

STATE OF COLORADO

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Colorado Department
of Public Health
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EPA Docket Center (EPA/DC)
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1200 Pennsylvania Ave., N.W.
Washington, DC 20460

**RE: State of Colorado Comments – Docket ID No. EPA-HQ-OAR-2009-0234 and
Docket ID No. EPA-HQ-OAR-2011-0044**

The State of Colorado (“the State”) submits the following comments on the U.S. Environmental Protection Agency (“EPA”) proposed Mercury and Air Toxics Rule (a.k.a. “MATR,” 76FR24976, May 3, 2011), which encompasses proposed changes to:

- National Emissions Standard for Hazardous Air Pollutants from Coal- and Oil-Fired Electric Utility Steam Generating Units, 40 C.F.R. Part 63, Subpart UUUUU (“MACT UUUUU”); and
- Standards of Performance for Fossil-Fuel-Fired Electric Utility, Industrial-Commercial-Institutional, and Small Industrial-Commercial-Institutional Steam Generating Units, 40 C.F.R. Part 60, Subparts D, Da, Db, and Dc (“NSPS D, Da, Db, Dc”).

The State’s comments focus on making use of temporal flexibility in obtaining MATR delegation. In addition, the state makes additional technical comments specific to opacity testing, monitoring plans, and stack test reporting. Please consider the following comments for review:

1. **MATR Delegation** – The State seeks to make use of temporal flexibility, authorized under Clean Air Act (CAA) Section 112(i)(3) in obtaining delegation of the MATR to preserve a hard negotiated comprehensive Colorado-specific program designed to yield greater emission reductions than the MATR alone. The State is concerned about existing sources subject to state-only rules for the reduction of mercury and other air toxic emissions. The State does not want the promulgation of the MATR to undermine the tremendous amount of work invested in creating a program to curb emissions within a reasonable timeframe, protecting both the economic viability of the State and the health of the public.

The State has taken three separate actions to reduce the emissions of criteria and hazardous air pollutants from coal-fired utility boilers:

- 1) the Colorado Air Quality Control Commission (AQCC) adopted state-only Standards of Performance for Coal-Fired Electric Steam Generating Units into Regulation No. 6, Part B, Section VIII on October 18, 2007; and
- 2) the Colorado Legislature passed House Bill 10-1365, the “Clean Air-Clean Jobs Act” (“CACJA”), on April 19, 2010; and
- 3) the AQCC adopted revisions to the Regional Haze State Implementation Plan (“RH SIP”) in Regulation No. 3, Part F on January 7, 2011.

Under these rules, the State has successfully negotiated both emissions standards and shut down provisions with Colorado utilities to reduce the emission of criteria and hazardous air pollutants on a timetable that protects the public interest. The CACJA in particular resulted in extensive negotiations to ensure the reliability of the energy grid while encouraging the use of renewable and cleaner energy sources, taking into consideration cost impact to customers, necessary transmission system changes, unit outage schedules and outage contingencies, and construction timeframes. Ultimately, the CACJA will promote job growth and reduce air emissions within the State.

EPA offers three options for delegation of MACT UUUUU to state or local agencies: straight delegation, partial approval, or replacement of the rule with a state rule (40 C.F.R. Part 63, Subpart E, §63.91). For state or local agencies which pursue straight or partial delegation, EPA has proposed in the preamble to the MATR that it supports the offering of an additional one (1) year to existing sources which are unable to comply with the requirements within the usual three (3) year timeframe, on a case-by-case basis where the need can be confirmed by the Administrator.

Several of the Colorado units covered by CACJA will achieve emission reductions years earlier than MATR. However, for other existing units in the State, four (4) years will not be sufficient to comply with the requirements of the MATR through the straight or partial delegation options. Through the CACJA, many of these sources have entered into phase-out schedules with completion in 2017, after the approximate compliance date in late 2014 or 2015 for the MATR. See Table 1, below, for more information on the scheduled compliance dates for coal-fired utility boilers in Colorado.

Table 1¹. Schedule of Emission Reductions from Coal-Fired Utility Boilers as required under AQCC Regulation No. 3, Part F.

Coal-Fired EGU	Compliance Date ²	Emission Reductions			
		NOx ² (tpy)	SO ₂ ² (tpy)	PM ² (tpy)	Hg (lb/yr)
PSCo Cherokee ³ Unit 1	Shutdown no later than 7/1/2012	1,556	2,221	37	6.7 ⁴

Coal-Fired EGU	Compliance Date ²	Emission Reductions			
		NOx ² (tpy)	SO ₂ ² (tpy)	PM ² (tpy)	Hg (lb/yr)
PSCo Cherokee ³ Unit 2	Shutdown no later than 12/31/2011	2,895	1,888	35	4.2 ⁴
PSCo Cameo Unit 1	Shutdown no later than 12/31/2011	516	849	225	15.8 ⁵
PSCo Cameo Unit 2		624	1,749		
Black Hills Clark ³ Units 1 & 2	Shutdown no later than 12/31/2013	861	1,457	72	
PSCo Arapahoe ³ Unit 3	Shutdown no later than 12/31/2013	1,770	925	56	15.7 ⁵
PSCo Arapahoe ³ Unit 4	Natural Gas operation by 12/31/2014	248	1,764	0	30.8 ⁵
PSCo Cherokee ³ Unit 3	Shutdown no later than 12/31/2016	1,866	743	65	4.4 ⁴
PSCo Cherokee ³ Unit 4	Natural Gas operation by 12/31/2017	2,211	2,127	0	30.4 ⁵
PSCo Valmont ³ Unit 5	Shutdown no later than 12/31/2017	2,314	758	42	8.7 ⁴
<ol style="list-style-type: none"> 1. This table only includes those sources in Colorado which will cease to be subject to MACT UUUUU by 2017. There are an additional 17 coal-fired EGUs that may be subject to MACT UUUUU which also achieved substantial emission reductions through the CACJA and the RH SIP. 2. Compliance dates and emission reductions for NOx, SO₂, and PM are outlined in Colorado's RH SIP submittal for revisions adopted by the AQCC on January, 7, 2011. 3. CACJA source. 4. Mercury emission reductions are based on actual emissions from 2010 as reported to the State. These values are based on data from stack tests and/or continuous emission monitors. 5. Mercury emission reductions are based on actual heat input for the data year 2010. Except for PSCo Cherokee Unit 4, the emissions were calculated with an assumed emission factor of 0.0174 lb Hg/GWhr, which is the state-only emission standard beginning in 2014. PSCo reported an Hg emission factor of 0.006 lb Hg/GWhr for Cherokee Unit 4. 					

However, for states seeking to replace MACT UUUUU with a state rule, EPA offers no specific recommendation in the preamble to the MATR, and instead requests comments on the integration of existing state rules with MACT UUUUU under the delegation provisions in CAA Section 112(l). The State requests that in the review of the delegation plan under CAA 112(l), EPA remain open to a plan calling for the continued operation of equipment which will not individually be in compliance with the emissions standards of

MACT UUUUU after 2015, but that will result emissions reductions that are equivalent to or exceed reductions required on a unit-by-unit basis under CAA Section 112(d).

As mentioned above, through the CACJA, there are units in the State which are scheduled to remain in operation after the effective date of the MATR. During that operation, those units will be subject to the mercury standards (80% inlet mercury reduction) for coal-fired steam generating units in Regulation No. 6, Part B by no later than January 1, 2014. While these emission standards are not as stringent as in those proposed in the MATR, the combination of these reductions with the reductions associated with CACJA's existing coal-fired unit phase out, the overall reduction in mercury, other air toxic and criteria pollutant emissions will by far exceed the emission reductions projected in the MATR. Overall, the State believes that the ultimate benefit to air quality of the State's rules will exceed that of the MATR, and will result in a State rule that is more stringent than MACT UUUUU.

Without some measure of temporal flexibility in compliance schedules, the carefully-devised structure of the comprehensive CACJA is placed in jeopardy, and the value of such comprehensive approaches for overall, cost-effective compliance with the new MATR requirements on both the State and national levels could be lost. Therefore the State requests EPA provide an option in obtaining MATR delegation that allows temporal flexibility regarding compliance schedules, as authorized under CAA Section 112(i)(3), to preserve Colorado's comprehensive program designed to yield greater emissions reductions than the MATR alone.

The State requests this temporal flexibility associated with MACT UUUUU delegation because it is interested in permanently exempting sources that would otherwise be subject to MACT UUUUU from having to comply with the MACT when they have committed to shutting down or are undergoing a fuel conversion proximate to MACT UUUUU compliance dates. Without this ability, sources may have to expend substantial resources to comply with the rule for a short time. Sources undergoing a fuel conversion may trigger MACT UUUUU requirements which would not otherwise apply after the fuel conversion, and thus have to maintain records, report necessary information, and possibly comply with other requirements associated with a fuel the source no longer burns based on EPA's "Once In Always In" MACT policy. With this in mind, the State suggests that EPA use the following criteria in developing the MACT UUUUU delegation option affording temporal flexibility. EPA could delegate authority to implement MACT UUUUU to the State with the provision that the State has the authority to exempt specific affected sources from the MACT UUUUU requirements, if the State can demonstrate to EPA's satisfaction that:

- The source or sources in question are subject to a federally enforceable permit condition or state regulatory requirement¹ to shut down or convert from coal

¹ While the EPA may prefer to rely upon incorporation of such requirement into a state implementation plan (SIP), the time necessary to submit the SIP to EPA alone may exceed three years, and does not account for the additional time necessary for EPA to act on that SIP submittal. Reliance upon an EPA approved SIP provision may not be

and/or oil to natural gas within a reasonable time frame compared to MACT UUUU compliance dates; and

- The source's emissions reduction or benefit to air quality is equivalent to or greater than the reductions required by MACT UUUUU.

2. **Opacity Testing Extension** – The State suggests EPA consider removing the requirement to complete subsequent Method 9 opacity performance tests after the initial performance test is completed, if the source is able to show in the initial reading that the opacity complies with the standard. It is the experience of the State that subsequent opacity readings for sources which have not exceeded the standard are onerous and may actually discourage good air pollution control practices.

Alternately, the State suggests that EPA consider expanding the extension associated with the MATR proposed changes to 40 C.F.R. Part 60, Subpart Dc, §60.47c(a)(1)(i). EPA has proposed a change in the MATR to allow sources to extend the time frame to complete a Method 9 performance test from a minimum of every 12 months for sources where the initial performance test showed that there were no visible emissions. In the MATR, EPA proposes to allow those sources to either repeat the performance test every 12 months or within 45 days of using a fuel with an opacity standard. Without the latter option, sources which primarily combust natural gas are often required to undergo a special startup using diesel fuel solely to satisfy the current compliance requirement to complete a Method 9 performance test every 12 months. As proposed, those sources will now only be required to complete a Method 9 performance test within 45 days of using diesel fuel, which will be dependent on the sources' operational need and not a compliance requirement. The State is in agreement with EPA's proposed revision to 40 C.F.R. Part 60, Subpart Dc, §60.47c(a)(1)(i).

However, this proposed extension is only available to facilities that have no visible emissions observed during the initial 60 minute Method 9 performance test. Pursuant to 40 C.F.R. Part 60, Subpart Dc §60.47c(a)(1)(ii-iv), sources which have *any* 6-minute opacity average greater than 0% must conduct another Method 9 performance test for compliance purposes in the near term (every 6 months, 3 months, or more frequently). It is the State's experience that all boilers running on diesel experience some degree of opacity during operation, which typically subsides quickly. At least one 6-minute opacity average is likely to exceed 0%. For many of the State's sources, the primary fuel used is natural gas, and diesel fuel is used only as a backup. Because these sources are very likely to have at least one 6-minute opacity average greater than 0% while using diesel fuel, they are required to repeat the Method 9 performance test even if they have ceased using diesel fuel in the interim. Repeating this performance test requires the source to shut down the boiler and restart using diesel fuel, only to shut down once again to restart using natural gas. It is the State's experience that, left to the operational needs of the

temporally feasible considering that MACT requirements for new units typically apply 30 days after promulgation of a MACT rule, and MACT requirements for existing sources subject to new MACT requirements have up to three years. Thus, the State suggests reliance upon federally enforceable permit conditions or state regulatory requirements.

source, a boiler may only utilize diesel fuel once every few years as opposed to the compliance requirement to use diesel fuel every few months.

It appears that the 45-day allowance, while intending to limit unnecessary opacity monitoring for sources with no visible emissions, was not extended to sources which may have some visible emissions during operation. Therefore, such sources are required to regularly shutdown their equipment and restart on diesel just to complete the necessary opacity readings. The State suggests that either EPA extend the 45-day allowance to §60.47c(a)(1)(ii-iv), or that a permitting agency may authorize an alternative opacity monitoring schedule by means of the site-specific monitoring plan as discussed in 40 C.F.R. Part 60, Subpart Dc, §60.47c(h).

3. **Site-specific Monitoring Plan** – The State requests that EPA provide further guidance on the “written site-specific monitoring plan approved by the permitting authority,” as discussed in the MATR under 40 C.F.R. Part 60, Subpart Dc, §60.47c(h). Specifically, in the scenario discussed in comment 2 above, the State requests EPA allow permitting authorities to authorize less stringent opacity or other monitoring requirements than identified in the rule. For example, the State proposes that a permitting agency could require sources to conduct opacity testing only upon using a fuel for operational reasons rather than for compliance demonstrations. Further, a permitting agency could specify that each periodically required Method 9 does not have to adhere to the notification and reporting requirements for 40 C.F.R. Part 60, associated with performance tests found in 40 C.F.R. Part 60, Subpart A, §§60.8 and 60.11, but rather the source would be required to submit any deviations with the excess emissions report required under 40 C.F.R. Part 60, §60.48c(c).
4. **Written Stack Test Reporting** – The State intends to continue to request sources to submit hard copies of stack test reports to the State, in addition to EPA’s collection of stack testing data via the Electronic Reporting Tool (“ERT”), and therefore supports EPA’s preservation of related requirements in 40 C.F.R. Part 60, §§60.8 and 60.11, and Part 63, §§63.7 and 63.10. The State appreciates EPA’s need to readily access stack test data and applauds efforts to improve emission factors. However, the State believes that the stack test data reported must be considered along with additional, specific information for each source’s operations. This evaluation cannot be easily conducted with the limited data reported in the ERT. The State believes that the stack test data submitted in the ERT, taken at face value, may be misleading unless the context in which the testing was completed is understood. Until the number and degree of source configuration and operation variables can be adequately accounted for and reported in one reporting tool, allowing the associated test data to be wholly considered, the State relies heavily upon the submission of written stack test reports. Thus, the State supports EPA’s preservation of the submittal of written performance testing reports to state agencies, and requests that EPA consider a way for states to report to EPA via the ERT that the test is not approvable or was not representative.

Thank you again for the opportunity to submit comments on the MATR.

Colorado Department of Public Health and Environment
Comments on Docket ID Nos. EPA-HQ-OAR-2009-0234 and EPA-HQ-OAR-2011-0044
August 4, 2011

Sincerely,

A handwritten signature in black ink, appearing to read 'Martha E. Rudolph', written in a cursive style.

Martha E. Rudolph
Director, Environmental Programs
Colorado Department of Public Health and Environment

cc: Christopher E. Urbina, CDPHE
Garry Kaufman, CDPHE