Avoid Installing Pollution Controls

Congress made clear when it first enacted, and then later amended, Section 111 that it intended for *each* source to comply with the uniform technology-based requirements of the NSPS program.

The legislative history surrounding the initial enactment of the CAA shows that NSPS were meant to apply uniformly to each pollution source. For example, the Conference Committee for the 1970 CAA Amendments stated that section 111 "require[s] that new major industry plants such as power plants, steel mills, and cement plants achieve a standard of emission performance based on the latest available control technology, processes, operating methods and other alternatives." *Summary of Provisions of the Conference Agreement on the Clean Air Amendments of 1970, reprinted in 1970 Legislative History*, at 130. The Conference Committee made clear that Section 111 established "*national* standards of performance on emissions from new stationary sources," and that "[t]hese sources, important in themselves and involved in industries of national scope *must be controlled to the maximum practicable degree* regardless of their location." *Id.* at 133 (emphases added). The House Report similarly states that "the emission standards shall provide that sources of such emissions shall be designed and equipped to prevent and control such emissions to the fullest extent compatible with the available technology and economic feasibility as determined by the Secretary." H.R. Rep. No. 91-1146, *reprinted in 1970 Legislative History* at 900. Perhaps the clearest explanation of the purpose of NSPS was expressed by the Commissioner of the National Air Pollution Control Administration, who explained that "the purpose is to assure that *everybody must meet the same performance requirements* . . . that requirement being the best possible control so that we begin to do more than just talk about protection and enhancement of air quality." *Id.* at 1190 (statement of Dr. John Middleton, Commissioner, National Air Pollution Control Administration, HEW) (emphasis added).

In 1990, when Congress enacted sweeping amendments to the CAA (and, not incidentally, adopted the acid rain trading provisions), it continued to support NSPS as a program that would require minimum technology controls for each facility. Indeed, while Congress

intended for power plants to have some flexibility in meeting the required standards, it also clearly intended for that "flexibility" to take the form of site-specific actions. As Senator Simpson explained: "[Congress has] directed EPA to come up with an alternative standard that would allow utilities to meet it in the most flexible manner possible. The new standard could be met by fuel switching, the use of technology and fuel switching, by technology alone, and by intermittent controls or intermittent operation." *1990 Legislative History* at 1149. Congress never envisioned, and certainly never approved, trading within the NSPS program of Section 111 of the CAA.

The legislative history thus supports Commenters' position that CAA Section 111 requires all facilities to install pollution controls reflecting the best demonstrated available technology. DEQ's proposed trading program, which will enable facilities to avoid installing such technology controls, is thus contrary to Congress' intent.

B. DEQ's Proposal Is Inconsistent with Established Trading Principles and Would Result in a Windfall for PGE Boardman and a Relaxation of the Rule's Emissions Reductions Requirements

Commenters strenuously object to trading in mercury pollution for the reasons stated throughout these comments. Additionally, the particular trading scheme DEQ proposes departs from the rationale behind pollutant trading programs because it awards pollution credits simply for complying with the law. Through trading allowances, DEQ effectively proposes to provide substantial subsidies to PGE Boardman, as well as an additional margin of pollution than the rule otherwise would allow.

In principle, a trading program could achieve the dual goals of protecting the environment and providing an economic incentive for regulated entities if pollution allowances given to those regulated entities bear some rational relationship with the required emissions reductions.[8] Facilities that intend to emit pollutants in excess of their allowances must buy credits from those who pollute less than their allowances. If a facility reduce its emissions below the required level, only at that point will the facility have any pollution credits to sell to another facility. In effect, the buyer is being fined for polluting, while the seller is being rewarded for having reduced its emissions beyond the applicable limitation.

DEQ's proposed rule does not work this way. Under DEQ's approach, PGE Boardman will be given pollution credits to sell to out-of-state polluters irrespective of whether Boardman meets or exceeds the pollution reductions required by regulation. DEQ states that its proposal requires PGE Boardman to reduce mercury emissions to 26 pounds per year by 2012, which DEQ

[8] Commenters wish to underscore that even effective trading programs should in no circumstances be allowed with pollutants such as mercury.

states reflects 90 percent control. At the same time, DEQ proposes to allocate mercury credits to PGE Boardman that exceed the required reductions. That is, DEQ intends to allocate 137 pounds/year of mercury credits to Boardman between 2010 and 2013. If Boardman complies with the mercury reductions, by 2012, Boardman should be emitting only 26 pounds of mercury per year during 2012. Yet, it will have 137 credits for that year. This means that by doing nothing but complying with the reductions required by rule, Boardman could sell 111 mercury credits to an out-of-state facility. EPA estimates that mercury credits will cost $23,369 per pound per year between 2010 and 2017. Thus, PGE stands to make almost $2.6 million in one year by selling its credits, even though it has not "earned" any of those credits under traditional trading principles.

Further, DEQ's subsidies will continue well beyond the initial time period of investment in control technology. Starting in 2013, and every year thereafter, DEQ proposes to give PGE 35 mercury credits. If PGE were to reduce its mercury emissions to 26 pounds/year, as the rule purports to require, PGE would still be able to sell 9 pounds/year of mercury credits. Again, this means that PGE would make $210,321 per year for doing nothing but complying with the law.

Alternatively, by setting up the trading scheme as it has, DEQ is effectively establishing a 35 pound/year mercury limitation. As explained above, DEQ's statement that PGE must reduce its emissions to 26 pounds/year is misleading because the rule does not contain an explicit pounds/year limitation; rather the limitation is expressed as a percentage reduction (90 percent). The 26 pounds/year figure has even less relevance to the regulatory requirements in light of the credits PGE is given simply as a matter of course. In other words, if DEQ is proposing to give PGE 35 pounds/year in mercury credits, isn't 35 pounds/year the operative limitation, *not* 26 pounds/year? According to DEQ's figures, based on an "average year" of uncontrolled mercury emissions (225 pounds/year), reduction to 35 pounds per year is only 84 percent control. Based on a minimum year of uncontrolled mercury emissions (159 pounds/year), reduction to 35 pounds/year reflects only 78 percent control. Thus, the trading/credit scheme DEQ has established either subsidizes PGE by allowing it sell credits it did not "earn," or it in fact establishes a more relaxed mercury limitation.

C. By Joining the Mercury Trading Program, Oregon will Encourage Higher Deposition of Toxic Mercury in Other States

The mercury trading program unfairly places human health and the environment of communities near certain large, dirty power plants at risk, by allowing the purchase of mercury credits to maintain or increase mercury pollution. The trading program will have disproportionate adverse effects on low income and minority communities in other states. It is DEQ's responsibility to take these disturbing "externalities" into account. DEQ should not allow the benefits of pollution reduction at PGE Boardman to adversely effect the health and environment of other communities. Oregon should opt out of the mercury trading program.

1. Toxic Mercury Pollution from Coal-Fired Power Plants will be Exacerbated in Other States under the CAMR's Mercury Trading Program

DEQ has repeatedly emphasized that pollution from power plants in the middle, southern, and eastern United States is far more severe than that in the Northwest. Whereas PGE Boardman emits several hundred pounds of mercury into the air annually, the top twenty coal-fired power plants each emit over 1,000 pounds.[9] Mercury emissions from coal-fired power plants in only eight states account for half of the nation's total power plant mercury emissions. *Id*. at 12. While this point is irrelevant to DEQ's obligation to regulate and reduce mercury emissions here in Oregon, it is important to consider when analyzing the potential effects of DEQ's proposed participation in the mercury trading program.

Local communities near power plants already suffer from the adverse human health and environmental effects of mercury pollution. In addition to local air and water contamination from fly ash and other wastes, 15 percent of a power plant's mercury pollution is deposited within 30 miles of a facility, and up to 50 percent is deposited within 600 miles. *Id*. at 17. Under the mercury trading program, PGE Boardman will be eligible to sell mercury credits once its mandatory emissions reductions are achieved. Power plants in other states that purchase these credits will be allowed to emit toxic mercury in quantities equal to or higher than current rates, posing health and environmental threats to nearby areas.

2. Low Income and Minority Communities will Continue to Suffer Disproportionate Adverse Effects from Mercury Trading

People living in low income communities and people of color will more likely be impacted by the adverse effects of mercury trading than others. The average poverty rate within one mile of coal-fired power plants is 20 percent, nearly twice the national poverty rate of 11.3 percent.[10] The percentage of non-white populations within one mile of a coal-fired power plant is 30 percent above the national average. *Id*.

States with some of the highest mercury pollution rates in the nation also have the highest poverty rates. Human health and the environment in these states will be harmed by the mercury

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[9] Environmental Working Group, *Mercury Falling: An Analysis of Mercury Pollution from Coal-Burning Power Plants*, 14 (Nov. 1999), attached to Commenters' June 26, 2006 comments.

[10] Martha Keating, *Laid to Waste: The Dirty Secret of Combustion Waste from America's Power Plants*, 9, Denver, Colo: Citizens Coal Council et al., 2000, attached to these comments as Exhibit 2.

trading program. While several states have not yet decided whether to allow mercury trading, there are currently at least thirteen states required to reduce mercury emissions under the CAMR that have decided to participate in the mercury trading program.[11] Instead of installing mercury-reducing technology or burning cleaner coal, power plants in these states will be able to purchase credits from facilities like PGE Boardman. Under the CAMR, power plants that purchase mercury credits will even be allowed to increase mercury emissions.

Many of the states allowing mercury trading to offset mandatory reductions already contribute huge quantities of mercury to their local and regional air and watersheds. The poverty rates in these states are also well above the national average.[12] It is well known that poverty rates are higher among ethnic and racial minority groups: poverty among African Americans, Hispanics, and Native Americans is twice the rate of Caucasian Americans. *Id.* at 12. These facts paint a bleak picture: impoverished, racially diverse communities near large coal-fired power plants will inevitably suffer from the trade-offs of Oregon's proposed mercury rule.

For instance, Alabama, Kentucky, Texas and West Virginia are four of the top eight states emitting mercury from coal-fired power plants. Environmental Working Group at 12. They are also among the top eight states with the highest poverty rates (at least six of these states will allow mercury trading). DeNavas-Walt, U.S. Census Bureau at 25; STAPPA/ALAPCO I at 5-8. Under the CAMR, these four states are required to reduce their excessive mercury emissions from between 7 and 47 percent by 2017. STAPPA/ALAPCO II. However, these states will also participate in the mercury trading program. The ability to buy credits from facilities like PGE Boardman will allow "dirty" power plants to maintain or increase emissions of mercury. Facilitating the continued pollution of communities already suffering from the disadvantages of poverty, racial under-representation, and environmental degradation is not an acceptable trade-off for mandatory reductions of mercury in Oregon.

D. Arguments that Citizens Elsewhere Should "Pay" for Oregon's Mercury Reductions are Irrational and Unfounded

Proponents of the mercury trading program in Oregon take the stance that citizens in

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[11] *See* STAPPA/ALAPCO, *State Mercury Programs for Utilities*, August 2, 2006 (hereafter "STAPPA/ALAPCO I"); STAPPA/ALAPCO, *State-by-State Changes in Mercury Emissions from Coal-Fired Power Plants as a Result of EPA's New Mercury Rule*, July 18, 2005 (hereafter "STAPPA/ALAPCO II"), attached to these comments as Exhibit 3 and Exhibit 4, respectively.

[12] Carmen DeNavas-Walt, et al., U.S. Census Bureau, *Income, Poverty, and Health Insurance Coverage in the United States: 2004*, 5 (2005), attached to these comments as Exhibit 5.

other states will benefit from the reduced mercury emissions from PGE Boardman. Therefore, they argue, others should pay for this benefit by purchasing mercury credits under the trading program. This is simply non-sensical.

First, consider the converse of such an argument: should Oregon "pay" for mercury reductions elsewhere? At least twelve states have decided not to participate in the mercury trading program, and several others will place strict limits on trading. *See* STAPPA/ALAPCO I. These states include Pennsylvania, which emits the most mercury from coal-fired power plants of any state (50 times that of Oregon), and other high-emission states like Illinois, Indiana, and Michigan. *Id.*; Environmental Working Group at 12. Regardless of whether power plants in these states pass the cost of mercury reductions on to their consumers, significant mercury reductions required under the CAMR will not be "paid for" by mercury credits. Indeed, if PGE Boardman should be repaid for installing overdue pollution controls because of the global benefits of mercury reduction, perhaps Oregon industry should establish a fund to repay unrewarded reductions in other states!

Second, by purchasing mercury credits to offset PGE's investment in mercury emissions reduction, power plants in other states won't be paying a reward to PGE. Instead, they will be paying for the opportunity to pollute. The benefits of mercury reductions in Oregon will be devalued because the same amount of mercury will enter the local and global atmosphere from other states - mercury that otherwise must be controlled. Mercury is highly toxic, and the only "payment" by citizens in other states will be good health, clean air, and water bodies suitable for fishing, swimming, and drinking.

DEQ and the EQC should thus reject any proposal that would allow trading in mercury pollution.

IV. TECHNOLOGY CURRENTLY EXISTS TO ACHIEVE MORE STRINGENT MERCURY REDUCTIONS THAN PGE HAS CLAIMED

Commenters have already submitted extensive documentation to DEQ demonstrating that technology currently exists to control mercury emissions beyond the 90 percent reduction level. Any arguments to the contrary are unfounded and should be rejected.

Moreover, the citizen's proposal requires a .2lbs/TBtu limit on mercury pollution from coal fired power plants. This limit is based on the 1999 EPA MACT findings for then-existing technology. The top 12 percent of the 80 tested plants were achieving controls at this level in 1999.[13] The EPA should have applied this MACT standard to the CAMR rule under the CAA

[13] Final Working Group Report, Recommendations for the Utility Air Toxics MACT, pp. 7, 8, 10 (Oct. 2002), attached as Exhibit 6 to these comments.

§112. Instead EPA employed an equation that was heavily criticized by state agencies and environmental and health groups, and is currently one aspect of the lawsuits challenging EPA's promulgation of the Clean Air Mercury Rule.

The available technology has improved significantly over the last seven years. An emissions limit that was the correct MACT level in 1999 is surely achievable in 2006. DEQ and the EQC should adopt this feasible, tested, legally required standard.

V. DEQ AND THE EQC SHOULD ADOPT THE CITIZENS' PROPOSAL

For the foregoing reasons, Option 5 still falls far short of adequately regulating mercury pollution. Commenters urge DEQ to support the Citizens' Proposal before the EQC because it would eliminate mercury trading, establish more stringent emissions limitations, and require PGE to order equipment within a reasonable time.

First, under the Citizens' Proposal, Oregon would opt out of the ill-conceived federal cap and trade program. PGE Boardman would not be allowed to engage in interstate trading of mercury pollution, and all excess mercury credits would be permanently retired. For all of the reasons Commenters have set forth, trading in mercury pollution is environmentally, scientifically, ethically and economically unsound and DEQ/EQC should adopt a rule that allows for no trading and no set-asides for future polluting power plants.

Second, under the Citizens' Proposal, the mercury emissions limit for PGE Boardman would be set at 0.2 pounds/trillion Btu. As explained above, this level reflects the top 12 percent in the mercury MACT standards testing conducted by EPA in 1999. Levels attainable seven years ago are certainly attainable now.

Third, the Citizen's Proposal would establish stricter, but readily achievable, timelines for emissions reductions. By August 30, 2007, the facility would install continuous mercury monitoring equipment and record all data. By August 30, 2008, the facility would submit a mercury control plan to DEQ and order mercury control technology. By August 30, 2009, the .2lbs/trillion Btu emissions limitation would become effective. If the facility installs SO_2 and NOx emissions control technology in accordance with RH-BART concurrently with installation of Hg controls, the deadline for installation would extend to August 30, 2010.

The deadlines in the Citizens' Proposal adequately address PGE's stated concerns regarding the delays involved with receiving equipment from manufacturers. DEQ's proposal sets too lenient a standard in this respect. Under DEQ's rule, PGE need only show that it is not "practical" to install mercury control equipment by the deadline, or that there are "extenuating circumstances," but does not define these terms. In contrast, the Citizens' Proposal sets a specific deadline by which PGE would be required to order the equipment. If the pollution

control technology does not arrive at the facility by the deadline due to no fault of PGE Boardman, and if the equipment was ordered by the required date, an extension of up to one year could be granted by DEQ. This alternative addresses PGE's concerns while still providing a strict and enforceable standard.

Fourth, the Citizens' Proposal would require DEQ to address other significant sources of mercury. Despite DEQ's recent acknowledgments that the Ash Grove Cement plant is the largest single point source of mercury in Oregon and that the plant's mercury emissions are even greater than DEQ originally estimated, the proposed rule fails to address this plant. The Citizens' Proposal would require DEQ to make case-by-case determinations regarding the applicability of MACT for all major sources of mercury in Oregon, including the Ash Grove Cement facility, by August 30, 2008.

Fifth, the Citizens' Proposal would require mercury sources to develop mitigation projects. In the interim period prior to the installation of required mercury control equipment, facilities would implement mercury offset projects to mitigate for the impacts of their continuing mercury emissions.

Finally, the Citizens' Proposal would require local mercury deposition monitoring, for the reasons explained above. PGE would be required to install local monitoring equipment in at least three locations within a one hundred mile radius of the Boardman plant to determine the localized deposition of mercury by August 30, 2007.

VI. CONCLUSION

While DEQ's proposed Option 5 is a significant improvement over its initial proposal, it is still not adequate. The PGE Boardman facility has, for far too long, escaped meaningful pollution controls, at the expense of air quality in the Columbia Gorge and at least 10 Wilderness Areas, at the expense of Native American art, and at the expense of human health throughout the region. Commenters urge DEQ to use the mercury rule as an opportunity for DEQ to play a leadership role in requiring PGE's facility to install available, state-of-the art technological control. Requiring anything less from PGE is legally, technologically, and morally indefensible.

Respectfully submitted,

/s/ Melissa Powers
Melissa Powers
Allison LaPlante
Pacific Environmental Advocacy Center

On behalf of Commenters