Secretariat of the Commission for Environmental Cooperation

Article 15(1) Notification to Council that Development of a Factual Record is Warranted

Submitters: Friends of the Earth Canada

Friends of the Earth-US

Earthroots

Centre for Environmentally Sustainable Development

Great Lakes United Pollution Probe Waterkeeper Alliance

waterkeeper Amanee

Sierra Club (US and Canada)

Represented by: Waterkeeper Alliance and Sierra Legal Defence Fund

Party: United States

Date received: 20 September 2004

Date of this

determination: 5 December 2005

Submission I.D.: SEM-04-005 (Coal-fired Power Plants)

I. EXECUTIVE SUMMARY

Article 14 of the *North American Agreement on Environmental Cooperation* (NAAEC or the "Agreement") creates a mechanism for citizens to file submissions in which they assert that a Party to the NAAEC is failing to effectively enforce its environmental law. The Secretariat of the Commission for Environmental Cooperation (the "Secretariat") initially considers these submissions based on criteria contained in Article 14(1) of the NAAEC. When the Secretariat determines that a submission meets these criteria, it then determines, pursuant to the provisions of Article 14(2), whether the submission merits requesting a response from the Party named in the submission. Should it so determine, the Secretariat then reviews the Party's response and, if it considers that the matter warrants the development a factual record, the Secretariat informs Council and provides its reasons, as required by Article 15(1). The Secretariat dismisses the submission if it believes that development of a factual record is not warranted.

On 20 September 2004, the Submitters listed above filed with the Secretariat a submission on enforcement matters pursuant to Article 14 of the NAAEC. The Submitters assert that the United States is failing to effectively enforce sections 303 and 402 of the federal Clean Water Act (CWA) in connection with mercury emissions from coal-fired power plants to air and water. The Submitters allege that these emissions are degrading thousands of rivers, lakes,

and other water bodies across the United States. In a determination of 16 December 2004, the Secretariat found that the submission as a whole did not provide sufficient information to allow for proper review, and therefore failed to satisfy Article 14(1)(c). The Secretariat gave the Submitters 30 days to re-file the submission, and on 18 January 2005, they did so, with an additional appendix containing an explanation of the new information provided and twelve sub-appendices. In a determination of 24 February 2005, the Secretariat found that the revised submission satisfied Article 14(1) and that it warranted requesting a response from the United States pursuant to Article 14(2).

The United States filed a response on 25 April 2005, and a supplemental response on 29 September 2005, contending, respectively, that the relevant facts and law do not support a conclusion that it is failing to effectively enforce its environmental legislation and that pending domestic judicial proceedings preclude review of this matter.

After consideration of the submission in light of the response of the United States, the Secretariat concludes that the response leaves open central questions raised in the submission concerning EPA's fulfillment of its obligations under §§ 303 and 402 of the CWA that would benefit from the development of a factual record. In particular, and as indicated below, a factual record would shed light on the Submitters' assertions that: 1) EPA is failing to effectively enforce the CWA by issuing or renewing NPDES permits (or allowing states to issue or renew such permits) that allow for point source discharges of mercury into impaired waterways, and 2) neglecting to account for airborne mercury when implementing CWA provisions requiring the promulgation of TMDLs for mercury-impaired waterways. The severity, persistence and widespread nature of mercury pollution of waterways in the United States, which the submission and response both recognize, underscores the Secretariat's recommendation of a factual record.

II. SUMMARY OF THE SUBMISSION

This section summarizes the original submission as well as the additional information provided on 18 January 2005.

A. The Original Submission

The Submitters assert that throughout the United States, the number of fish consumption advisories (FCAs)² for mercury has risen from 899 to 2347 since 1993, and that, according to the US Environmental Protection Agency (EPA), 35 percent of the total lake acres and 24 percent of the river miles in the United States are now under FCAs.³ They contend that EPA "is allowing both nonpoint and point source discharges of mercury from coal-fired power

¹ Article 14(1)(c), Guideline 5.2, 5.3.

² The Submitters describe FCAs as "warning the general public and sensitive subpopulations, such as pregnant women, of the dangers of consuming this otherwise healthy food." Submission at 1.

³ Submission at 1.

plants that are contributing to a steady degradation of the nation's waterways as evidenced by increasing mercury fish advisories and the effective withdrawal of existing uses (fishable) of many of these water bodies." According to the Submitters, these discharges include both direct discharges to water and air emissions of mercury that fall back to the earth in the form of precipitation and dry particles.

The Submitters assert that mercury discharges from coal-fired power plants to water and air contravene provisions of the CWA enacted to prevent degradation of national waters, including those provisions relating to the National Pollutant Discharge Elimination System (NPDES) program under section 402 and the Water Quality Standards (WQS) under section 303. According to the submission, the CWA, through the NPDES provisions, "requires the [EPA] Administrator to establish and enforce technology and water quality-based limitations for point source discharges into the country's navigable waters." The submission also describes the system for delegating permitting of point sources to states under EPA's oversight authority.

The Submitters then present an explanation of state WQS. They assert that states designate uses, including both existing and desired uses, for all water bodies within their borders and that they are required to protect and maintain the level of water quality necessary to protect "existing uses." Submitters claim that if a waterway was being used as a source for fish consumption on or after 28 November 1975, the CWA requires controls on both point and nonpoint source pollutants in order to allow the existing use to continue.8 The submission describes the requirement to develop numeric or narrative water quality criteria to achieve and protect existing and designated uses of waterways under a three-tiered system for classifying water bodies, and also outlines the antidegradation provision, which the Submitters describe as "[t]he most critical component of the state WQS scheme." According to the Submitters, "[t]he purpose of the antidegradation policy is to ensure that existing water uses and the level of water quality to protect those uses are maintained and protected." They assert that the antidegradation provisions "require that both point and nonpoint sources of pollution be maintained to protect designated and existing uses of all US waterways."11 The Submitters contend that EPA retains oversight authority for all aspects of state WQS, including authority to approve state WQS or to promulgate its own standards if a state does not make changes EPA says are needed to meet requirements of the CWA.¹²

The submission also outlines the CWA's Total Maximum Daily Load (TMDL) scheme, which the Submitters describe as essential for implementing the antidegradation provisions.

⁴ *Id*. at 12.

⁵ *Id*. at 6.

⁶ *Id*.

⁷ *Id.* at 6-7.

⁸ *Id.* at 7.

⁹ *Id*.

¹⁰ *Id*.

¹¹ *Id.* at 7-8.

¹² *Id.* at 8.

Coal-fired Power Plants – Notification to Council

A14/SEM/04-005/48/ADV **DISTRIBUTION:** General ORIGINAL: English

The Submitters assert that "where waterways have become contaminated beyond levels set in the WOS, the state must establish TMDLs to bring a water body back into compliance...by establishing the maximum amount of pollution that can be added to [the] water body."13 According to the Submitters, "[t]he CWA requires that TMDLs incorporate (1) a waste load allocation for point sources (those with NPDES permits), (2) a load allocation for natural background pollution, and (3) a load allocation for nonpoint sources."¹⁴ The Submitters assert that "TMDLs apply to water bodies that exceed their WQS even where there is no point source of pollution, that is, where the only sources of pollution are nonpoint, for example from atmospheric deposition."15 They contend that EPA retains considerable oversight of a state's TMDL program, including authority to approve state TMDLs (or state "continuing planning processes" containing TMDLs) or to reject them and promulgate acceptable ones. 16

Focusing on the years 1993 to 2003, the Submitters assert that EPA failed on an ongoing basis to effectively enforce the NPDES provisions under section 402 of the CWA and the WQS and TMDL provisions under section 303 of the CWA. This failure, they allege, occurred in three different ways. First, EPA issues NPDES permits—or delegates to states the authority to issue state permits meeting federal requirements—that allow for ongoing point source discharges of mercury into waterways, without consideration for the cumulative impact of point and nonpoint discharges of mercury on degraded waters.¹⁷ Second, EPA approves inadequate state antidegradation policies and implementation procedures, thus failing to safeguard water bodies. Third, EPA fails to use its authority to require states to adopt TMDLs for mercury where WQS are not being met, and to issue its own TMDLs where state action is inadequate.

B. The Additional Information in Appendix 12

On 18 January 2005, Submitters provided additional information in the form of Appendix 12 to the original submission. This additional information was provided in response to the Secretariat's determination that the original submission provided sufficient information with respect to some, but not all, of its assertions. Specifically, the Secretariat concluded that the information provided in the original submission and its attachments was sufficient to allow consideration of the Submitters' claims regarding the issuance of NPDES or state permits, but only with respect to all NPDES or state-permitted electric utilities in Pennsylvania, Kentucky, Illinois, Ohio (identifiable through EPA's Toxics Release Inventory (TRI) data referenced in the submission), 18 and the three identified utilities in Michigan. However, the Secretariat found that the original submission did not include sufficient information to allow

¹³ *Id.* at 9.

¹⁴ *Id*.

¹⁷ Id. at 10 (stating that "a factual record would establish whether the [EPA] is allowing direct discharges of mercury to waterways that are currently under FCAs for mercury and thus no longer suitable for fishing").

¹⁸ See id. at notes 95-98.

consideration of the assertions regarding approval of state antidegradation policies and procedures and enforcement of TMDL requirements.¹⁹

Appendix 12 contains an initial section containing a response to the Secretariat's determination of 16 December 2004, plus twelve subsections containing additional supporting information. Submitters also request that the period covered by the submission be expanded to 1993 through 31 December 2004.

The Submitters state that "[t]he very nature of the allegations—that the US government is failing to enforce its environmental laws with respect to mercury emissions from coal-fired plants across all of the country's almost 1,100 utility units and impacting virtually every waterway in North America—makes it highly impracticable to cite and provide documentary evidence of every alleged violation of the CWA with respect to every facility." Nonetheless, the Submitters purport to provide "detailed information relating to the coal-fired plants in ten specific states, which [they] submit as exemplary of the widespread and systemic problem that is being asserted." They assert that these states—Alabama, Illinois, Indiana, Kentucky, Michigan, North Carolina, Ohio, Pennsylvania, Texas and West Virginia—"represent almost 60 percent of the mercury emissions from coal-fired power plants." The Submitters provide data indicating that coal-fired power plants in these states emitted 73,624 pounds of mercury and mercury compounds to air in 2001 and 72,145 pounds to air in 2002. They also provide data on the amount of mercury and mercury compounds those plants discharged to water in 2001 and 2002.

For each of the ten states, Appendix 12 provides analysis of private remedies available to address the matters raised in the submission; statistical data of direct discharges to water from coal-fired power plants; charts that correlate designated uses of state waterways with mercury fish consumption advisories (FCAs); a list of the largest mercury emitting power plants in the state; a complete list of mercury-based FCAs for the state; an updated list of state-wide FCAs; a copy of the state's water quality standards, including its antidegradation policy and, where available, a list of designated uses of each waterway in the state and tier protection designations; a detailed review of state TMDL actions, including CWA §303(d) mercury-impaired waterways and preparation of TMDLs for mercury impaired waters; and press reports critiquing EPA's actions in dealing with mercury emissions under the Clean Air Act (CAA).²⁵

¹⁹ Although the Submitters' assertions regarding NPDES and state discharge permits appeared to implicate the TMDL scheme to some extent, those assertions did not incorporate the full scope of the Submitters' TMDL assertions.

²⁰ *Id.*, Appendix 12 at 4.

²¹ *Id*.

²² *Id*.

²³ *Id.* at 5-6.

²⁴ *Id.* at 6-7.

²⁵ *Id.* at 7-8.

In addition, the Submitters append two CAA Title V permits for coal-fired power plants, which they claim are representative of the systemic failure to regulate emissions from coal-fired power plants in that the permits neither place restrictions on mercury emissions nor mention water quality standards or antidegradation. Submitters claim that the failure of the permits to control mercury emissions is consistent with statements on EPA's web site that "EPA is committed to regulating and reducing power plant mercury plant emissions for the first time ever" and that "[o]n December 15, 2003, EPA signed its first-ever proposal to substantially curb mercury emissions from coal-fired power plants." According to the Submitters, the conduct of EPA towards the coal-fired power industry, as demonstrated by its handling of an ongoing mercury rule-making process under the CAA, while not a primary piece of evidence of non-enforcement of the CWA, can properly be considered to give factual context to their allegation that EPA is failing to effectively enforce the CWA.

The Submitters also provide information regarding FCAs for the ten states in question. They submit that, as of July 2004, four of the ten states (Ohio, Pennsylvania, Illinois and Kentucky) had state-wide mercury FCAs for both lakes and rivers, two (Indiana and Michigan) had state-wide mercury FCAs for either lakes or rivers, and four (Texas, Alabama, North Carolina and West Virginia) had no state-wide mercury FCAs but nonetheless had at least one, and as many as 17, mercury FCAs in the state.²⁸ The Submitters state that West Virginia has declared a state-wide mercury advisory on its waters since the filing of their original submission.²⁹ They also assert that Texas, Alabama, and North Carolina have state-wide mercury FCAs for coastal areas.³⁰ Appendix 12B provides detailed information regarding the specific water bodies under mercury FCAs in each state.

With regard to their NPDES-related assertions, the Submitters provide additional information that identifies all of the power plants that discharge mercury to water in the ten states on which Appendix 12 focuses.³¹ They note that in states without state-wide mercury FCAs, they were not able in each case to determine the name of the receiving water body to which NPDES-permitted facilities discharge mercury.³²

The Submitters supplement their allegations regarding the CWA's antidegradation requirements by providing examples of instances where water quality standards have been exceeded across all tiers of water within each of the ten states.³³ According to the Submitters, "every time a 'fishable' waterway becomes subject to a mercury FCA and is no longer fishable it is, by definition, in exceedance of water quality standards for the pollutant for which the FCA was issued."³⁴ In addition, they assert that "these ten states exceed their

²⁷ *Id.* at 10.

²⁶ *Id.* at 8.

 $^{^{28}}$ *Id.* at 9.

 $^{^{29}}$ *Id.* at 13.

³⁰ *Id.* at 9.

³¹ *Id.* at 13, Appendix 12D.

³² *Id.*, Appendix 12 at 13.

³³ *Id.* at 14; Appendix 12B; Appendix 12E.

³⁴ *Id.*, Appendix 12 at 14.

WQS's narrative criteria regarding the addition of toxic mercury from power plants into local waterways, resulting in a significant human health threat and a continuing diminution in water quality."³⁵ The Submitters contend that EPA routinely approves state WQS, including antidegradation provisions and implementation procedures that illegally fail to control nonpoint source mercury pollution from power plants. With respect to Tier II waterways, the Submitters state that, having found no information to the contrary, they conclude that EPA has taken no action to implement best management practices (BMPs) for mercury from utility units in order to protect Tier II water bodies. The submitters are plants and the submitters are plants and the submitters are provided that EPA has taken no action to implement best management practices (BMPs) for mercury from utility units in order to protect Tier II water bodies.

The Submitters supplement their TMDL-related assertions by cross-referencing the listing of impaired waters with the water bodies subject to a mercury FCA for each of the ten states in question, reviewing the EPA approval and determining what, if any, TMDLs are planned or have been prepared for mercury-impaired water bodies.³⁸ They assert that state lists of impaired water bodies prepared under CWA section 303(d), while often incomplete, to a large extent list water bodies with mercury FCAs, but "there is little if any follow-through by states or EPA in terms of moving even to the stage of listing such waters for TMDL preparation."³⁹ The Submitters "could not find an example—among the hundreds of mercury-impaired waters—of a control program for nonpoint mercury sources and therefore no evidence of any action against coal-fired power plants."⁴⁰

The Submitters include a detailed description of the progress toward TMDLs addressing mercury-impaired waters in the ten states. They contend that of these states, only North Carolina has a TMDL for a mercury-impaired water body that acknowledges contributions from coal-fired power plant air emissions, but they note further that this TMDL does not include a specific waste load allocation for power plants.⁴¹ According to the Submitters:

[w]hile...the reasons for [the failure to adopt TMDLs addressing mercury emissions from power plants] are diverse—in the case of Pennsylvania no explanation is given and in the case of Michigan the EPA has offered to assist in preparing plans in 2011—the systemic nature of the failure of effective enforcement is shown by the almost total absence of action on TMDLs and, more importantly, the concomitant failure by the EPA to take action.⁴²

The Submitters state that in Georgia, pursuant to a settlement agreement, a state TMDL did address mercury deposition. The Georgia TMDL indicates that 99 percent of mercury deposition was from airborne sources, but, according to the Submitters, it does not outline any nonpoint source control program against coal-fired power plants.⁴³ The Submitters contend that the Georgia TMDL is illustrative of the predicament faced by state-prepared TMDLs

³⁵ *Id.* at 15.

³⁶ *Id*.

 $^{^{37}}$ *Id.* at 16.

³⁸ *Id.* at 17.

³⁹ *Id*.

⁴⁰ *Id.* at 18.

⁴¹ *Id.* at 18, 27-31.

⁴² *Id.* at 39.

⁴³ *Id.* at 18.

when attempting to address out-of-state nonpoint source polluters such as power plants; they note that this predicament "presents a plausible explanation for the EPA's failure to effectively enforce the CWA provisions against states."⁴⁴ According to the Submitters, the absence of a national program highlights the failure of EPA to act in regard to nonpoint sources of mercury from coal-fired power plants.

With regard to available private remedies, the Submitters assert that one option would be to bring several hundred lawsuits against CAA Title V permitting authorities to challenge permits that fail to address antidegradation of waterways.⁴⁵ Another option would be to sue individual state governments alleging failure to implement adequate water quality standards and antidegradation provisions.⁴⁶ They contend bringing multiple lawsuits would require considerable expense of time and money.⁴⁷ The Submitters provide information regarding lawsuits private citizens have brought, with mixed results, in order to attempt to force states and EPA to "effectively control nonpoint sources of pollution and atmospheric deposition of toxics and to better implement current requirements under WQS and TMDL processes."48 The Submitters contend that the TMDL litigation they reference "tends to strengthen [the] assertion that the EPA fails to effectively enforce the relevant CWA provisions."49 They conclude that "any attempts to address mercury emissions through TMDL litigation would itself be a great burden without necessarily dealing with the full extent of the problem."50 The Submitters also claim that pursuing litigation regarding individual NPDES permits would also be extremely cumbersome. In sum, noting that the failure to effectively enforce asserted in the submission is demonstrated by the totality of the evidence regarding alleged failures based on the NPDES, antidegradation, WQS or TMDL processes, the Submitters maintain that it would be "highly burdensome to attempt to remedy the issue through available private means." 51

III. SUMMARY OF THE UNITED STATES' RESPONSE

The United States interprets the submission as an allegation that it "is failing to effectively enforce Title V of the US Clean Air Act...and sections 303 and 402 of the US Clean Water Act...in connection with mercury emissions to air and direct discharges to water from coal-fired power plants." The United States acknowledges that mercury is a highly persistent and toxic pollutant that accumulates in the food chain and that humans are exposed to methylmercury primarily by eating contaminated fish; it asserts, however, that it has taken significant steps to reduce these health risks and is fulfilling its enforcement duties under

⁴⁴ *Id*.

⁴⁵ *Id.* at 11.

⁴⁶ *Id*.

⁴⁷ *Id*.

⁴⁸ *Id*.

⁴⁹ *Id*.

⁵⁰ *Id*. 12.

⁵¹ *Id*.

⁵² Response at 1.

⁵³ *Id.* at 3.

Coal-fired Power Plants – Notification to Council

A14/SEM/04-005/48/ADV DISTRIBUTION: General ORIGINAL: English

domestic law. The United States also maintains that the increase in fish consumption advisories documented by the Submitters is due in large part to steps EPA is taking to address mercury contamination in water and, standing alone, neither indicates that the level of mercury contamination is increasing nor demonstrates any failure to effectively enforce environmental laws.⁵⁴

With regard to the CAA and the Submitters' allegation that the Title V permits fail to place restrictions on mercury emissions from coal-fired power plants, thus contravening the CWA, EPA asserts that "nothing in the CAA or its implementing regulations requires CAA Title V permits to incorporate requirements under the CWA, such as water quality standards or antidegradation requirements." Instead, the United States contends that the EPA has "reasonably exercised its discretion in implementing the CAA" and that even though coal-fired power plants were the largest unregulated anthropogenic source of mercury under the CAA, its efforts to control mercury emissions from all anthropogenic sources have been "substantial." In support of this contention, the United States posits that "[o]verall US mercury air emissions were reduced by 45 percent between 1990 and 1999" and that the recently issued Clean Air Emergency Rule (CAIR) and Clean Air Mercury Rule (CAMR), when fully implemented, "will reduce domestic power plant mercury emission by nearly 70 percent from 1999 levels." According to the United States, the foregoing measures will address the Submitters' core concerns. **

Turning to the CWA, the United States' general assertion is that the "Submitters seek development of a factual record to demonstrate that the US is failing to implement the CWA on the basis that the US has failed to take actions that are neither required nor authorized by that act." The response then proceeds to address each of the Submitters' three CWA-related assertions.

The first of these assertions is that EPA is exercising its responsibilities under the TMDL program ineffectively by failing to require coal-fired power plants to reduce airborne mercury emissions. In response, EPA describes the TMDL⁶⁰ program and its function within CWA §303(d). According to EPA, "303(d) requires each State to identify and prioritize waters where technology-based controls are inadequate to attain water quality standards....The State's identification of such waters...constitutes the 303(d) list."⁶¹ The United States asserts that EPA regulations require states to establish and submit their 303(d) lists to EPA every two

⁵⁴ *Id.* at 29-30.

⁵⁵ *Id.* at 21.

⁵⁶ *Id.* at 23.

⁵⁷ *Id.* at 22; *see also id.* at 17-20. The CAIR and CAMR were issued by the EPA on 10 March 2005 and 15 March 2005, respectively.

⁵⁸ *Id.* at 20.

⁵⁹ *Id.* at 24.

⁶⁰ EPA's 1985 implementing regulations define TMDL as "the sum of the 'wasteload allocations' assigned to point sources, the 'load allocations' assigned to nonpoint sources..., and a margin of safety;" that is, "a TMDL identifies the maximum amount of a pollutant that can be present in a waterbody and still attain State water quality standards (the 'loading capacity')." Response at 31.

Coal-fired Power Plants – Notification to Council

A14/SEM/04-005/48/ADV DISTRIBUTION: General ORIGINAL: English

years, and if EPA disapproves a state's list, EPA must itself establish a 303(d) list for the state.⁶² Pursuant to CWA 303(d)(1)(C), states must establish a TMDL for each water identified on their respective 303(d) lists.⁶³ The United States asserts that the EPA is required to establish a TMDL on behalf of a state only where 1) it disapproves a state TMDL that was actually submitted to EPA or 2) failure of a state to submit a TMDL amounts to a "constructive submission" that compels EPA to take action.⁶⁴ Further, where a state has not submitted a TMDL, the response states that EPA has discretionary authority to establish a TMDL even where the failure of the state to submit a TMDL is not a "constructive submission" that compels EPA to act.⁶⁵

According to EPA, "TMDLs established under section 303(d)(1) of the Act function primarily as planning tools and are not self executing....A TMDL does not, by itself, prohibit any conduct or require any actions. Instead, each TMDL represents a goal that may be implemented by adjusting pollutant discharge requirements in individual NPDES permits or by a State establishing nonpoint source controls." Thus, the United States maintains that the Submitters' assertions regarding TMDLs are fundamentally misplaced in that the TDML program does not provide EPA with either a regulatory mechanism to control nonpoint source pollution or the authority to regulate such pollution. Rather, pollutant reductions are required under the CWA for coal-fired power plants that contribute nonpoint source pollutants to waterways "only to the extent that a State opts to make such reductions a regulatory requirement pursuant to State authority." Despite this assertion, the response details EPA's current implementation of the TDML program, which EPA maintains is being conducted in accordance with its statutory mandate.

The response next addresses the Submitters' assertion that EPA is approving inadequate state antidegradation policies and implementation procedures. As with the TMDL program, the United States contends that the Submitters misunderstand the operation and scope of the CWA's antidegradation provisions. The United States provides an overview of the antidegradation scheme, explaining that it is one of three elements of a water quality standard (WQS).⁶⁹ Under the CWA, the primary responsibility for establishing WQS—and, accordingly, antidegradation policies—is vested in the states, with the caveat that the

⁶² *Id*.

⁶³ *Id*.

⁶⁴ *Id.* at 37.

⁶⁵ *Id.* at 38.

⁶⁶ *Id.* at 31.

⁶⁷ *Id.* at 24; *see also id.*at 32 ("If a source of pollutants is a nonpoint source..., that source is not subject to regulation under the NPDES program, [and] the existence of a TMDL does not provide any additional regulatory authorities").

⁶⁸ *Id.*at 33. This is the case, according to the EPA, because while the CWA establishes the NPDES permitting program to govern wasteload allocations for point sources, it has no corresponding program for load allocations from nonponit sources.

⁶⁹ *Id.*at 44. WQSs consist of three elements: 1) a designated "use" for the water (e.g., fishing, recreation, public water supply, etc.); 2) "criteria" that specify the amounts of various pollutants that may be present in the water without impairing the designated uses; and 3) an antidegradation policy to protect existing uses and high-quality waters. *Id*.

antidegradation policies adopted by states must be consistent with and at least as stringent as EPA's federal antidegradation policy. Along with adopting antidegradation policies, states must identify the methods for implementing those policies. The United States explains that, like TMDLs, WQS are not directly enforceable; that is, while the CWA requires point source discharge permits (e.g., NPDES permits) to include effluent limitations necessary to meet WQS, "it is the resulting permit effluent limitations, not the standards themselves, that are enforceable under the CWA." Moreover, the United States asserts that EPA does not have the power to compel states to regulate or otherwise control nonpoint sources of pollution through antidegradation requirements:

[T]he extent to which a state's antidegradation policy applies to nonpoint sources depends upon the extent to which state law regulates nonpoint sources and the extent to which the state voluntarily applies its antidegradation policy to unregulated nonpoint sources. EPA's regulation does not require that states establish nonpoint source controls as part of their antidegradation policies. Therefore, there is no basis for [the] Submitters' claim that EPA has approved inadequate state antidegradation policies and implementation procedures...because the policies and procedures do not control nonpoint source pollution, including emissions from coal-fired power plants.⁷³

The response next turns to the Submitters' third assertion: that EPA is issuing NPDES permits that allow discharges of mercury into impaired waters or allowing states to issue such permits. The United States describes an NPDES permit as the "principal means" for implementing WQS because the permit "transforms the general requirements and standards embodied in the WOS into specific limits applicable to an individual discharger."⁷⁴ It explains that NPDES permits have two components: (1) technology-based controls that reflect pollution reduction that is achievable through particular equipment; and (2) where necessary, more stringent limitations representing the level of control necessary to ensure that the receiving waters achieve applicable WQS.75 The United States asserts that "[n]o person may discharge pollutants, including mercury, from a point source into the waters of the US unless the person has an NPDES or other CWA permit."76 However, the United States maintains that the Submitters misunderstand NPDES regulations, in that those regulations do not establish an "absolute prohibition" on new permits for point sources discharging to impaired waters; rather, permits may be granted to new dischargers "if the discharge would not cause or contribute to the exceedance of the water quality standards" and to existing dischargers so long as the "level of water quality to be achieved is derived from, and complies with all applicable water quality standards."⁷⁷ The response provides a number of examples of how an

⁷⁰ *Id.*at 45. The federal antidegradation policy is codified at 40 C.F.R. Part 131.12. EPA is responsible for reviewing state WQS to ensure that they comply with the federal standard.

⁷¹ *Id.* at 45 (noting that the methods are often referred to as "implementation procedures").

⁷² *Id.* at 47 (citing *American Wildlands v. Browner*, 94 F. Supp.2d 1150, 1161 (D. Colo. 2000)).

⁷³ *Id.* at 49; *see also id.* at 28 (stating that "[w]hile nonpoint sources make a significant contribution to water pollution, Congress has chosen in the CWA not to give EPA the power to regulate nonpoint sources" and that "[n]onpoint source contrls, if enforceable at all, are enforceable only under State law").

⁷⁴ *Id*. at 52.

⁷⁵ *Id*.at 52-53.

⁷⁶ *Id*.at 54.

⁷⁷ *Id*.at 56.

NPDES permit can be developed such that a particular discharge complies with the foregoing requirements. In sum, the United States contends that because "it is possible to permit [point source] . . . discharges under the NDPES program consistent with the [CWA]," the Submitters' assertion that any point source discharge into impaired waters is per se evidence of a failure to effectively enforce the CWA is without merit.

The response also describes EPA's efforts to improve monitoring and permitting of mercury discharges to water. The United States indicates that TRI data provided in the Submitters' supplemental information should be considered by NPDES permit writers and reviewers. It also indicated that an analytical procedure adopted in 1999 for greatly improving detection of dissolved mercury in water and fish samples was not used consistently, including in the ten states of particular concern to the Submitters, until a revised version of the procedure was adopted in 2002. The United States asserts that, in light of the new analytical method and other planned actions, the present situation with regard to mercury emissions from coal-fired power plants is legally complex, but is "dynamic and improving." The United States also indicates that it is committed to reviewing closely the renewal of the approximately 40 permits identified by the Submitters for coal-fired power plants that have reported significant discharges of mercury to water. 81

The response also describes United States actions in international fora to address mercury uses, releases and exposure. 82 These include bilateral actions with Canada, a North American Regional Action Plan for mercury developed through the CEC's cooperative work program, and global activities addressing mercury.

Finally, the United States raises several procedural concerns. First, the United States contends that Submitters' assertions are the subject of pending judicial and administrative proceedings relating to both the CAA and the CWA.⁸³ Therefore, the response posits that, pursuant to NAAEC Article 14(3)(a), the Secretariat should proceed no further with the submission.⁸⁴ The United States also asserts that there are ample private remedies available under domestic law to address the issues raised by the Submitters, but that the Submitters have failed to pursue those remedies.⁸⁵ In support of these assertions, the United States filed a supplemental response with the Secretariat on 29 September 2005. The supplemental response asserts that petitions for judicial review of the CAIR and CAMR, two power plant rules recently promulgated under the CAA, have been filed in United States courts, and that these proceedings also preclude the Secretariat from further consideration of the submission.⁸⁶ Last, the United States contends that "the Submitters' purported notice should not be considered

⁷⁸ See id.at 56-58.

⁷⁹ *Id*.at 24.

⁸⁰ *Id*.at 5-6.

⁸¹ *Id*.at 9, 56, 67.

⁸² *Id.* at 63-65.

⁸³ See id.at 69-73.

⁸⁴ *Id*.at 69.

⁸⁵ *Id*.at 73-75.

⁸⁶ Supplemental Response at 2.

adequate notice of the complicated set of allegations and voluminous supporting materials ultimately reflected in the submission."87

IV. ANALYSIS

After reviewing the submission in light of the response provided by the United States, the Secretariat considers that the submission warrants developing a factual record as recommended in this notification. The reasons for this recommendation are set forth below.

A. Procedural Considerations

The United States raises three threshold procedural matters. First, it contends that the Secretariat is precluded from further review because matters raised in the submission are the subject of pending judicial or administrative proceedings. Second, it contends that prudential concerns weigh against development of a factual record because private remedies in connection with matters raised in the submission are available and have yet to be pursued. Third, it contends that the Submitters did not provide adequate notice of their concerns to the United States before filing the submission.

1. Pending judicial and administrative proceedings

Article 14(3)(a) provides that the Party responding to a submission shall notify the Secretariat "whether the matter is the subject of a pending judicial or administrative proceeding, in which case the Secretariat shall proceed no further." Pursuant to this provision, the United States asserts that the Secretariat is barred from further consideration of the submission.⁸⁸ Alternatively, the United States asserts that even if Article 14(3)(a) does not apply, the Secretariat should decline to proceed further in order to avoid duplication of or interference with other proceedings.

A "judicial or administrative proceeding" is defined in Article 45(3) as

- (a) a domestic judicial, quasi-judicial or administrative action pursued by the Party in a timely fashion and in accordance with its law. Such actions comprise: mediation; arbitration; the process of issuing a license, permit, or authorization; seeking an assurance of voluntary compliance or a compliance agreement; seeking sanctions or remedies in an administrative or judicial forum; and the process of issuing an administrative order; and
- (b) an international dispute resolution proceeding to which the Party is party.

The Secretariat has previously stated that the threshold consideration of whether an administrative or judicial proceeding is pending should be construed narrowly to give full

⁸⁷ Response at 73.

⁸⁸ *Id*.at 67.

Coal-fired Power Plants – Notification to Council

A14/SEM/04-005/48/ADV DISTRIBUTION: General ORIGINAL: English

effect to the object and purpose of the NAAEC, and more particularly, to Article 14(3). Only those proceedings specifically delineated in Article 45(3)(a), pursued by a Party⁸⁹ in a timely manner, in accordance with a Party's law, and concerning the same subject matter as the allegations raised in the submission, should preclude the Secretariat from proceeding further under Article 14(3).⁹⁰ The Secretariat has noted that the rationale for excluding matters that fall within Article 45(3)(a) is to avoid duplication of effort and to refrain from interfering with pending litigation.⁹¹ The Secretariat has further noted that these considerations can be relevant even where pending proceedings that relate to the same subject matter as is raised in a submission fall outside Article 45(3)(a), such that Article 14(3)(a) does not apply.⁹²

The first proceedings to which the United States refers fall under the rubric of the CAA. According to the United States, several states, environmental organizations, and industry groups have filed petitions for review of three CAA power plant rules that have been published in the Federal Register, most notably the CAIR and CAMR.⁹³ To the extent that the Submitters assert that the United States is failing to directly control or regulate nonpoint air emissions of mercury from coal-fired power plants as a means of meeting requirements of the CWA, these CAA-related proceedings are relevant. The CAA, not the CWA, provides the clearest avenue for regulating power plant emissions; as the United States' response indicates, EPA's authority in this respect is much less clear under the CWA. Although these judicial proceedings were not pursued by the United States, and therefore Article 14(3)(a) does not apply, the Secretariat concludes that a factual record dealing with the Submitters' assertions that the United States is failing directly to control or limit power plant air emissions through the CWA would risk duplicating or interfering with those pending proceedings. Accordingly, the Secretariat declines to proceed further with that aspect of the submission.

This determination does not affect the remaining assertions that the United States is failing to effectively 1) ensure that NPDES permits for power plants are consistent with water quality criteria for mercury in the receiving waters, and 2) account for (as opposed to control or regulate) air emissions from coal-fired power plants, both through adoption of TMDLs and through consideration of nonpoint sources of pollution when issuing or reviewing NPDES permits. The United States has identified no pending proceedings that would preclude continued consideration of the first of these assertions, but does contend that pending and

_

⁸⁹ The United States notes that the Secretariat has not applied Article 14(3)(a) to judicial or administrative proceedings brought against a Party, as opposed to those pursued by a Party. *Id.* at 67-68.

proceedings brought against a Party, as opposed to those pursued by a Party. *Id.* at 67-68. ⁹⁰ SEM 00-004 (BC Logging), Article 15(1) Notification (27 July 2001); SEM-98-004 (BC Mining), Article 15(1) Notification (11 May 2001); SEM-97-001 (BC Hydro), Article 15(1) Notification (28 April 1998).

⁹¹ SEM-97-001 (BC Hydro), Article 15(1) Notification (28 April 1998).

⁹³ Response at 70; *see also* Supplemental Response at 2.

⁹⁴ In the Secretariat's view, this distinction explains why the Submitters appended the two CAA Title V permits to their submission. The permits, which contain no controls on airborne mercury emissions, are included to support Submitters' position that EPA is failing to effectively enforce provisions of the CWA that require accounting for nonpoint source pollution (i.e., to demonstrate that EPA is not complying with the CWA, as opposed to the CAA). *See also* Submission at 17 (stating that there is "ongoing EPA action regarding the proposed mercury regulations, but those regulations are measures targeted at private actors...as part of the *Clean Air Act* and are not directly the subject of this submission").

anticipated CWA proceedings preclude further review of the second. Specifically, the United States asserts that "citizens have filed judicial actions under CWA . . . seeking to require EPA to establish TMDLs in 39 states by a date certain. As a result, EPA currently has obligations under court orders or consent decrees . . . to develop TMDLs in 22 States."95 Four of the ten States (Alabama, Ohio, Pennsylvania and West Virginia) highlighted in the submission are subject to such consent decrees. However, the United States does not indicate whether these civil actions or consent decrees relate to the establishment of mercury TMDLs for the waterbodies of concern to the Submitters. For example, the West Virginia consent decree cited by the United States was entered in July 1997 and appears to pertain only to water quality-limited segments that were identified at that time; the Secretariat has no information indicating that mercury-limited segments were included in that litigation or consent decree.⁹⁶

The Secretariat cannot categorically determine that a factual record would risk duplicating or interfering with the pending proceedings in those four states; no TMDL proceedings are pending in the other six states. The Secretariat concludes that pending proceedings do not preclude further consideration of the Submitters' TMDL assertions with respect to 1) states for which pending judicial proceedings relating to TMDLs do not address an alleged failure of those TMDLs to account for nonpoint source mercury air emissions from coal-fired power plants, and 2) states for which no administrative or judicial challenges are pending regarding the adequacy of state promulgated TMDLs or the alleged failure of the United States to adopt TMDLs for the state.97

2. Availability of private remedies

Pursuant to Article 14(3)(b), a Party may notify the Secretariat of private remedies that are available to submitters and whether those remedies have been pursued. The response asserts that the Secretariat should not recommend a factual record because there are a number of remedies available under both the CAA and the CWA that Submitters have not pursued.

In light of the Secretariat's determination that pending proceedings relating to the control and regulation of mercury emissions through the CAA preclude further consideration of certain aspects of the submission, no further discussion is necessary of available private remedies under the CAA.

With respect to the CWA, the United States asserts that there are a host of private remedies available to Submitters.98 Among these remedies are various actions for administrative or judicial review of administrative action, as well as the citizen suit provision in CWA § 505(a)(2). While these administrative and judicial remedies are an option for Submitters, they contend that it is "impractical and unrealistic for individuals and non-governmental entities

⁹⁵ Response at 67.

⁹⁶ See US EPA, The Mid-Atlantic States: Total Maximum Daily Loads, Lawsuits, at http://www.epa.gov/reg3wapd/tmdl/law.htm.

⁹⁷ The United States' response gives no indication that judicial or administrative proceedings are pending with respect to TMDLs in Illinois, Indiana, Kentucky, Michigam, North Carolina, or Texas.

⁹⁸ Response at 70. The United States cites six such examples.

with limited resources to seek redress through private remedies for a transnational problem of such scope and complexity." Moreover, Submitters are trying to address the issue of environmental law enforcement as regards the cumulative and widespread impacts of pollution from coal-fired power plants on environmental and human health, making their assertions particularly well-suited to the SEM process. Accordingly, the Secretariat concludes that the availability of private remedies does not bar further consideration of the submission or the recommendation of a factual record.

3. Adequacy of notice to the United States

The United States contends that "the Submitters' purported notice should not be considered adequate notice of the complicated set of allegations and voluminous supporting materials ultimately reflected in the submission." Although the communications referenced in the submission were broad in scope, 102 they touched on all of the assertions contained in the submission. Moreover, the Submitters stated, and the United States did not refute, that no response was provided to these communications before the submission was filed. The Secretariat also notes that the Submitters do "not merely assert a failure based on any one of NPDES, antidegradation, WQS, or TMDL processes" but rather "a widespread, systemic failure that is evidenced by the sum of the evidence of failures in these areas." The many examples of litigation cited in both the submission and response demonstrate the extent to which the complex issues raised in the submission has received attention in public forums. In view of these considerations, the Secretariat is satisfied that the extent of the notice to the United States does not provide a reason not to recommend a factual record.

B. Preparation of a Factual Record is Warranted

After consideration of the submission in light of the response of the United States, the Secretariat concludes that the response leaves open central questions raised in the submission concerning EPA's fulfillment of its obligations under §§ 303 and 402 of the CWA that would benefit from the development of a factual record. In particular, and as indicated below, a factual record would shed light on the Submitters' assertions that: 1) EPA is failing to effectively enforce the CWA by issuing or renewing NPDES permits (or allowing states to issue or renew such permits) that allow for point source discharges of mercury into impaired waterways, and 2) neglecting to account for airborne mercury when implementing CWA provisions requiring the promulgation of TMDLs for mercury-impaired waterways. As an overarching matter, this recommendation takes into consideration the ample information in the submission and the response regarding the severity and extent of mercury pollution in

⁹⁹ Submission at 16-17.

¹⁰⁰ See SEM-99-002 (Migratory Birds), Article 15(1) Notification (15 December 2000) ("The larger the scale of the asserted failure, the more likely it may be to warrant developing a factual record, other things being equal."). ¹⁰¹ Response at 73. The Secretariat notes that Article 14(1)(e) is written in the passive voice and does not specify

that the written communication to the relevant authorities must have been from a submitter.

¹⁰² See Submission at 13, Appendices 6 and 7.

¹⁰³ Submission Appendix 12, at 12.

¹⁰⁴ See, e.g., Submission, Appendix 12A.

United States' waterways, and regarding the serious risks to human health that this pollution poses. The Secretariat's reasoning is presented below.

A factual record is warranted for assertions regarding NPDES permits 1.

The Submitters assert that EPA is failing to effectively enforce the CWA by issuing or renewing NPDES permits, or allowing states to issue or renew such permits, that allow for point source discharges of mercury from coal-fired power plants into waterways that do not meet WQS for mercury (i.e., mercury-impaired waters). The Submitters' assertions focus on 36 coal-fired utilities in the ten states of concern that discharge mercury directly to water. 105 They provide Toxics Release Inventory (TRI) data on total point source mercury discharges from coal-fired power plants for 2001 and 2002 in the ten states, as well as facility-by-facility data for 2002. 106 They also provide information indicating that eight of these ten states have state-wide FCAs for mercury for either lakes or rivers, or for all waters, and that the other two states have mercury FCAs applicable to specific waters. 107 The Submitters therefore provide information indicating that most, if not all, of the power plants they identify discharge to waterways covered by mercury FCAs. Although they did not specifically identify the receiving waterways for all of the power plants, 108 the Submitters specifically identify the receiving waterbodies in Michigan with mercury FCAs to which three power plants discharged mercury in 2002. The Submitters assert that waterways with mercury FCAs exceed the WQS for mercury and provide evidence of a strong correlation between FCAs and non-attainment of WQS for mercury.

This information raises central questions regarding whether the United States is effectively ensuring that permits for the identified power plants are not contributing to mercury impairment of the receiving waterways, taking into account other sources of mercury to those waterways. As explained below, the United States response leaves these central questions open.

In Arkansas v. Oklahoma, 109 the United States Supreme Court summarized the NPDES permitting program as follows:

The [Clean Water] Act provides for two sets of water quality measures. 'Effluent limitations' are promulgated by the EPA and restrict the quantities, rates, and concentrations of specified substances which are discharged from point sources. 'Water quality standards' are, in general, promulgated by the States and establish the desired condition of a waterway. These standards

17

¹⁰⁵ Submission, Appendix 12D (of these 36, 23 discharged less than 1 kg, 11 discharged between 1 and 5 kg, and 2 discharged more than 25 kg).

106 Submission, Appendix 12, at 3-4, and 12D. This information indicates that power plants discharged a total of

²³⁴ pounds of mercury to water in those states in 2001 and 203 pounds in 2002.

¹⁰⁷ According to Submitters, Ohio, Pennsylvia, Illinois and Kentucky have issued statewide mercury FCAs for all lakes and rivers, Michigan has issued a statewide mercury FCA for lakes, Indiana has issued a statewide mercury FCA for rivers, and West Virginia has declared a statewide mercury advisory for all its waters. The remaining states in question all have issued mercury FCAs for specific waterbodies. See Submission, Appendix 12, Table 3. ¹⁰⁸ Submitters said they did not have ready access to the NPDES permits for the power plants they identified. Submission, Appendix 12 at 10. ¹⁰⁹ 503 U.S. 91 (1992).

supplement effluent limitations so that numerous point sources, despite individual compliance with effluent limitations, may be further regulated to prevent water quality from falling below acceptable levels.

The primary means for enforcing these limitations and standards is the NPDES....Section 301(a) of the [CWA]...generally prohibits the discharge of any effluent into a navigable body of water unless the point source has obtained an NPDES permit. Section 402 establishes the NPDES permitting regime, and describes two types of permitting systems: state permit programs that must satisfy federal requirements and be approved by the EPA, and a federal program administered by the EPA. ¹¹⁰

EPA's NPDES regulations provide that water quality-based effluent limitations¹¹¹ must be established for "any pollutant that is or may be discharged at a level that 'will cause, have a reasonable potential to cause, or contribute' to an excursion above any applicable State water quality standard." According to the United States, "[i]n determining the need for an effluent limit for mercury from a particular point source, the permit writer must consider existing controls on other point and nonpoint sources that contribute mercury to the water body in question." When a waterway is, or may potentially be, exceeding its water quality criteria for mercury, the applicable NPDES permits must be reviewed, and, if necessary, amended. 114

The United States asserts that a mercury FCA does not necessarily indicate that a waterway is not attaining its WQS, but recognizes that "on a case-by-case basis, waters subject to mercury FCAs may also not be attaining their applicable designated use."¹¹⁵ Thus, as the United States notes, "the States and EPA have identified many waters with mercury FCAs as also not attaining applicable water quality standards for mercury."¹¹⁶ Indeed, the Submitters'

Permits may be modified during their terms for this cause only if the information was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and would have justified the application of different permit conditions at the time of issuance. For NPDES general permits...this cause includes any information indicating that cumulative effects on the environment are unacceptable. For new source or new discharger NPDES permits...this cause shall include any significant information derived from effluent testing required under § 122.21(k)(5)(vi) or § 122.21(h)(4)(iii) after issuance of the permit.

¹¹⁰ *Id.* at 101-02 (internal citations and quotations omitted).

According to the United States, there are presently no technology-based effluent limitations for mercury. *See* Response at 55 (stating that EPA considered establishing such limitations in 1982 when it issued its Effluent Limitations Guidelines for the Steam Electric Power Generating Point Source Category, but declined to do so). ¹¹² Response at 59 (citing 40 C.F.R. § 122.44(d)(1)(i)).

Response at 59. See also 40 C.F.R. § 122.44(d)(1)(ii) ("When determine whether a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above a...criteria within a State water quality standard, the permitting authority shall use procedures which account for existing controls on point and nonpoint sources of pollution...").

¹¹⁴ See generally 40 C.F.R. § 122.44(d)(1). Modification of NPDES permit terms is governed by 40 C.F.R. § 124.5 and 40 C.F.R. § 122.62, both of which provide that permit terms may be amended upon a determination that "cause" for modification exists. Among the "causes" cognizable under 40 C.F.R. § 122.62 is "Information;" 40 C.F.R. § 122.62(a)(2) reads:

¹¹⁵ Response at 50.

¹¹⁶ *Id*.

discussion of TMDLs for the ten states on which they focus indicates a considerable likelihood that a waterbody under a mercury FCA is also considered water-quality limited for mercury. For example, according to the Submitters, in Illinois, all bodies of water under a Special Mercury Advisory are also listed as water-quality impaired for mercury; the same holds true for waterbodies under mercury FCAs in Indiana and Michigan. The Submitters also note TMDLs for which the endpoint goal is related to elimination of FCAs for mercury or to concentration of mercury in fish tissue. Consequently, although a mercury FCA does not necessarily indicate non-attainment of a WQS for mercury, taken together, the submission and the response indicate that a strong correlation exists. In the Secretariat's view, this correlation is sufficient to raise central questions regarding whether the power plants of concern that discharge to waters under mercury FCAs are also discharging into mercury-impaired waters.

In response to the central questions this correlation raises, the United States provides no information indicating that any of the waterbodies to which the 36 power plants identified in the submission discharge—most, if not all, of which appear to be under mercury FCAs—are not mercury-impaired. However, the United States contends that even if those waterways are impaired the Submitters are incorrect in assuming that discharges of mercury to mercury-impaired waterways may not be allowed under the CWA. Indeed, courts have held that although the CWA prohibits point source discharges into the waters of the United States except in compliance with the terms of an NPDES permit, 120 it does not establish a categorical ban on discharges into impaired waters. 121 EPA has promulgated regulations providing that NPDES permitting authorities may issue permits to new sources for discharges to impaired waters unless the discharge will "cause or contribute to a violation of water quality standards,"122 and may renew permits for existing sources so long as the permit's conditions "derive from and comply with water quality standards."123 According to the United States,

determining whether a new discharge will cause or contribute to an exceedance of water quality standards (or establishing a limit for an existing discharge which 'derives from and complies with' water quality standards) is...done on a case-by-case basis. To date, EPA has not formally interpreted its regulations with respect to what conditions, if present, would allow for permit issuance to new sources, new discharges or existing dischargers proposing to discharge their effluent into impaired waters. In practice, however, permitting has occurred consistent with current regulations. ¹²⁴

The United States contends that permits "to dischargers with effluent limitations at or below either the numeric water quality criteria or a quantification of a narrative water quality

¹¹⁷ Submission, Appendix 12, at 13-35.

¹¹⁸ *Id.* at 18-19, 22.

¹¹⁹ *Id.* at 25-26, 30-32.

¹²⁰ Oregon Natural Desert Ass'n v. Dombeck, 172 F.3d 1092, 1096 (9th Cir. 1998).

¹²¹ Arkansas, 503 U.S. at 108 ("Although the Act contains several provisions directing compliance with state water quality standards, the parties have pointed to nothing that mandates a complete ban on discharges into a waterway that is in violation of those standards").

¹²² Response at 56.

¹²³ *Id*.

¹²⁴ *Id*. at 57.

Coal-fired Power Plants – Notification to Council

A14/SEM/04-005/48/ADV DISTRIBUTION: General ORIGINAL: English

criterion"¹²⁵ are "consistent with the underlying environmental objectives of the CWA."¹²⁶ For example, under this approach, if a permittee discharges to an impaired stream with a water quality criterion for a pollutant of 10 ppm, the permittee is not "causing or contributing" to a violation of water quality standards for the pollutant so long as the effluents contain less than 10 ppm of the pollutant. Under EPA's interpretation, notwithstanding any mercury FCA, it is possible for EPA to permit new or existing point source discharges of mercury to waterways that exceed their water quality standards without contravening the CWA.

Even assuming this interpretation is correct, however, the United States' response provides only limited information about how the permits for the specific power plants that the Submitters identify account for the water quality standards in the receiving waters and of other sources of mercury to those waters. Noting the TRI data on which the Submitters rely in connection with their NPDES-related assertions, the response states:

A review of the permits for the coal-fired power plants identified by Submitters in the ten highlighted States indicates that...the threshold for reporting mercury releases from the electric generating facilities for purposes of the TRI has only recently been substantially lowered. Because of this, NPDES permit writers have not traditionally considered TRI data as a source of relevant information on potential discharges of mercury. EPA will encourage State permit writers to consider TRI data for coal-fired power plants as appropriate for these ten highlighted States and expect the plants to explain any discrepancies in the data reported. ¹²⁸

The response states that EPA will "closely review" and "pay close attention to" the NPDES permits identified by Submitters in Appendix 12 and that TRI data referenced by Submitters "should be considered by State permit writers and EPA permit reviewers as these facilities' permits come up for renewal." However, the United States' acknowledgment that permit writers have not traditionally considered TRI data (which EPA gathers) raises questions as to what information they have considered. The response also raises questions regarding the permits for the identified power plants by noting that between 1999 and 2002 many permit writers were not using the newest methodology for analyzing effluent for the presence of mercury, which led to determinations of "no reasonable potential to exceed water quality standards." In addition, the Secretariat notes that the draft TMDL for the Cashie River in North Carolina 131 includes an allocation of 8 g/yr of mercury for all point sources, and that the

 $^{^{125}}$ Id

¹²⁶ *Id.* at 58. EPA provides three other examples of how it permits direct discharges of effluents into impaired water bodies such that those discharges do not "cause or contribute to a violation of water quality standards." *Id.*¹²⁷ *See id.* ("Where the background level of the pollutant in the receiving water is greater than the criteria, the stream is in non-attainment [of WQS], and the aquatic environment or human health admittedly is adversely impacted. However, a point source discharging a pollutant at criteria end-of-pipe in such situations will discharge effluent containing a lower concentration of the pollutant than the receiving water, and therefore, will not increase the pollutant concentration in the waterway. Such a discharger may, in fact, cause the ultimate pollutant concentration in the receiving water to decrease as a result of an increase in flow").

¹28 Response at 60-61.

¹²⁹ *Id.* at 63.

¹³⁰ *Id.* at 60.

¹³¹ Submission, Appendix 12, at 27. The TMDL establishes the total loads from various sources that cannot be exceeded if the WQS for the river is to be attained.

TRI data the Submitters provided indicates annual discharges ranging from 400 to 26,000 g/yr of mercury for the 36 facilities of concern. Regardless of whether the Cashie River TMDL is representative, this disparity underscores the central questions raised in the submission.

Based on the foregoing, the response leaves open central questions regarding whether the NDPES permits for the power plants that the Submitters identify are consistent with applicable WQS for the receiving waters and account for other sources of mercury in those waters. A factual record would shed light on what information was considered and incorporated by EPA and states when they issued, approved, reviewed or adjusted the referenced permits. In developing a factual record, the Secretariat would gather facts confirming whether the receiving waters exceed their water quality standards for mercury and, if so, whether and how it was determined that the discharges would not "cause or contribute" to violations of water quality standards or that the permit conditions "derived from and complied with" water quality standards. This would include information on the correlation between mercury FCAs and water quality standards for the receiving waters. 132 The factual record would also present facts on the relationship between NPDES permits and Toxics Release Inventory (TRI) data, including information on the data relied upon in preparing and reviewing NPDES permits (or state equivalents) for coal-fired utilities in the ten states of concern. Finally, as discussed in detail below, because the CWA requires that TMDLs be established for all impaired waterways, the TMDL program may also compel states or EPA to adjust NDPES permit terms for coal-fired utilities that discharge mercury into impaired waterways; accordingly, the factual record would include facts regarding the extent to which EPA's review of the identified NPDES permits for power plants has accounted for TMDLs, if any, for the waters into which those power plants discharge mercury. 133

For the above reasons, the Secretariat concludes that central questions remain open regarding the Submitters' NPDES-related assertions and that a factual record addressing those open questions would serve well the goals of the NAAEC.

2. A factual record is warranted regarding TMDL-related assertions for states with no pending proceedings on mercury TMDLs

The Submitters assert that the United States is failing to effectively fulfill its obligation to ensure that either the states or EPA adopt TMDLs for mercury for water bodies that fail to meet water quality standards for mercury. Section 303(d) of the CWA requires states to

21

¹³² See Response at 62 (discussing EPA's recommendations for CWA § 304(a)). EPA has tied FCAs to water quality standards in the context of developing TMDLs. See, e.g., EPA, <u>Guidance Document</u>, "<u>Use of Fish and Shellfish Advisories and Classifications in 303(d) and 305(b) Listing Decisions</u>," 24 October 2000, <u>available at http://www.epa.gov/waterscience/library/wqstandards/shellfish.pdf</u>; TMDL Development in the Ocholcknee River Watershed, 28 February 2002, <u>available at</u>

http://www.epa.gov/Region4/water/tmdl/georgia/ochlockonee/final_tmdls/OchlockoneeHgFinalTMDL.pdf; State of Ohio Environmental Protection Agency, 2004 Integrated Water Quality Monitoring and Assessment Report (discussing the use and consideration of FCAs to determine non-attainment of water quality standards and to compile Ohio's CWA § 303(d) list of impaired waters), available at

 $[\]underline{http://www.epa.state.oh.us/dsw/tmdl/2004IntReport/2004OhioIntegratedReport.html.}$

¹³³ See *infra*, § IV(B)(iii).

Coal-fired Power Plants – Notification to Council

A14/SEM/04-005/48/ADV DISTRIBUTION: General ORIGINAL: English

identify all waters within their boundaries for which technology-based controls¹³⁴ are insufficient to allow the waters to meet their water quality standards. Waters so identified are known as water quality limited segments and, taken together, comprise the states' "303(d) lists." States must prioritize all waters on their 303(d) lists based on the severity of the pollution and the uses of the waters and, in accordance with those rankings, establish TMDLs that set the total pollutant load, allocated among natural, point, and nonpoint sources, that will allow attainment of water quality standards. The 303(d) lists and TMDLs are submitted to EPA for review. Upon EPA approval, "the identified waters and TMDLs are incorporated by the state into its continuing planning process established under § 303(e)(3), and become part of the federal law of water pollution control. If EPA disapproves the submission, it has days to "make its own identification of waters and establish TMDLs necessary to implement the applicable water quality standards."

The Submitters contend that in order for EPA to effectively exercise its obligations under the TMDL program, it must account for, and impose limits on, nonpoint source pollutants, including power plant emissions of mercury to air that are eventually deposited into water. The submission provides detailed information on the status of TMDL development in the ten states of concern. The Submitters conclude:

Generally, we have found that 303(d) lists, although often not complete, do to a large extent list FCA-impaired water bodies but that there is little if any follow through by states or EPA in terms of moving even to the stage of listing such waters for TMDL preparation....With the exception of North Carolina, we found little evidence of TMDLs that had been prepared for water bodies that had been impaired by atmospheric mercury pollution. In cases where we did find TMDLs for mercury-impaired waters further inquiry generally confirmed that the source of mercury contamination was a local one as opposed to the widespread problem of airborne mercury deposition....In one case outside of our area of inquiry we found an example of a

¹³⁴ According to the United States, there are presently no technology-based effluent limitations for mercury. *See* Response at 55 (stating that EPA considered establishing such limitations in 1982 when it issued its Effluent Limitations Guidelines for the Steam Electric Power Generating Point Source Category, but declined to do so; apparently, these guidelines have never been revised).

¹³⁵ *Pronsolino*, 291 F.3d at 1127.

¹³⁶ *Idaho Sportsmen's Coalition v. Browner*, 951 F. Supp. 962, 965 (W.D. Wash. 1996).

¹³⁷ Sierra Club v. Hankinson, 939 F. Supp. 865, 867 (N.D. Ga. 1996).

¹³⁸ *Idaho Sportsmen's Coalition*, 951 F. Supp. at 965 (noting that the CWA establishes that such review shall take place within 30 days).

¹⁴⁰ Arkansas, 503 U.S. at 110 n.13 (stating that 40 C.F.R. s. 122.4(d), which applies whether the permit is issued by an approved state program or by the EPA itself, "effectively incorporates into federal law those state-law standards the Agency reasonably determines to be 'applicable.' In such a situation, then, state walter quality standards…are part of the federal law of water pollution control").

¹⁴¹ *Idaho Sportsmen's Coalition*, 951 F. Supp. at 965-66. While the CWA is silent as to the precise nature of EPA's obligations if a state fails to make any initial submission at all, courts have held that "Congress intended that EPA's affirmative duties be triggered upon a state's failure to submit a list, or any TMDL at all." *Alaska Center for the Environment v. Browner*, 20 F.3d at 981, 983 (9th Cir. 1994).

¹⁴² The submission and the response are in agreement that deposition of mercury from power plant air emissions into water is a nonpoint source of water pollution.

¹⁴³ Submission, Appendix 12, at 13-36.

Coal-fired Power Plants – Notification to Council

A14/SEM/04-005/48/ADV **DISTRIBUTION:** General ORIGINAL: English

TMDL that...identifies airborne mercury deposition as the overwhelming source of the water contamination. 144

The submission acknowledges the difficulties states face in developing TMDLs that account for widespread airborne mercury that is often interstate in nature. 145 In the Secretariat's view, the information in the submission raises central questions regarding EPA's fulfillment of its obligation to ensure that TMDLs are promulgated for mercury-impaired waters in the ten states of concern.

The United States asserts that EPA lacks authority to control nonpoint source pollution under the CWA, through TMDLs or otherwise. 146 Specifically, while agreeing that states are obligated to develop TMDLs for waters exceeding their WQS in accordance with a priority ranking, the United States asserts that the CWA does not give EPA authority to require states to control nonpoint source pollution through TMDLs. 147 Therefore, according to the United States, "the fact that EPA has not mandated that the ten highlighted States establish TMDLs for mercury...provides no evidence that the US is failing to effectively enforce the CWA."148

The United States acknowledges that even if TMDLs are not a mechanism for imposing controls on nonpoint sources, TMDLs must account for, and allocate, pollutant loads attributable to nonpoint sources. According to the United States, TMDLs are "primarily informational tools, 149 that "represent a pollutant level goal that is to be achieved by adjusting pollutant discharge requirements in individual NPDES permits or by a state electing to establish nonpoint source controls." The United States has stated that "[allthough a TMDL itself imposes no enforceable requirements [on regulated entities], it can serve as an assessment and planning tool that local, state, and federal authorities can use to impose controls or pollution reduction targets for the purpose of achieving the applicable water quality standards."151

The United States provides the following definition of a TMDL:

[A TMDL is] the sum of the individual WLAs [wasteload allocations] for point sources and LAs [load allocations] for nonpoint sources and natural background. If a receiving water has only one point source discharger, the TMDL is the sum of that point source WLA plus the LAs

¹⁴⁴ *Id*. at 14-15.

¹⁴⁵ *Id.* at 15.

¹⁴⁶ Response at 33 (stating that "section 303(d)'s TMDL provisions add no new federal enforcement authorities, and EPA cannot impose mandatory controls on nonpoint sources").

¹⁴⁷ Id. at 37 (positing that the CWA only requires EPA to act if it disapproves of a state's 303(d) submission; that is, so long as EPA approves a state's submission, it has no affirmative duty to act).

¹⁴⁹ *Id*.

¹⁵⁰ Id. at 32; see also Sierra Club v. Meiburg, 296 F.3d 1021, 1025 (11th Cir. 2002) (stating that TMDLs serve as the goal for the level of a pollutant in a waterbody to which the TMDL applies).

SEM-98-003 (Great Lakes), U.S Response to Submission (3 December 1999). See also Submission, Appendix 7 at note 26 and accompanying text.

for any nonpoint sources of pollution and natural background sources, tributaries, or adjacent segments....Thus, the TMDL process provides for nonpoint source control tradeoffs. ¹⁵²

The United States points out although the CWA does not obligate states to adopt controls on nonpoint sources, states without such controls (including, according to the submission, the ten in question here) can achieve pollutant level goals through the CWA only, if at all, through effluent limitations in NDPES permits—the WLA portion of the TMDL formula.¹⁵³ The United States makes clear that this is true whether or not a TMDL is in place; where a TMDL has been promulgated, the WLA portion of the TMDL must be allocated among point sources through the permitting system.¹⁵⁴ However, in preparing a TMDL, the WLA allocation can only be calculated in conjunction with allocations for nonpoint sources and natural sources.

United States courts have affirmed that TMDLs must account for nonpoint source pollution, even if they do not impose regulatory limitations on those sources. One court noted that TMDLs do not establish a traditional regulatory scheme but instead serve as a link in an implementation chain that includes federally-regulated point source controls, state or local plans for point and nonpoint source pollution reduction, and assessment of the impact of such measures on water quality, all to the end of attaining water quality goals for the nation's

¹⁵² 40 C.F.R. 130.2(i); see also Friends of the Earth v. U.S. E.P.A., 346 F. Supp.2d 182, 185 (D.D.C. 2004) (noting that TMDLs are calculated "at a level necessary to implement the applicable water quality standards with...a margin of safety which takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality"); San Francisco BayKeeper v. Browner, 147 F. Supp.2d 991, 995 (N.D. Cal. 2001) ("TMDL contemplates establishing...WLAs and...LAs for the sources of the pollutants, to ensure that the sum of all pollutants does not exceed the TMDL. In other words, the CWA requires each state to identify the maximum amount of each type of pollutant that a waterbody can handle without violating water quality standards").

standards").
¹⁵³ The Supreme Court has noted that water quality standards "supplement effluent limitations so that numerous point sources, despite individual compliance with effluent limitations, may be further regulated to prevent water quality from falling below acceptable levels." *Arkansas*, 503 U.S. at 101. Implicit in this statement is that further regulation of point source discharges—which can be directly regulated under the CWA through NPDES permitting—is properly done by accounting for the amount of nonpoint source pollution—which cannot be directly regulated—in the impaired water and adjusting effluent limitations accordingly.
¹⁵⁴ *See* Response at 59:

NPDES regulations...require the establishment of an effluent limit for any pollutant that is or may be discharged at a level that 'will cause, have a reasonable potential to cause, or contribute' to an excursion above any applicable State water quality standard. In determining the need for an effluent limit for mercury from a particular point source, the permit writer must consider existing controls on other point and nonpoint sources that contribute mercury to the water body in question.

See also 40 C.F.R. § 122.44(d)(1)(ii) ("When determining whether a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above a...criteria within a State water quality standard, the permitting authority shall use procedures which account for existing controls on point and nonpoint sources of pollution...").

¹⁵⁵ See, e.g., Idaho Sportsmen's Coalition, 951 F. Supp. at 965 ("TMDL calculations help ensure that the cumulative impacts of multiple point source discharges are accounted for, and are evaluated in conjunction with pollution from other nonpoint sources").

waters."¹⁵⁶ Although EPA can oversee the TMDL program in the statutorily required manner without mandating or imposing controls on nonpoint source pollutants, it cannot do so without accounting for nonpoint sources. Thus, in *Pronsolino v. Nastri*, the Ninth Circuit held that the § 303(d) listing and TMDL requirements apply to waters polluted exclusively by nonpoint sources. ¹⁵⁷ The court explained as follows:

The list required by § 303(d)(1)(A) requires that waters be listed if they are impaired by a combination of point sources and nonpoint sources; the language admits of no other reading. Section 303(d)(1)(C), in turn, directs that TMDLs "shall be established at a level necessary to implement the applicable water quality standards...." So, at least in blended waters, TMDLs must be calculated with regard to nonpoint sources of pollution; otherwise, it would be impossible 'to implement the applicable water quality standards,' which do not differentiate sources of pollution. ¹⁵⁸

It follows that the absence of an obligation to control nonpoint source pollutants does not excuse EPA from taking them into account when reviewing or establishing TMDLs.¹⁵⁹

Even if the inquiry is focused only on EPA's obligation to ensure that TMDLs account for (as opposed to limit) nonpoint sources of mercury pollution, the United States asserts that it is effectively fulfilling its obligations. With respect to the Submitters' assertion that EPA should intervene and issue its own TMDLs where state action is inadequate, the United States contends that EPA "does not have the authority to require States to establish TMDLs for mercury." Instead, the United States asserts that, although EPA has the discretionary authority to adopt a TMDL for a state, it only has a nondiscretionary duty to do so where 1) it disapproves a state TMDL or 2) a state has made a "constructive submission" that amounts to a decision not to adopt a TMDL. The constructive submission doctrine applies only when the state completely fails to submit TMDLs for any pollutants and has no plans to submit any, a situation that does not appear to exist in any of the ten states of concern. The United States also points out that states may consider the complexity of a TMDL when scheduling TMDLs for development, and that "developing TMDLs for mercury, particularly mercury from nonpoint source[s], such as deposition from air sources, is particularly

¹⁵⁶ Pronsolino v. Nastri, 291 F.3d 1123, 1129 (9th Cir. 2002).

¹⁵⁷ *Id.* at 1132-33; *see also id.* at 1131(recognizing that "EPA regulations pertinent to § 303(d)(1) lists and TMDLs focus on the attainment of water quality standards, whatever the source of any pollution"); 40 C.F.R. § 130.7(c)(1)(ii) (TMDLs must be established for *all* pollutants that prevent the attainment of water quality standards).

¹⁵⁸ *Pronsolino*, 291 F.3d at 1139; *see also San Francisco Baykeeper v. Whitman*, 297 F.3d 877, 880 (9th Cir. 2002) ("TMDL calculations are to ensure that the cumulative impacts of multiple point source discharges and nonpoint source pollution are accounted for").

¹⁵⁹ For other relevant decisions, see *Friends of Wild Swan v. U.S. E.P.A.*, 130 F. Supp.2d 1184, 1188 (D. Mont. 1999), *San Francisco BayKeeper*, 147 F. Supp.2d 991, and *Idaho Sportsmen's Coalition*, 951 F. Supp. 962. ¹⁶⁰ Response at 37.

¹⁶¹ *Id.* at 38.

¹⁶² *Id.* at 37-38.

¹⁶³ San Francisco Baykeeper, 297 F.3d at 882-83. In view of the limited reach of the doctrine, the Submitters state that "[o]ne of the most significant concerns for any TMDL 303(d) private remedy is with the doctrine of 'constructive submission." Submission, Appendix 12, at 8.

¹⁶⁴ See Submission, Appendix 12, at 13-36.

complex."¹⁶⁵ Although the United States does not contend that the obligation to ensure that TMDLs are prepared for mercury-impaired waters is excused where preparation of a TMDL is complex, it asserts that this complexity provides a reasonable basis for a state to elect to develop mercury TMDLs later in its TMDL development schedule. However, the United States acknowledges that EPA has approved or established mercury TMDLs for 221 waterbodies in 16 states and the District of Columbia that include allocations for air sources of mercury. ¹⁶⁶

Because TMDLs addressing air sources of mercury have been developed for numerous waterways in several states despite the complexities involved in doing so, ¹⁶⁷ and because EPA has not exercised its statutory authority to establish TMDLs for mercury in any of the ten states of concern, ¹⁶⁸ the Secretariat concludes that the response leaves open central questions that the submission raises regarding development of mercury TMDLs in the states for which no judicial proceeding relating to development of mercury TMDLs is pending. At a minimum, this includes the six states for which no TMDL-related proceedings are pending: Illinois, Indiana, Kentucky, Michigan, North Carolina, and Texas. It also includes the states covered by consent decrees where the consent decrees do not address development of TMDLs for mercury-impaired waters.

Although there is no precise time limit for developing TMDLs,¹⁶⁹ in light of EPA's authority to disapprove a state's 303(d) list should it fail to include mercury-impaired waters and to exercise its discretion to develop TMDLs where a state is not doing so, the Secretariat does not consider it necessary that EPA's duty to promulgate TMDLs for those states be non-

The role of TMDLs in the CWA strategy for improving water quality confirms that they were to be developed quickly....To serve their intended purpose, they must be available early in the development of a state's program....[Thus, while] a schedule may provide more specific deadlines for the establishment of a few TMDLs for well-studied water quality limited segments in the short-term, and set only general planning goals for long-term development of TMDLs for water quality limited segments about which little is known[,]...'Short-term' and 'long-term' at most can mean months and a few years.

with San Francisco Baykeeper, 297 F.3d at 880 (a more recent Ninth Circuit case upholding EPA's 1997 guidelines that suggest that states allocate between 8 and 13 years from the time that waters are initially listed on 303(d) lists to the development of TMDLs).

 $^{^{165}}$ *Id* at 36.

¹⁶⁶ Id

¹⁶⁷ The fact that TMDLs for mercury that account for air deposition have been established for many waterways distinguishes this submission from the Ontario Power Generation and Great Lakes submissions, for which the Secretariat determined factual records were not warranted. As well, a TMDL can include a margin of safety that accounts for uncertainties. *See Idaho Sportsmen's Coalition*, 951 F. Supp. at 966 ("Congress provided that TMDLs might incorporate 'a margin of safety which takes into account any lack of knowledge,' showing that a lack of precise information must not be a pretext for delay") (citing 40 C.F.R. 130.7(c)(1)).

¹⁶⁹ Compare Idaho Sportsmen's Coalition, 951 F. Supp. at 967 (internal citations omitted), where the court held that EPA's proposed schedule allowing Idaho to develop "all necessary TMDLs" by the year schedule violated the CWA because of "its extreme slowness," stating:

discretionary in order to recommend a factual record. Review of a government's fulfillment of specific obligations under NAAEC Articles 14 and 15 has not been limited to obligations in the form of a nondiscretionary duty to act. Indeed, United States courts have generally considered government enforcement decisions to be entirely committed to agency discretion and therefore ordinarily not subject to judicial review, and yet such enforcement decisions are the focus of Articles 14 and 15.¹⁷⁰ Thus, the Council has instructed preparation of factual records that have presented facts regarding the manner in which a government exercises its discretion, so as to allow interested persons to reach their own conclusions as to whether the government's exercise of its discretion constitutes a failure to effectively fulfill its obligations.¹⁷¹ Here, the focus of the submission is on EPA's overarching obligation to ensure that the TMDL program is systematically implemented to account for mercury from nonpoint sources, particularly power plant air emissions, an obligation that the Submitters contend requires particular attention from EPA because an individual state's waters may receive mercury pollution from air emissions of power plants in other states.¹⁷²

For the foregoing reasons, the Secretariat concludes that a factual record is warranted to examine central questions that the response leaves open relating to EPA's responsibilities in approving or adopting TMDLs for mercury in the ten states of concern, except where pending proceedings or consent decrees address mercury TMDLs. The factual record would present information concerning what, if any, efforts the states and EPA are making towards accounting for nonpoint source pollutants in the development of TMDLs for mercury, including the manner in which load allocations for nonpoint sources are calculated and the modeling tools used by EPA to estimate the pollutant contributions to waterways from specific air sources.¹⁷³ It would also examine the extent to which mercury-impaired waterways are included on 303(d) lists for these states and any EPA responses to state listing failures.

3. A factual record is not warranted regarding the antidegradation assertions

The Submitters' other assertion is that EPA is failing to effectively enforce the CWA through its approval of state antidegradation policies and implementation procedures that do not properly safeguard waterbodies from airborne mercury deposition.¹⁷⁴ They contend that EPA has failed meet its responsibility to prevent degradation of waterbodies, either substantively, by failing to prevent water degradation that stems from mercury emissions from coal-fired power plants, or procedurally, by, for example, failing to mandate the adoption of best

¹⁷⁴ Submission at 10, 11.

¹⁷⁰ See Heckler v. Chaney, 470 U.S. 821 (1985).

While this is true for all of the factual records that the Council has authorized to date, the Cozumel, Oldman River II and Tarahumara factual records are particularly noteworthy.

¹⁷² See Submission at 36 ("While it is true that the reason[s] for these failures [to adopt TMDLs in the ten states of concern] are diverse . . ., the systemic nature of the failure of effective enforcement is shown by the almost total absence of action and more importantly, the concomitant failure by EPA to take action.")

¹⁷³ See Response at 39-40 (asserting that load allocations may range from reasonably accurate estimates to gross allotments, and may be made for categories or subcategories of sources).

management practices (BMPs). As noted above, the Submitters also assert that every time a tiered fishable waterway becomes subject to a mercury FCA and is no longer fishable, it is, by definition, in exceedance of water quality standards for mercury and in violation of the CWA's antidegradation provisions.¹⁷⁵

The basic elements of the CWA antidegradation scheme are set out in *American Wildlands v. Browner*: 176

The antidegradation review policies adopted by the states as a part of their water quality standards must be consistent with the federal antidegradation policy. The EPA's regulations establish three levels of water quality protection: Tier I, Tier II, and Tier III. Tier I protection establishes the minimum water quality standard for all waters and requires that '[e]xisting instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.' Tier II protection provides that, where the water quality of a water body exceeds that necessary to support aquatic life and recreation, that level of water quality shall be maintained unless the state determines that 'allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located.' Tier III protection provides that, where a water body 'constitute[s] an outstanding National resource, such as waters of National and State parks and wildlife refuges and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected.' 1777

States are required to submit their antidegradation policies and procedures to EPA and, if consistent with the federal standards, EPA must approve them within sixty days. ¹⁷⁸ If inconsistent, EPA must, within ninety days, notify the state and specify the changes necessary to bring the policies and procedures into compliance; if the state does not adopt the changes within ninety days of the date of notification, EPA is obligated to promulgate the policies and procedures for the state. ¹⁷⁹ The submission and response make clear that this scheme has been the subject of extensive litigation in the United States, such that its overall operation is relatively well settled.

As indicated above, the Submitters assert that "the federal antidegradation policy mandates control of both point and nonpoint sources of pollution in...the creation of state antidegradation policy and in its implementation." The focus of the Submitters' antidegradation assertions is on nonpoint source pollution from air emissions of coal-fired power plants. In light of the Secretariat's determination not to proceed further with aspects of the submission asserting that EPA is failing to control such emissions through the CWA, further discussion of the antidegradation assertions is unnecessary. The CAA proceedings discussed above in section IV.A.1 are the current venue in which issues regarding control of airborne mercury emissions are being addressed.

¹⁷⁵ Submission, Appendix 12, at 14; see also Submission at 12-13.

¹⁷⁶ 260 F.3d 1192 (10th Cir. 2001).

¹⁷⁷ *Id.* at 1194-95 (citing 40 C.F.R. § 131.12(a)).

Ohio Valley Environmental Coalition v. Horinko, 279 F. Supp.2d 732, 738-39 (S.D.W.Va., 2003).

¹⁷⁹ *Id*. at 739.

¹⁸⁰ Submission, Appendix 12, at 15.

The Submitters' assertions regarding the correlation of FCAs to impairment of waterways would be addressed in the recommended factual record in connection with their NPDES-related assertions. Aside from those matters, a factual record is not warranted concerning the assertions that EPA is approving inadequate state antidegradation schemes or failing to promulgate its own antidegradation schemes when states neglect to adopt the EPA-specified changes necessary to bring their antidegradation policies and procedures into compliance with the CWA.

V. RECOMMENDATION

For the foregoing reasons, the Secretariat considers that the submission, in light of the United States' response, warrants the development of a factual record and hereby so informs the Council. As discussed in detail above, a factual record is warranted to develop and present information regarding Submitters' assertions that EPA is failing to effectively enforce §§ 303 and 402 of the CWA in the ten highlighted states by issuing or renewing NPDES permits (or allowing states to issue or renew such permits) that allow for point source discharges of mercury that do not comply with, or that cause or contribute to non-attainment of, the water quality criteria for mercury in the receiving waterbodies. The Secretariat also recommends that a factual record be developed to examine EPA's actions with respect to the development of mercury TMDLs for mercury-impaired waterways in the ten states of concern, except where pending litigation or consent decrees are addressing mercury TMDLs.

Developing a factual record on the foreoing issues will serve the goals of the NAAEC by, *inter alia*, illuminating the efforts being undertaken to promote pollution prevention policies and practices, fostering the protection and improvement of the environment for the well-being of present and future generations, and enhancing compliance with environmental laws and regulations.¹⁸¹ These objectives are particularly important in light of the serious harmful effects of mercury on environmental and human health, particularly that of children and pregnant women, which both the submission and the response acknowledge. Accordingly, in accordance with Article 15(1), and for the reasons set forth in this document, the Secretariat informs the Council of its determination that the purposes of the NAAEC would be well served by developing a factual record regarding the submission.

Respectfully submitted on this 5^{th} day of December 2005.

Secretariat of the Commission for Environmental Cooperation

per: (original signed)
Executive Director