EXHIBIT D

COMPLIANCE WITH ACT 143 OF 2007
From: Goff, Patricia (Commission) [GOFFPATT1@adeq.state.ar.us]
Sent: Wednesday, July 14, 2010 3:57 PM
To: Marcy Taylor
Subject: FW: Alcoa Third-Party Rulemaking Petition

-----Original Message-----
From: Charles Moulton [mailto:charles.moulton@arkansasag.gov]
Sent: Monday, July 12, 2010 4:42 PM
To: ipbrown@arkansasedc.com
Cc: Goff, Patricia (Commission)
Subject: FW: Alcoa Third-Party Rulemaking Petition

Ms. Brown —

I do not know whether you heard that Judge Michael O'Malley retired from the Pollution Control and Ecology Commission on July 1, 2010.

The Commission has requested that I act as interim AHO until a replacement for Judge O'Malley is hired.

I have received the following letter addressed to you regarding a proposed Third-Party Rulemaking change. I am forwarding that letter, and the accompanying attachments, to you for AEDC's consideration.

Should you have any questions my telephone number is 682-5310.

Sincerely,

Charlie Moulton
Acting Administrative Hearing Officer

From: Marcy Taylor [mailto:MTaylor@mwlaw.com]
Sent: Monday, July 12, 2010 1:55 PM
To: Charles Moulton
Subject: Alcoa Third-Party Rulemaking Petition

Dear Judge Moulton:

Alcoa Inc. (Alcoa) will be filing a Petition to Initiate a Third-Party Rulemaking to amend Arkansas Pollution Control & Ecology (APCEC) Regulation No. 2. Pursuant to the Regulations Formatting and Drafting Guidelines and the requirements of Act 143 of 2007 attached is a letter, addressed to the Arkansas Economic Development Commission (AEDC), seeking a determination that Alcoa's requested amendment does not impact small businesses. Attached to the letter to AEDC are the blacklined copy of the proposed amendment to Regulation No. 2 and the Economic Impact Statement of Proposed Rules or Regulations, EO 05-04: Regulatory Flexibility.

Please forward the information to AEDC for their review and approval. It is my hope to be able to submit the rulemaking Petition to APCEC for consideration at the August Commission meeting. Thank you for your assistance with this.

Marcy
July 12, 2010

Ms. Patricia Brown  
Division Director  
Arkansas Economic Development Commission  
Arkansas Department of Economic Development  
One Capitol Mall  
Little Rock, AR 72201

Re: Economic Impact/Environmental Benefit Analysis  
Alcoa Inc.'s Third Party Rulemaking Petition

Dear Ms. Brown:

Alcoa Inc. (Alcoa) intends to petition the Arkansas Pollution Control & Ecology Commission (APCEC) to amend APCEC Regulation No. 2, Regulation Establishing Water Quality Standards for Surface Waters of the State of Arkansas. A copy of the proposed amendment and the Economic Impact Statement of Proposed Rules or Regulations, EO 05-04: Regulatory Flexibility are attached for your review. Additional documentation, including a copy of the Environmental Improvement Project Notice of Intent is available for your review upon request. This is being submitted to AEDC pursuant to the requirements of Act 143 of 2007.

Alcoa is requesting a temporary modification of the selenium standard for Holly Creek to reflect current and historic conditions in the creek during the time Alcoa will be conducting an Environmental Improvement Project required by the Arkansas Department of Environmental Quality to develop technically and economically feasible biological or chemical treatments or source reduction strategies capable of reducing the selenium to meet the water quality standards.

Holly Creek is located entirely within Alcoa's property and the surrounding watershed contains no businesses which would be impacted by the proposed rule. There will be no cost to state government associated with the proposed amendment. Likewise, there will be no regulatory burden such as fees, reporting requirements, or the obtaining of any regulatory permit imposed on any small business because of the modification of the selenium standard for Holly Creek. The proposed amendment will not create any barrier to entry. No additional requirements will be imposed on any small business by the proposed amendment and no small business will be required to implement any changes because of the proposed amendment. The requested changes will have no impact on any small business. It will impact only Alcoa.

Please review the prepared amendment to APCEC Regulation No. 2, and provide your approval of same pursuant to Act 143 of 2007 as amended by Act 809 of 2009.
Should you have any questions or concerns regarding this matter, please do not hesitate to contact me.

Sincerely,

MITCHELL, WILLIAMS, SELIG, GATES & WOODWARD, P.L.L.C.

By [Signature]
Marcella J. Taylor

MJT:ce
Enclosures

cc: The Honorable Charles L. Moulton (w/encls.)
ARKANSAS POLLUTION CONTROL AND ECOLOGY COMMISSION

REGULATION NO. 2

REGULATION ESTABLISHING WATER QUALITY STANDARDS FOR SURFACE WATERS OF THE STATE OF ARKANSAS

INITIAL DRAFT

Submitted to the Arkansas Pollution Control and Ecology Commission on August 27, 2010)
DESIGNATED USES: GULF COASTAL ECOREGION
(Plates GC-1, GC-2, GC-3, GC-4)

Extraordinary Resource Waters
Saline River (GC-3, GC-4)
Moro Creek - adjacent to natural area (GC-3)

Natural and Scenic Waterways
Saline River from the Grant-Saline County line to mouth (GC-3)

Ecologically Sensitive Waterbodies
Little River above Millwood Reservoir - location of Ouachita rock pocketbook and pink mucket mussels (GC-1)
Grassy Lake and Yellow Creek below Millwood Reservoir - unique ecosystem and biota (GC-1) Lower Little Missouri River - location of peppered shiner and longnose darter (GC-2)
Lower Saline River - location of peppered shiner, crystal darter and goldstripe darter (GC-3)
Ouachita River near Arkadelphia - location of flat floater, Ouachita rock pocketbook and pink mucket mussels (GC-2)

Streams with Substantial Springwater Influence
L'Eau Frais (GC-4)
Cypress Creek (GC-4)
East and West Fork Tulip Creeks (GC-4)
Others to be determined

Primary Contact Recreation - all streams with watersheds greater than 10 mi² and all lakes/reservoirs

Secondary Contact Recreation - all waters

Domestic, Industrial and Agricultural Water Supply - all waters

Fisheries
Trout
Little Missouri River from Narrows Dam to confluence with Muddy Fork (GC-1)

Lakes and Reservoirs - all

Streams
Seasonal Gulf Coastal fishery - all streams with watersheds of less than 10 mi² except as otherwise provided in Reg. 2.505
Perennial Gulf Coastal fishery - all streams with watersheds of 10 mi² or larger and those waters where discharges equal or exceed 1 CFS

Use Variations Supported by UAA
Loutre Creek - perennial fishery, except seasonal from railroad bridge to mouth (GC-2, #1)
Unnamed tributary to Smackover Creek - no fishable/swimmable uses (GC-2, #2)
Unnamed tributary to Flat Creek - no fishable/swimmable uses (GC-2, #4)
Dodson Creek - perennial fishery (GC-4, #5)
Jug Creek - perennial fishery (GC-2, #6)
Lick Creek - seasonal fishery; no primary contact (GC-1, #7)
Coffee Creek and Mossy Lake - no fishable/swimmable or domestic water supply uses (GC-3, #8)
Red River from Oklahoma to confluence with Little River - No domestic water supply use (GC-1, #9)
Bluff Creek and unnamed tributary - no domestic water supply use(GC-1,#10)
Mine Creek from Highway 27 to Millwood Lake - no domestic water supply use (GC-1, #11)
Caney Creek - no domestic or industrial water supply use(GC-1,#12)
**Use Variations Supported by UAA**

Bois d'Arc Creek from Caney Creek to Red River - no domestic or industrial water supply use(GC-1,#13)
Town Creek below Acme tributary - no domestic water supply(GC-4,#14)
Unnamed trib. from Acme - no domestic water supply(GC-4,#14)
Gun Creek - no domestic water supply use(GC-2,#15)
Bayou de Loutre from Gum Creek to State line - no domestic water supply use(GC-2,#16)
Walker Branch - no domestic water supply use(GC-2,#17)
Little Cornie Bayou from Walker Branch to State line - no domestic water supply use(GC-2,#18)
Alcoa unnamed trib to Hurricane Cr. and Hurricane Cr. - no domestic water supply use(GC-4,#19)
Holly Creek - no domestic water supply use(GC-4,#20)
Dry Lost Creek and Tribs. - no domestic water supply use(GC-4,#21)
Lost Creek - no domestic water supply use(GC-4,#22)
Albemarle unnamed trib (AUT) to Horsehead Creek - no domestic water supply use(GC-2,#27)
Horsehead Creek from AUT to mouth - no domestic water supply use(GC-2,#27)
Dismukes Creek and Big Creek to Bayou Dorcheat – no domestic water supply
Boggy Creek from the discharge from Clean Harbors El Dorado LCC downstream to the confluence of Bayou de Loutre - no domestic water supply use

**SPECIFIC STANDARDS: GULF COASTAL ECOREGION**
(Plates GC-1, GC-2, GC-3, GC-4)

<table>
<thead>
<tr>
<th></th>
<th>Typical Streams</th>
<th>Spring Water Streams</th>
<th>Lakes and Reservoirs</th>
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<tr>
<td><strong>Temperature °C (°F)</strong></td>
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<tr>
<td>Ouachita River</td>
<td>30 (86)</td>
<td>30 (86)</td>
<td>32 (89.6)</td>
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<td>(state line to Little Missouri River)</td>
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<tr>
<td>Red River</td>
<td>32 (89.6)</td>
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<td><strong>Turbidity (NTU) (base/all)</strong></td>
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<td>25/45</td>
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<td>Red River (base/all)</td>
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<td><strong>Minerals</strong></td>
<td></td>
<td>see Reg. 2.511</td>
<td>see Reg. 2.511</td>
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<tr>
<td><strong>Dissolved Oxygen (mg/l)</strong> **</td>
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<td>Pri.</td>
<td>Crit.</td>
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<td>&lt;10 mi² watershed</td>
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<td>2</td>
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<tr>
<td>10 mi² - 500 mi²</td>
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<td>3</td>
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<tr>
<td>&gt;500 mi² watershed</td>
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<tr>
<td>All sizes</td>
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<td>5</td>
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<tr>
<td>All other standards</td>
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<td>(same as statewide)</td>
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</table>

* Increase over natural temperatures may not be more than 2.8°C (5°F).
At water temperatures ≤10°C or during March, April and May when stream flows are 15 CFS and greater, the primary season D.O. standard will be 6.5 mg/l. When water temperatures exceed 22°C, the critical season D.O. standard may be depressed by 1 mg/l for no more than 8 hours during a 24-hour period.

**Variations Supported by UAA**

- Loutre Creek - from headwaters to railroad bridge, critical season D.O. standard - 3 mg/l; primary season - 5 mg/l; from railroad bridge to mouth, critical season D.O. - 2 mg/l (GC-2, #1)
- Unnamed tributary to Smackover Creek - headwaters to Smackover Creek, year round D.O. criteria - 2 mg/l (GC-2, #2)
- Unnamed tributary to Flat Creek - from headwaters to Flat Creek, year round D.O. criteria - 2 mg/l (GC-4, #4)
- Dodson Creek - from headwaters to confluence with Saline River, critical season D.O. standard - 3 mg/l (GC-4, #5)
- Jug Creek - from headwaters to confluence with Moro Creek, critical season D.O. standard - 3 mg/l (GC-2, #6)
- Lick Creek - from headwaters to Millwood Reservoir, critical season D.O. standard - 2 mg/l (GC-1, #7)
- Coffee Creek and Mossy Lake - exempt from Reg. 2.406 and Chapter Five (GC-3, #8)
- Red River from Oklahoma to confluence with Little River - total dissolved solids - 850 mg/l (GC-1, #9)
- Bluff Creek and unnamed trib. - sulfates 651 mg/l; total dissolved solids 1033 mg/l(GC-1,#10)
- Muddy Fork Little Missouri River - sulfates 250 mg/l; total dissolved solids 500 mg/l(GC-1,#24)
- Little Missouri River - sulfates 90 mg/l; total dissolved solids 180 mg/l(GC-1,#25)
- Mine Creek from Highway 27 to Millwood Lake - chlorides - 90 mg/l; sulfates - 65 mg/l; TDS - 700 mg/l (GC-1,#11)
- Caney Creek - chlorides 113 mg/l; sulfates 283 mg/l; total dissolved solids 420 mg/l(GC-1,#12)
- Bois d'Arc Creek from Caney Creek to Red River - chlorides 113 mg/l; sulfates 283 mg/l; dissolved solids 420 mg/l(GC-1,#13)
- Town Creek below Acme tributary - sulfates 200 mg/l; TDS 700 mg/l(GC-4,#14)
- Unnamed trib. from Acme - sulfates 330 mg/l; TDS 830 mg/l(GC-4,#14)
- Gun Creek - chlorides 104 mg/l; TDS 311 mg/l(GC-2,#15)
- Bayou de Loutre from Gunn Creek to State line - Chlorides 250 mg/l; TDS solids 750 mg/l(GC-2,#16)
- Walker Branch - chlorides 180 mg/l; total dissolved solids 970 mg/l(GC-2,#17)
- Ouachita River - from Ouachita River mile(ORM) 223 to the Arkansas-Louisiana border(ORM 221.1),site specific seasonal D.O.criteria: 3 mg/L June and July; 4.5 mg/L August; 5 mg/L September through May. These seasonal criteria may be unattainable during or following naturally occurring high flows,(i.e., river stage above 65 feet measured at the lower gauge at the Felsenthal Lock and Dam, Station No.89-o, and also for the two weeks following the recession of flood waters below 65 feet), which occurs from May through August. Naturally occurring conditions which fail to meet criteria should not be interpreted as violations of these criteria (GC-3, #26)
- Alcoa unnamed trib. to Hurricane Cr. And Hurricane Cr. - see Reg. 2.511(GC-4, #19)
- Holly Creek - See Reg. 2.511(GC-4, #20)
- Saline River bifurcation - see Reg. 2.511(GC-4, #23)
- Dry Lost Creek and tributaries - see Reg. 2.511(GC-4, #21)
- Lost Creek - see Reg. 2.511(GC-4, #22)
- Albemarle unnamed trib (AUT) to Horsehead Creek - chlorides 137 mg/l; TDS 383 mg/l (GC-2,#27)
- Horsehead Creek from AUT to mouth - chlorides 85 mg/l; TDS 260 mg/l(GC-2,#27)
- Bayou Dorcheat - sulfates 16 mg/l(GC-2,#27)
- Dismukes Creek - chlorides 26 mg/L; TDS 157 mg/L(GC-2, #28)
- Big Creek from Dismukes to Bayou Dorcheat - chlorides 20 mg/L; TDS 200 mg/L(GC-2, #28)
- Bayou de Loutre from Chemtura outfall to Loutre Creek - maximum water temperature 96°F(GC-2, #29)
- Unnamed tributary of Lake June from Entergy Couch Plant to confluence with Lake June – maximum water temperature 95 degrees F (limitation of 5 degrees above natural temperature does not apply) (GC-1, #30).
- Unnamed tributary from Great Lakes Chemical Company Outfall 002 to Bayou de Loutre-chloride 65, sulfate 35 mg/L, TDS 141 mg/L(GC-2, #31)
- Unnamed tributary from Great Lakes Chemical Company Outfall 004 to Bayou de Loutre-chloride 239 mg/L, TDS 324 mg/L(GC-2, #32)
- Bayou de Loutre from mouth of UT004 to mouth of Loutre Creek, chloride 278 mg/L(GC-2, #33)
- Unnamed tributary from Great Lakes Chemical Company Outfall 003 (UT003) downstream to unnamed tributary to Little Cornie Bayou – chloride 538 mg/l, sulfate 35 mg/L, and TDS 519 mg/L(GC-2, #34)
- Unnamed tributary of Little Cornie Bayou to confluence with Little Cornie Bayou – chloride 305 mg/L and TDS...
325 mg/L (GC-2, #35)
Little Cornie Bayou from mouth UTA to state line- chloride 215mg/L, sulfate 25mg/L and TDS 500mg/L. (GC-2, #36)

Unnamed tributary to Flat Creek from EDCC Outfall 001 d/s to confluence with unnamed tributary A to Flat Creek Chloride 23 mg/L, Sulfate 125 mg/L, TDS 475 mg/L, (GC-2, #37)
Unnamed tributary A to Flat Creek from mouth of EDCC 001 ditch to confluence with Flat Creek, Chloride 16 mg/L, Sulfate 80 mg/L, TDS 315 mg/L, (GC-2, #38)
Flat Creek from mouth of UTA to confluence with Haynes Creek, Chloride 165 mg/L, Sulfate 67 mg/L, TDS 560 mg/L (GC-2, #39)
Haynes Creek from mouth of Flat Creek to confluence with Smackover Creek, Chloride 360 mg/L, Sulfate 55 mg/L, TDS 855 mg/L (GC-2, #40)
Loutre Creek from Hwy 15 South to the confluence of Bayou de Loutre Chloride, 256mg/I; Sulfate 997mg/I, TDS, 1756* (GC-3. #41)
Bayou de Loutre from Loutre Creek to the discharge for the City of El Dorado South facility Chloride, 264mg/I; Sulfate 635mg/l, TDS, 1236* (GC-3. #42)
Bayou de Loutre from the discharge from the City of El Dorado-South downstream to the mouth of Gum Creek. Chloride, 250mg/I; Sulfate 431mg/I, TDS, 966 (GC-3. #43)
Bayou de Loutre from the mouth of Gum Creek downstream to the mouth of Boggy Creek Chloride, 250mg/I; Sulfate 345mg/l, TDS, 780 (GC-3. #44)
Bayou de Loutre from the mouth of Boggy Creek downstream to the mouth of Hibank Creek Chloride, 250mg/I; Sulfate 296mg/l, TDS, 750 (GC-3. #45)
Bayou de Loutre from the mouth of Hibank Creek downstream to the mouth of Mill Creek Chloride, 250mg/I; Sulfate 263mg/l, TDS, 750 (GC-3. #46)
Bayou de Loutre from the mouth of Mill Creek downstream to the mouth of Buckaloo Branch Chloride, 250mg/I; Sulfate 237mg/l, TDS, 750 (GC-3. #47)
Bayou de Loutre from the mouth of Buckaloo Branch downstream to the mouth of Bear Creek Chloride, 250mg/I; Sulfate 216mg/l, TDS, 750 (GC-3. #48)
Bayou de Loutre from the mouth of Bear Creek to the final segment of Bayou de Loutre. Chloride, 250mg/I; Sulfate 198mg/l, TDS, 750(GC-3. #49)
Bayou de Loutre (Final Segment) to the Arkansas / Louisiana State Line. Chloride, 250mg/I; Sulfate 171 mg/l, TDS, 750(GC-3. #50)
Boggy Creek from the discharge from Clean Harbors El Dorado LCC downstream to the confluence of Bayou de Loutre. Chloride, 631mg/I; Sulfate, 63 mg/l, TDS, 1360; Selenium, 15.6 u/l

Variations Supported by EIP
Holly Creek: Selenium, Chronic Standard, 17u/l (GC-4. #1)
Plate GC-4 (Gulf Coastal Plain)

**LEGEND**
- Ecologically Sensitive Waterbodies
- Trout Waters
- Extraordinary Resource Waters
- Natural and Scenic Waterways
- Variation by UAA
- Variation by EIP
Title or Subject: Petition to Amend Arkansas Pollution Control & Ecology Commission Regulation No. 2, Arkansas Water Quality Standards

Benefits of the Proposed Rule or Regulation

1. Explain the need for the proposed change(s). Did any complaints motivate you to pursue regulatory action? If so, please explain the nature of such complaints.
   - Alcoa Inc. (Alcoa) seeks to have the chronic selenium standard set forth in Arkansas Pollution Control & Ecology Commission (APCEC) Regulation No. 2 modified from 5 μg/l to 17 μg/l in Holly Creek (Saline County) during the term of an Environmental Improvement Project (EIP). The EIP is authorized by Ark. Code Ann. § 8-5-901 et seq. and APCEC Regulation No. 2, § 2.105 and Appendix B and is required by Alcoa's current NPDES permit.
   - This proposed change is needed to reflect actual and historic conditions while Alcoa carries out the EIP to find economically and technically feasible treatment technologies or source reduction strategies to reduce selenium in Alcoa's discharge to meet the chronic water quality standard.
   - No complaints motivated Alcoa to seek amendment of APCEC Regulation No. 2.

2. What are the top three benefits of the proposed rule or regulation?
   - Compliance by Alcoa with the terms of its NPDES permit limits.
   - Revised water quality standards which reflect actual conditions.
   - Continued protection of the designated and attainable uses of the receiving stream.

3. What, in your estimation, would be the consequence of taking no action, thereby maintaining the status quo?
   - There is no current economically and technically feasible treatment technology or source reduction strategy to reduce selenium in Alcoa's discharge to the current chronic selenium standard (5 μg/l) and Alcoa must discharge the 1.5 billion to 4.5 billion gallons per year of water generated and treated at the site. Therefore, Alcoa will have no option except to relocate the discharge point to the Saline River if no action is taken to amend the water quality standard.

4. Describe the market-based alternatives or voluntary standards that were considered in place of the proposed regulation and state the reason(s) for not selecting those alternatives.
   - Alcoa has only 2 alternatives: modification of the chronic selenium standard during the term of the EIP or relocate the discharge point to the Saline River.
   - Discharge to the Saline River is an alternative which is not favored by Alcoa or ADEQ.
   - Source reduction strategies which have already been considered include reduction of infiltration into the bauxite residue disposal areas which is the source of the selenium (estimated cost: $56 - $100 million); recycling/reuse of the bauxite residue (estimated cost: $1 billion); recycling/reuse of the leachate (estimated cost: $7.5 million per year).
Impact of Proposed Rule or Regulation

5. Estimate the cost to state government of collecting information, completing paperwork, filing, recordkeeping, auditing and inspecting associated with this new rule or regulation.
   - There is no cost to state government associated with this proposed new rule.

6. What types of small businesses will be required to comply with the proposed rule or regulation? Please estimate the number of small businesses affected.
   - There will be no additional requirements for any small business due to this rule change.

7. Does the proposed regulation create barriers to entry? If so, please describe those barriers and why those barriers are necessary.
   - The proposed regulation does not create barriers to entry.

8. Explain the additional requirements with which small business owners will have to comply and estimate the costs associated with compliance.
   - There are no additional requirements with which small business owners will have to comply.

9. State whether the proposed regulation contains different requirements for different sized entities, and explain why this is, or is not, necessary.
   - The proposed regulation does not contain different requirements for different sized entities.

10. Describe your understanding of the ability of small business owners to implement changes required by the proposed regulation.
    - No small business owners will be required to implement changes because of the proposed regulation.

11. How does this rule or regulation compare to similar rules and regulations in other states or the federal government?
    - Both federal environmental laws and the environmental laws of most, if not all, states provide for the establishment and amendment of water quality standards, not only by the federal and state agencies, but also by third party petition. Although the actual numbers set forth in any federal or state promulgated water quality standards may vary one from the other, this proposed amendment to APCEC Regulation No. 2 would be comparable to water quality standards in other states.

12. Provide a summary of the input your agency has received from small business or small business advocates about the proposed rule or regulation.
    - Alcoa is not an agency and, to the best of its knowledge, ADEQ has not yet received input about the proposed rule from any small business or small business advocates. APCEC Regulation No. 8 requires submission of this information to the public. Input will come about during the public comment period once the APCEC initiates the rule-making.