



*Advocacy: the voice of small business in government*

April 5, 2017

BY ELECTRONIC MAIL

The Honorable Scott Pruitt  
Administrator  
U.S. Environmental Protection Agency  
Ariel Rios Building  
1200 Pennsylvania Avenue, N.W.  
Washington, D.C. 20460

**Re: *Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category, Docket ID No. EPA-HQ-OW-2009-0819, 80 Fed. Reg. 67,838 (November 3, 2015)***

Dear Administrator Pruitt:

The U.S. Small Business Administration, Office of Advocacy (Advocacy), submits a regulatory petition to modify the final Steam Electric Power Plant Effluent Limitations Guidelines (ELG) which imposed technology-based standards to control wastewater under the Clean Water Act (CWA).<sup>1</sup> Advocacy supports the petition to reopen the rulemaking for reconsideration filed by the Utility Water Act Group (UWAG)<sup>2</sup>, as it provides the opportunity for regulatory relief for small entities. Advocacy supplements that petition with specific recommendations to alleviate burdens on small entity owned power plants. Regulatory relief in this rulemaking should play a key role in the implementation of the recent Executive Order 13771 on Reducing Regulation and Controlling Regulatory Costs which requires agencies to eliminate unnecessary regulations, and reduce costs on regulated entities.<sup>3</sup> These unduly stringent requirements are likely to force closures of a significant number of coal-fired utilities, and adversely affect mining and utility jobs and rural communities that depend on those plants, without concomitant environmental benefits. Advocacy believes that there are alternatives that would achieve important statutory goals while also providing regulatory burden relief for small entities.

<sup>1</sup> 78 Fed. Reg. 67,838 (November 3, 2015).

<sup>2</sup> UWAG's Petition for Rulemaking to Reconsider and Administratively Stay the ELGs and Standards for the Steam Electric Power Generating Point Source Category, March 24, 2017, filed with U.S. EPA.

<sup>3</sup> 82 Fed. Reg. 9339 (Feb. 3, 2017); The Executive Order states, in section 2(a): "Unless prohibited by law, whenever an executive department or agency (agency) publicly proposes for notice and comment or otherwise promulgates a new regulation, it shall identify at least two existing regulations to be repealed."

## **Office of Advocacy**

Advocacy was established pursuant to Pub. L. 94-305 to represent the views of small entities before federal agencies and Congress. Advocacy is an independent office within the U.S. Small Business Administration (SBA), so the views expressed by Advocacy do not necessarily reflect the views of the SBA or the Administration. The Regulatory Flexibility Act (RFA),<sup>4</sup> as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA),<sup>5</sup> gives small entities a voice in the rulemaking process. For all rules that are expected to have a significant economic impact on a substantial number of small entities, federal agencies are required by the RFA to assess the impact of the proposed rule on small business and to consider less burdensome alternatives. The Small Business Jobs Act of 2010 requires agencies to give every appropriate consideration to comments provided by Advocacy.<sup>6</sup> The agency must include, in any explanation or discussion accompanying the final rule's publication in the Federal Register, the agency's response to these written comments submitted by Advocacy on the proposed rule, unless the agency certifies that the public interest is not served by doing so.<sup>7</sup>

## **Introduction**

The Office of Advocacy worked closely with EPA's Office of Water in developing the proposed and final rules. EPA's proposed rule included consideration of additional regulatory alternatives that would have addressed small business concerns, but the agency failed to adopt these alternatives in the final rule. EPA certified that the final rule would not have a significant economic impact on small entities under the Regulatory Flexibility Act (RFA). As stated in our 2013 comment letter, Advocacy disagreed and believed that EPA should have convened a Small Business Regulatory Enforcement Fairness Act (SBREFA) panel, as required by the RFA.<sup>8</sup> Our view is unchanged with respect to the final rule. Small entities potentially affected by this rule include several hundred small independently-owned private utilities, small government-owned utilities, and small rural electric cooperative-owned utilities.<sup>9</sup>

Advocacy has offered a set of recommendations that would be consistent with the Regulatory Flexibility Act, Executive Order 13563, Executive Order 13771, and the Clean Water Act. Advocacy recommends that EPA strongly consider regulatory options that exclude all plants with de minimis amounts of pollution, primarily by excluding smaller plants with generation capacity below a certain size, measured in megawatts (MW), or some other appropriate alternative metric. This rule imposes, in our best estimate, hundreds of millions of dollars annually in unnecessary costs, jeopardizing well-paying jobs, particularly in rural America.

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<sup>4</sup> 5 U.S.C §601 et seq.

<sup>5</sup> Pub. L. 104-121, Title II, 110 Stat. 857 (1996) (codified in various sections of 5 U.S.C. § 601 et. seq.).

<sup>6</sup> Small Business Jobs Act of 2010 (Pub. L. 111-240) § 1601.

<sup>7</sup> *Id.*

<sup>8</sup> Section 609(c) of the RFA requires the formation of a SBREFA panel of three federal agency representatives that receives small entity input for all EPA rules, except those that are certified by the Administrator as having no significant economic impact on a substantial number of small entities.

<sup>9</sup> Advocacy's 2013 comments are found at <https://www.sba.gov/content/9192013-effluent-limitations-guidelines-and-standards-steam-electric-power-generating-point-source-category-docket-id-no-epa-hq>.

## **This Expensive Rule Imposes Costs that Outweigh Benefits and Warrants Review Under the New Executive Orders 13771 and 13777.**

This is exactly the kind of regulation targeted by the President's new Executive Order 13771,<sup>10</sup> to revise costly regulations that are not justified by the benefits. As the UWAG petitioners noted, this rulemaking also triggers review under the related EO 13777<sup>11</sup> on three grounds listed in that Executive Order.<sup>12</sup> Those three grounds are: (1) effect on jobs, (2) costs that exceed benefits and (3) lack of transparency of the underlying information. EPA's revision of this rule could result in annual savings of \$500 million or more and conserve jobs in rural America. The cost of additional controls on bottom ash wastewater alone would be hundreds of millions of dollars annually, using EPA's estimates, and yet the environmental benefits would be negligible. Therefore this rulemaking should be placed on a high priority for review under Executive Orders 13771 and 13777.

## **EPA's Certification of No Significant Economic Impact on Small Entities Lacks a Factual Foundation and Transparency.**

As discussed in detail in the 2013 comments, the agency certified that its proposed rule would not have a significant economic impact on a substantial number of small entities.<sup>13</sup> EPA produced a certification analysis that showed surprisingly few plants are owned by small entities subject to compliance costs. The analysis showed some significant costs for a large fraction of plants owned by municipalities and rural electric cooperatives of unknown size. EPA failed to identify the affected plants, and in turn, which affected plants with costs had small entity owners, preventing us from commenting effectively on the validity of EPA's determinations.<sup>14</sup> Given the hundreds of small entity owners that could be affected, small entity trade associations also concluded that the EPA estimate of the number of plants with costs owned by small entities was too low.<sup>15</sup> In the final Regulatory Impact Analysis, EPA now finds that only 12 small entities face costs in excess of one percent annualized cost/sales.<sup>16</sup> This is lower than stated in the proposed rule Regulatory Impact Analysis (RIA), and EPA has provided no explanation of the significant downward revision.

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<sup>10</sup> 82 Fed. Reg. 12285 (March 1, 2017).

<sup>11</sup> The related Regulatory Reform Order (EO 13777) reads: "At a minimum, each Regulatory Reform Task Force shall attempt to identify regulations that:

(i) eliminate jobs, or inhibit job creation; ...

(iii) impose costs that exceed benefits; ... [or]

(v) are inconsistent with the requirements of section 515 of the Treasury and General Government Appropriations Act, 2001 (44 U.S.C. 3516 note), or the guidance issued pursuant to that provision, in particular those regulations that rely in whole or in part on data, information, or methods that are not publicly available or that are insufficiently transparent to meet the standard for reproducibility;..."

<sup>12</sup> UWAG petition at 7.

<sup>13</sup> 78 Fed. Reg. 34432, 34530 (June 7, 2013).

<sup>14</sup> See EPA Proposed rule Regulatory Impact Analysis (RIA) Chapters 3, 4 and 8.

<sup>15</sup> Phone conversation with Dorothy Kellogg, National Rural Electric Cooperative Association (NRECA) and Theresa Pugh, American Public Power Association (APPA), July 19, 2013.

<sup>16</sup> Annualized costs divided by sales are typically used to measure economic impact on small firms. EPA Final RIA Table 8-4.

For both the proposed and final rules, the agency has not revealed which plants will have compliance costs, which plants with costs have small entity owners, what those costs are, or the revenues that such plants have to address those costs. This makes it impossible to verify EPA's underlying data, estimated values and calculations in either the proposed or final rules.<sup>17</sup> Advocacy reaffirms our previous view that a small business panel was warranted in 2013 and is still warranted now for the final rule.<sup>18</sup>

Further, in the final rule, EPA excludes from the economic impact analysis all the plants that are expected to close due to two other costly EPA rules – the Coal Combustion Residual (CCR) rule<sup>19</sup> and the Clean Power Plan (CPP) rule.<sup>20</sup> By excluding dozens of plants, primarily owned by small businesses, the Agency has reduced the estimated adverse impact of the Steam Electric rule. In other words, by excluding the most vulnerable plants from the analysis, the projected economic effects on the remaining plants appear substantially improved. Given that both these rules are also under reconsideration, those previously excluded more vulnerable utility plants are likely to re-emerge in the analysis of plants subject to the ELG requirements, increasing the estimated adverse economic effects on ELG plants.

The agency needs to provide more transparency regarding the pollution control and economic data when it reopens this rulemaking. EPA needs to repropose this rule, and reconsider regulatory options that minimize small business burdens, such as the regulatory flexibility alternatives that were seriously considered in the proposed rule, but rejected in the final rule.

### **The Regulatory Flexibility Act Requires EPA to Consider Less Stringent Alternatives for Small Entities under the Steam Electric ELG**

The Regulatory Flexibility Act requires EPA to consider small entity alternatives that achieve regulatory purposes and minimize small business burdens consistent with the statutory goals. This rule warranted a robust examination under the Regulatory Flexibility Act because the rule imposes billions of dollars of capital costs, hundreds of millions of dollars in annual operating expenses, and jeopardizes jobs.<sup>21</sup> As noted above, Advocacy believes that EPA should have convened a panel under section 609 of the Regulatory Flexibility Act before it issued the proposed rule.<sup>22</sup>

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<sup>17</sup> The UWAG petition for reconsideration of this rule demonstrates that the lack of transparency in the final rule effectively bars a reasonable review of the costs and economic impacts. UWAG petition at 13-32. The Office of Advocacy agrees that EPA did not provide additional transparency in the final rule record.

<sup>18</sup> In the event EPA repropose this final rule without significant change, Advocacy believes a panel should be required for such a proposed rule.

<sup>19</sup> 80 Fed. Reg. 21,301 (Mar. 17, 2015).

<sup>20</sup> 80 Fed. Reg. 64,661 (Oct. 23, 2015).

<sup>21</sup> EPA's own estimate of job impact included 953 full-time-equivalents at power plants and 525 full-time-equivalents at coal mines in the year 2020. EPA RIA Tables 6-2 and 6-6, September 25, 2016. Given the expected change in the implementation of related regulations described above, this estimated impact would increase significantly, even according to EPA's conservative estimate.

<sup>22</sup> 5 U.S.C. § 609(b).

Indeed, during 2011 and 2012, EPA had been planning to initiate the small business panel proceeding, and then terminated those plans, without explanation, shortly before the proposed rule was issued in 2013. We agree with EPA's original determination, and recommend that EPA complete the SBREFA panel process, and then repropose, unless the stringency of the new proposed rule is low enough to support a new certification of no significant economic impact under section 605 of the RFA.<sup>23</sup>

In a well-crafted proposed rule, in accordance with the Regulatory Flexibility Act, EPA did outline several regulatory alternatives that would minimize small utility burdens, while achieving statutory objectives. EPA even identified several "preferred" alternatives that would potentially provide a substantial fraction of the pollution reductions (the benefits arising from this water pollution control rule) at much lower costs. Unfortunately, in the 2015 final rule, EPA rejected these "preferred" regulatory flexibility alternatives, and adopted a very stringent set of requirements that were neither cost-effective nor warranted by the Clean Water Act. These "preferred" alternatives and other options merit close re-examination in a new review of the final rule.

In addition to the baseline issue related to the CCR and CPP rules, as part of the reconsideration, the agency needs to address the overlap with these two rules. EPA is in the process of reviewing and revising those two closely related rules, and this review is likely to take years to complete.<sup>24</sup>

<sup>25</sup> Each utility needs to consider the costs and the technical requirements of all these related rules in developing, testing and implementing a compliance strategy. This ELG rule, including the compliance dates, needs to be reopened simply in order to coordinate the juncture between these different rules.

The key standards to be revisited are the BAT technology based standards (best available technology economically achievable) required under the Clean Water Act.<sup>26</sup> These standards are based on considerations of cost and the pollution reductions to be achieved by the given technology.

Controls for two wastewater streams, namely bottom ash wastewater and flue gas desulfurization (FGD or scrubber) wastewater, should be evaluated for modifications. In the case of bottom ash, EPA is requiring a no-discharge standard to be applied to all units above 50 megawatts (MW). In the case of FGD, EPA requires the application of both chemical precipitation and biological treatment to all units above 50 MW. Both of these standards will be extremely costly – EPA estimates \$292 million annually for the bottom ash regulation nationwide and \$195 million annually for the FGD regulation nationwide.<sup>27</sup> Industry estimates suggest that these

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<sup>23</sup> 5 U.S.C. § 605.

<sup>24</sup> The CCR rule reconsideration is included in the Fall 2016 EPA Regulatory Agenda, RIN 2050-AG88; Notice of Proposed Rulemaking scheduled for October 2017. Final Rule scheduled for June 2019.

<sup>25</sup> Section 4 of March 28, 2017 Executive Order, Presidential Executive Order on Promoting Energy Independence and Economic Growth addresses the CPP reconsideration.

<sup>26</sup> 33 U.S.C. §§ 1311 and 1314.

<sup>27</sup> See Table 2-2 and 2-3, Memorandum entitled, "Compliance Costs, Loadings Reductions, and Cost-effectiveness by Wastestream Control Technologies," Isabelle Morin, Abt Associates, dated September 25, 2015.

costs may be underestimated by a factor of two or more, which makes the reconsideration more critical for small power plants that are least able to afford these upgrades.<sup>28</sup>

Without modification, we expect that this extraordinarily stringent final rule would force early closures of many small units owned by small entities, predominantly in rural America, with serious consequences to jobs and communities.<sup>29</sup> This rule is exactly the type of rule targeted for review by the new EO 13771 to address reduce regulatory costs.

In the case of bottom ash, the proposed rule included options that would exclude all plants (Options 1, 2 and 3).<sup>30</sup> Option 4a would exclude bottom ash units of nameplate generating capacity of under 400 MW.<sup>31</sup> Review of the bottom ash controls is the most significant issue, because it drives the highest costs, and it also controls the least amount of toxic pollution. These four options reflect the view of many commenters<sup>32</sup> that no additional bottom ash controls are warranted,<sup>33</sup> or at a minimum, only the largest units should be controlled further. In the case of FGD, the proposed rule included Option 3a which exempted smaller plants with total scrubbed MW capacity of 2000 MW<sup>34</sup> from all FGD requirements. EPA estimates excluding all bottom ash plants would save \$292 million annually, and this estimate is likely an underestimate. Therefore, these regulatory revisions addressed in the proposed rule could provide a lifeline to small plants and preserve local jobs and the economy in the affected areas.

## **EPA Needs to Correct Overestimation of Pollution Removals**

### *A. Bottom Ash Pollutant Removals are Overestimated*

EPA historically has measured the environmental benefits of ELG rules in terms of the quantities and relative toxicities of the pollutants to be removed, known as toxic-weighted pound equivalents (TWPEs).<sup>35</sup> The TWPE metric is used to measure the benefits of pollutant removals to the public. The agency has used this metric over several decades in determining whether the rule is achieving cost-effective pollutant reductions. ELGs typically cost less than \$100/TWPE

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<sup>28</sup> See 2013 UWAG comments, attachment 10, UWAG Methodology for Calculating Dollars per TWPE for Bottom Ash, Fly Ash, and FGD Wastewaters.

<sup>29</sup> See proposed rule's preamble discussion of the rule's expected effect on small unit closures. 78 Fed. Reg. 34450. Also, see later discussion of small unit closures in this letter.

<sup>30</sup> 78 Fed. Reg. 34459-61.

<sup>31</sup> 78 Fed. Reg. 344679-81.

<sup>32</sup> See 2013 UWAG, NRECA and APPA comments.

<sup>33</sup> Bottom ash wastewater is now subject to Best Practical Control Technology (BPT), which requires an impoundment pond to settle the pollution in the pond before discharge, which was established in the 1982 ELG. In the 1982 Technical Development Document, EPA stated that it could not quantify any additional pollution reductions that another control technology could achieve.

<sup>34</sup> Scrubbed MW refers to the cumulative MW capacity of all units at a plant with scrubbers, pollution equipment designed to recover sulfur dioxide emissions.

<sup>35</sup> Toxic weighted pound equivalents, or TWPEs are the measure of total pollution removals, weighted by appropriate toxicity-related factors derived by the agency. See Table F-5, EPA Regulatory Impact Analysis, September 25, 2015.

(\$1981).<sup>36</sup> Rules well in excess of this benchmark were determined to be not cost-effective and not Best Available Technology (BAT).<sup>37</sup>

In Advocacy's comments on the proposed rule, we stated that EPA made several major errors in overestimating the amount of pollution removals to be achieved by the proposed regulation for direct dischargers, particularly with respect to the bottom ash wastewater. This had the effect of dramatically increasing the projected benefits of the proposed rule. EPA corrected some of those earlier major errors, but unfortunately introduced new significant errors in the final rule analysis. Instead of being overestimated by a factor of about 10, EPA's new estimate is inflated by about a factor of three. In other words, Advocacy estimates that the more accurate cost/TWPE is roughly three times EPA's published figures of \$289 - \$383/TWPE.<sup>38</sup> \$289/TWPE is the EPA estimate for units over 400 MW, and \$383/TWPE is the EPA estimate for the remaining smaller units. This cost/TWPE is far in excess of all ELGs except one since 1979.<sup>39</sup> This suggests that EPA should re-evaluate the efficacy of controlling bottom ash for all units, including small units.

According to the EPA final rule, the bottom ash wastewater removals account for 344,000 toxic pound-equivalents (TWPEs). Based on making only corrections for four pollutants of the approximately 50 pollutants analyzed, a better estimate would be 127,000 TWPEs. This means that the agency has inflated the benefits of this regulation with respect to ash pollutant removals. Part of the determination of what constitutes "best available technology economically achievable" has historically included consideration of the costs and pollutant removals (benefits to the public). Proper estimation of the bottom ash wastewater flows is critical in estimating the cost effectiveness of this rule and evaluating the merits of the regulatory options for bottom ash wastewater controls. In the past, EPA has promulgated only those rules whose cost effectiveness (cost/toxic pound-equivalent of pollution removed) was in the \$100/pound-equivalent (TWPE) and under range for direct dischargers of wastewater (facilities that discharge water directly into water bodies).<sup>40</sup> This calculation was used in past ELGs to help design the final regulation, so it needs to be carefully determined.

A review of EPA's data, made available only after the rule was published, reveals significant flaws. In one case, EPA used incorrect reporting units. In another instance, the agency confused the plant value for magnesium for manganese. This error is evident because this manganese value is about 100 times higher than all other manganese values at all other ELG plants. In another instance, EPA used a value for thallium that was based almost entirely on unreliable non-

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<sup>36</sup> The Cost Effectiveness Factor is calculated using the 1981 dollars, the year this benchmark was first adopted by EPA. By standardizing the real value of money, EPA can fairly compare cost-effectiveness of rulemakings over time. The conversion factor for converting 2013 dollars into 1981 dollars is 0.37 (from Engineering News Construction Cost Index). See Table F-5, EPA Regulatory Impact Analysis, September 25, 2015 for the list of rules.

<sup>37</sup> See further discussion on pages 7-8.

<sup>38</sup> EPA's estimates are found in Table 2-3, Memorandum entitled, "Compliance Costs, Loadings Reductions, and Cost-effectiveness by Wastestream Control Technologies," Isabelle Morin, Abt Associates, dated September 25, 2015, Docket EPA-HQ-OW-2009-0819.

<sup>39</sup> See Table F-5, EPA Regulatory Impact Analysis, September 25, 2015.

<sup>40</sup> See discussion below about the basis for the \$100/TWPE benchmark.

detect data,<sup>41</sup> which was obviously too high because the eleven other measurements are 30 or more times lower. Lastly, despite earlier strong criticism from public comment, EPA continued to use 40-year-old data from plants that were not identified and for which the underlying records were unavailable to characterize the pollution loadings. These determinations were not consistent with the data quality procedures required under the OMB Information Quality Guidelines.<sup>42</sup> Even before correction of these data flaws, the bottom ash requirement in this rule still has the distinction of being the second most cost-ineffective rule in EPA's history of all ELGs.<sup>43</sup>

In short, EPA substituted one set of errors for another, and commenters, including Advocacy had no opportunity to comment on the calculations using the new data. Correction of these and other errors would dramatically change the estimated cost effectiveness of the rule with respect to bottom ash wastewaters.

#### *B. Best Available Technology Historically Was Established by EPA at Under \$100/PE*

Industry estimated that the cost effectiveness of the rule as proposed was thousands of dollars/pound-equivalent (TWPE) for regulation of bottom ash, not the \$200 - \$300/TWPE now estimated by EPA.<sup>44</sup> The February 2012 UWAG comments on the draft Merrimack Station permit offer a good summary of the history of cost effectiveness in ELGs.<sup>45</sup> For example, in the 2003 promulgation of the Metals Products and Machinery (MP&M) ELG, EPA found that \$1000/PE was too high; less than \$200/PE was typical for BAT; \$420/PE was "quite expensive;" and \$455/PE was "very expensive." The cost effectiveness for this rule with respect to bottom ash cannot be justified, since the figure, as in MP&M, is about \$1000/TWPE, according to our recalculation. In sum, EPA should seek a regulation with a cost/TWPE that is \$100/TWPE or lower. In that manner, it would be complying with both the RFA and the Clean Water Act and minimizing small firm costs.

As stated above, the cost/TWPE (toxic weighted pound equivalent) is far in excess of the historical benchmarks set by the agency. This is yet another sign that there would be little pollution, particularly from the smallest units in the industry. In addition, by our calculation, the total toxic pollutants average about three pounds (TWPE) per day per plant.<sup>46</sup>

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<sup>41</sup> Non-detect data is data for which the pollutant was not detected, and the value of the pollutant is estimated by taking one half of the detection limit in this rulemaking. The true value is between zero and the detection level.

<sup>42</sup> OMB, *Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility and Integrity of Information Disseminated by Federal Agencies, Republication*, 67 Fed. Reg. 8452 (Feb. 22, 2002).

<sup>43</sup> See 78 Fed. Reg. at 34,504. Only one ELG has a higher cost/TWPE.

<sup>44</sup> The industry estimate varied by size of plant, varying from several thousand dollars/PE to over ten thousand dollars/TWPE. 2013 UWAG comments, Attachment 10. The Advocacy estimate, based on the new final rule data is approximately \$780 to \$1000/TWPE.

<sup>45</sup> Region I Draft Permit for Merrimack Station, UWAG Comments, February 28, 2012, <https://www3.epa.gov/region1/npdes/merrimackstation/comments.html>.

<sup>46</sup> 127,000 TWPEs divided by 365 operating days and 103 plants > 50 MW is approximately 3 TWPE/day.



## Regulatory Options to be Considered in the Reconsideration

### A. *EPA Should Consider Two Options: Exempt All Bottom Ash Units or Exempt Bottom Ash Units Under 400 MW*

The high cost/TWPE for bottom ash demonstrates that the no-discharge bottom ash requirement is very expensive and yields little incremental environmental protection. Thus, EPA should prioritize reconsideration of bottom ash controls. Small entities, including small rural electric cooperatives and municipalities, own many plants that discharge bottom ash wastewater. These discharges are already being treated in ponds using Best Practicable Technology (BPT).<sup>47</sup> EPA found in 1982 that these discharges were so low that the agency could not quantify the pollutant reductions that would be obtained from further regulation.<sup>48</sup> Given the large expense, and small pollutant loadings, EPA needs to seriously examine exempting all bottom ash units from additional controls, and retaining the 1982 BPT requirement for coal ash impoundments.

At a minimum, EPA should exempt small units - under 400 MW - as EPA itself recommended as one of the preferred alternatives in the 2013 proposed rule. This exemption would have no significant adverse effect on the environment while lifting a heavy burden on small entities, particularly in rural America.

EPA recognized the utility of this regulatory flexibility alternative (option 4a) in the preamble to the proposed rule.<sup>49</sup> Many small plants are under great economic pressure to close. In the proposed rule, EPA observed that “most” plants could theoretically install and operate the new systems required by the rule. However, EPA stated in the proposed rule preamble:

EPA believes that companies may choose to shut down 400 MW and smaller units instead of making new investments to comply with proposed zero discharge bottom ash requirements. EPA is basing this belief on its review of units that facilities have announced will be retired or converted to non-coal based fuel sources. Of those units that plants have announced for retirement, and that also generate bottom ash transport water, over 90 percent are 400 MW or less.<sup>50</sup>

Using the 2015 final rule estimates, EPA estimates that excluding units under 400 MW would save \$96 million per year nationwide for small units, and would still preserve 73 percent of the bottom ash pollutant reductions.<sup>51</sup> This is a very attractive trade-off between costs and benefits. Elimination of all bottom ash upgrades would save \$292 million a year nationwide (an additional \$196 million), a very considerable savings with relatively minimal benefits foregone. This means that EPA should consider whether these additional controls are warranted at all.

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<sup>47</sup> The surface impoundment pond was defined as Best Practicable Technology in the 1982 ELG for bottom ash wastewater. See discussion in the 1982 Steam Electric EPA Technical Development Document found in the EPA rulemaking docket. EPA-HQ-OW-2009-0819.

<sup>48</sup> 1982 EPA Steam Electric Technical Development Document at 498.

<sup>49</sup> 78 Fed Reg. 34450 (June 7, 2013).

<sup>50</sup> *Id.*

<sup>51</sup> See Morin Memo Tables 2-2 and 2-3.

We agree with EPA that many plants have already achieved zero discharge for bottom ash wastewater, suggesting that this alternative is economically achievable; this does not mean that it is achievable for small units. EPA is relying on information from plants that have installed zero discharge systems in new plants. There is no information about whether the same would be true for plants that would have to retrofit. Advocacy believes it would be particularly difficult for small plants that do not have available space to expand.

In conclusion, EPA could exempt from BAT requirements either all bottom ash units or all units under 400 MW that discharge bottom ash wastewater without any adverse effect on the environment, while accomplishing the goals of the Clean Water Act, the Regulatory Flexibility Act and the relevant Executive Orders.

*B. Flue Gas Desulfurization: EPA Should Consider Excluding Small Plants or Only Requiring Small Plants To Address Local Water Quality*

There has been considerable criticism of the practicability, high costs, and feasibility of the biological treatment option for FGD wastewaters.<sup>52</sup> Advocacy recommends that biological treatment be required only by local permit authorities that are trying to address localized water quality issues, such as excessive selenium, rather than impose this technology across the board. Selenium is the only pollutant identified by EPA to justify the use of the high cost biological treatment. Since this is only a problem at a minority of plants that discharge into small water bodies, it makes sense to limit this technology to those scenarios. In all other situations, this technology drives up the cost but creates no additional environmental benefits.

Alternatively, we recommend that the more complex and expensive biological treatment be reserved for the largest plants. Biological treatment requires consideration of complex design and maintenance of delicate biological processes, including close control of temperature, chloride and other wastewater constituents under operating conditions that are constantly changing. As of the time of the proposed rule, this was only implemented in six plants in the U.S.<sup>53</sup> Restricting this rule to the largest plants will account for a larger portion of the pollution reduction benefits at a fraction of the cost of the final rule, and will avoid burdening small entities. In other words, a much more cost-effective rule can be designed to replace this final rule, more in line with the requirements of EO 12866, where the costs of the rule must be less than by the expected benefits.<sup>54</sup>

In our calculations, Advocacy finds that the total annualized pre-tax compliance costs for all facilities would be \$195 million, and the TWPEs reduced would be 825,000 per year. Regulating only the larger units, borrowing from the proposed rule to regulate only units with more than 2000 MW scrubbed, the rule would cost only \$92 million and reduce TWPEs by

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<sup>52</sup> See 2013 comments of UWAG and the National Rural Electric Association (NRECA).

<sup>53</sup> 78 Fed. Reg. 34452.

<sup>54</sup> The February 2, 2017 interim guidance on EO 13771 explicitly states that the regulatory cost cap has “no effect on the requirements of EO 12866 or the consideration of regulatory benefits in making regulatory decisions.” This EO includes the central principle that regulatory costs should be justified by regulatory benefits.

550,000.<sup>55</sup> EPA could achieve 67 percent of the TWPE reductions at 47 percent of the costs.<sup>56</sup> This is the expected pattern because small plants generally are disproportionately affected by uniform standards, and would need to spend more to remove the same amount of pollution as a large plant. Excluding the smallest units is a good regulatory option because it relieves the burden on small plants, more frequently owned by smaller entities, increases the cost effectiveness of the regulation and lowers total costs.

There is a separate issue with regard to the applicable FGD limits, which are based on biological treatment. EPA relied upon a limited set of data upon which to set FGD limits, and overlooked the fact that none of this data reflected the many plants in the industry that relied on subbituminous coal or lignite. The record includes data which strongly suggests that these FGD limits are not feasible for such plants or plants with high chloride content. EPA needs to reflect further upon this, and re-examine its derived limits, possibly including excluding plants that use subbituminous coal and lignite.

### C. Other Issues

#### 1. Pretreatment Standards for Indirect Dischargers

We understand that six plants are indirect dischargers,<sup>57</sup> and those face the same stringent standards required for direct dischargers, despite the fact that these discharges go through publicly-owned treatment plants before discharging into the waters of the United States. Given the extremely limited pollutant loadings and relative high costs, according to EPA's own analysis,<sup>58</sup> these requirements appear to be ripe for substantial reduction or elimination. Under the 1979 NRDC consent decree, this entire subcategory would be excluded by rule given the de minimis amount of pollution,<sup>59</sup> as this is less than one pound TWPE/day.<sup>60</sup> As detailed in the UWAG petition, the City of Springfield is facing a heavy expense to address this rule.<sup>61</sup> Furthermore, these plants face the November 1, 2018 compliance date, with no permit authority flexibility to grant extensions, unlike direct dischargers. These compliance dates need to be

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<sup>55</sup> Calculations are based on the proportion of total annualized compliance costs and TWPE reduction associated with covering only plants with greater than 2,000 MW wet scrubbed capacity from the proposed rule. [These options were not analyzed in the final rule.] This was derived by comparing costs and TWPE reductions for policy options 3b and 3, representing the coverage of only large plants and all plants, respectively. See EPA figures at Table XI-1 and Table XII-1, 78 Fed. Reg. at 34504.

<sup>56</sup> As described above, Advocacy used the proposal preamble figures to derive these estimates since EPA did not examine these proposal options in the final rule.

<sup>57</sup> March 2017 Fact Sheet on Stream Electric ELG Pretreatment Standards, City of Springfield, Illinois, Office of Public Utilities.

<sup>58</sup> See EPA RIA, Table F-2 which shows that the total pollutant removals from this sector is barely 0.1% of the entire industry sector. The cost/ton, even under EPA's understated math is stated as \$5,441/TWPE (Table F-4)..

<sup>59</sup> Paragraph 8(a)(iii) of the consent decree listed an exclusion where the "amount and toxicity in the discharge does not justify developing national regulations." The 1984 Clean Water Amendments generally codified the provisions in this consent decree. See discussion in *Economic Objectives within a Bureaucratic Process: Setting Pollution Control Requirements under the Clean Water Act*, Fraas & Mulvey, Journal of Environmental Economics and Management Vol 17, 35-53. (1989) "For example, if the loading is considered *de minimis* then the Administrator can find that additional treatment is unnecessary." Fraas & Mulvey at 39.

<sup>60</sup> EPA RIA Table F-2 shows 1,556 TWPE removed for final rule. Divided by 365 days per year and six plants yields about one pound TWPE/day.

<sup>61</sup> UWAG petition at 66-67.

amended now under applicable legal standards, including consideration of a stay under section 705 of the Administrative Procedure Act, given that engineering and financial planning and permitting requires years. Under 5 U.S.C. § 705, EPA may postpone the effective dates of rules where “justice may require it,” pending judicial review.

## 2. Compliance Dates for Indirect and Direct Dischargers

As addressed above, the compliance date for indirect dischargers needs immediate revision, given the imminence of the November 1, 2018 deadline. Direct dischargers face a similar problem, with the requirement to be completed as “soon as possible”, which could be November 2018, or as distant as December 2023, with the compliance date established by the permit authorities. Similarly, EPA should act administratively to stay or extend these deadlines. Further, as explained in the UWAG petition, in more detail, EPA could issue informal guidance to the permit writers stating that the pendency of this reconsideration and related litigation are grounds for later deadlines.

## 3. Related Rulemakings

The agency needs to coordinate review and revision of this ELG with the CCR and CCP rulemaking proceedings. For example, the UWAG petition stated that it would be extremely inefficient to undertake system retrofits for this ELG and then revise these plans after EPA modifies the CCR requirements.<sup>62</sup>

## 4. Extension of Compliance Time for Plants Scheduled to Close – Lifeline Extension

EPA did not consider adjustment of the final compliance dates for plants that are planning to close shortly after the compliance dates. It would be extremely expensive and wasteful to expend millions of dollars in capital costs, and then simply close. The agency should consider an exemption for units that plan to close within five to ten years.

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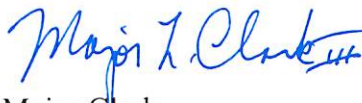
<sup>62</sup> UWAG petition at 73.

## Conclusion

Advocacy strongly believes that the final rule is not consistent with the requirements of the Regulatory Flexibility Act, and not consistent with provisions of relevant Executive Orders.<sup>63</sup> EPA should provide greater transparency in its pollutant loadings and cost estimates, and correct its overestimations of pollution removals. EPA should consider further regulatory options, including exempting all bottom ash wastewater flows, and setting an exclusion levels for FGD wastewaters subject to biological treatment.

We look forward to working further with the agency on developing the final rule. If you have any questions or comments on this letter, please contact me or Kevin Bromberg of my staff at 202-205-6964 or kevin.bromberg@sba.gov.

Sincerely,



Major Clark  
Acting Chief Counsel for Advocacy



Kevin Bromberg  
Assistant Chief Counsel  
Office of Advocacy

cc: The Honorable Dom Mancini, Acting Administrator  
Office of Information and Regulatory Affairs  
Office of Management and Budget  
Docket No. EPA-HQ-OW-2009-0819  
Mike Shapiro, Acting Assistant Administrator for Water

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<sup>63</sup> President Obama's EO 13563 was a essentially a reissue of President Clinton's EO 12866, with some small modifications. President Trump issued EO 13771, and the related 13777.