

## Marisa Weber

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**From:** PUBCOMMENT-OCC  
**Sent:** Monday, September 15, 2014 9:23 AM  
**To:** PUBCOMMENT-OCC2  
**Subject:** FW: LCRA Permit No. WQ00210500

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LOWD  
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**From:** CHIEFCLK  
**Sent:** Monday, September 15, 2014 8:19 AM  
**To:** PUBCOMMENT-OCC  
**Subject:** FW: LCRA Permit No. WQ00210500

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**From:** Muriel Tipps [mailto:murtipps@msn.com]  
**Sent:** Monday, September 15, 2014 6:35 AM  
**To:** CHIEFCLK  
**Subject:** LCRA Permit No. WQ00210500

Bridget C. Bohac - TCEQ Chief Clerk

With so much changing in our environment in regard to water supply and quality I think it would be justified to call a public hearing on this permit. With the information at hand I see there are definite problems with groundwater tables near the coal ash ponds & landfill at the Fayette Plant. These need to be explored for the sake of the people living near this plant and agriculture businesses.

The draft permit does not set effluent limits for the numerous toxic pollutants and is not a good sign of management. One feels that this plant is continuing to operate under some very old standards.

There also seems to be no provision to clean up and prevent future pollution into the groundwater in the vicinity. This is unacceptable to the people of Texas. Provisions for this should be included in the existing and FUTURE permit.

There are many public health issues at hand here and I feel that a public hearing is the in order to address critical problems with this plant and a plan to rectify the problems.

Please authorize a public hearing on this matter immediately for this project. With the existing drought it makes this a **necessity** with water at a premium and in short supply. Many more people may be depending on this groundwater supply now and suffering the consequences of the toxicity being found in the water tables and in close proximity to the coal ash ponds.

Let's work for the people of Texas when these permits come up for renewal and insist on better compliance & modernization of these plants. These plants make a lot of money and it is their responsibility to address these issues immediately.

MW

Regards,

**Roy & Muriel Tipps**  
**Tipps Bait Camp**  
**PO Box 260**  
**Cedar Lane, Tx 77415**



**Billie Clays**  
**67 PR 651**  
**Bay City, TEXas 77414**



Attention: TCEQ-Bridget C. Bohac

As an organization of over 60 pecan orchard growers farming around and in the Cedar Creek and its tributaries connected with the Fayette Power Plant Ash Ponds, we demand that TCEQ conduct a "Public Hearing" regarding the Lower Colorado River Authority's application and intent to obtain a water quality permit for the Fayette Power Plant.

Thanks,

The Texas Pecan Growers' Alliance

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CHIEF CLERKS OFFICE

2014 SEP 16 AM 10:24

TEXAS  
COMMISSION  
ON ENVIRONMENTAL  
QUALITY

REVIEWED

SEP 16 2014

By *AR*

*H*

*RM*

September 10, 2014

Bridget C. Bohac  
Chief Clerk, MC-105  
Texas Commission on Environmental Quality  
P.O. Box 13087  
Austin, Texas 78711-3087  
<http://www5.tceq.state.tx.us/rules/ecomments/>

*LWD  
93275*

REVIEWED

SEP 16 2014

By *PR*

*pm*

CHIEF CLERK'S OFFICE

2014 SEP 16 AM 10:25

TEXAS  
COMMISSION  
ON ENVIRONMENTAL  
QUALITY

**RE: *Notice of Application and Intent to Obtain Water Quality Permit Renewal for the LCRA Fayette Power Plant, Permit No. WQ0002105000***

Dear Chief Clerk:

We are writing to request a public meeting to discuss the Lower Colorado River Authority's ("LCRA") application and intent to obtain a water quality permit for the Fayette Power Plant. Each day across the United States, coal-burning power plants like the LCRA Fayette Power Plant dump millions of gallons of wastewater loaded with toxic pollutants like arsenic, boron, cadmium, chromium, lead, mercury, and selenium into our rivers, lakes, and streams. This toxic soup can be harmful to humans and aquatic life in even small doses. This pollution is discharged directly from plants and waste pits; flows from old, unlined surface impoundments that many plants use to store toxic slurries of coal ash and smokestack scrubber sludge; and seeps from unlined ponds and landfills into ground and surface waters.

LCRA's own 2010 annual groundwater monitoring report shows that groundwater near the coal ash ponds and a landfill at the Fayette Plant contains levels of arsenic, selenium, cobalt, and molybdenum exceeding Texas Protective Contamination Levels (PCLs) and federal Maximum Contaminant Levels (MCLs). Selenium levels have reached more than 4 times the PCL and MCL, cobalt levels have reached more than 3 times the PCL, and molybdenum has exceeded the federal Life-time Health Advisory by nearly 4 times and exceeded the PCL in water down-gradient or cross-gradient of ash disposal areas. Aluminum, chloride, manganese, sulfate and total dissolved solids exceed federal secondary MCLs.

Moreover, according to LCRA's report, many of the groundwater monitoring wells are located within the shallow groundwater bearing Middle Sand Unit. LCRA acknowledges that the "Middle Sand is believed to be in communication with the Cedar Creek Reservoir," and that contaminated groundwater "could migrate beyond the boundaries of the [Fayette Power Plant] property." In short, pollution from the Fayette Plant's leaking coal ash dumps could potentially impact water quality in the Cedar Creek Reservoir and nearby residential drinking water wells.

Despite this imminent public health risk, the current draft Clean Water Act permit fails to set effluent limits for almost all of the toxic pollutants found in coal ash wastewaters, or address the seeps and leaks from the plant's coal ash disposal units. In addition:

*PR*

- **The current Draft Permit does not set effluent limits for the numerous toxic pollutants that are regularly discharged in coal ash wastewaters.** Under the Clean Water Act, Clean Water Act permits must include technology-based effluent limits for all discharged pollutants. Despite the fact that EPA has identified 27 pollutants found in coal ash wastewaters (including, aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, molybdenum, nickel, selenium, silver, sodium, thallium, tin, titanium, vanadium, yttrium, and zinc), the current permit for the Fayette Plant only imposes limits on one toxic pollutant—selenium. *The revised Clean Water Act permit must impose effluent limits that eliminate or control toxic discharges as required by law.*
- **TCEQ must also require LCRA to clean up and prevent pollution from its leaking coal ash disposal units.** Discharges, including leaks and seeps, of leachate from the Plant's coal ash impoundments and landfills to surface waters and/or groundwater with a hydrogeological connection to surface water without a permit are prohibited by the Clean Water Act. LCRA itself has identified concentrations of pollutants like arsenic, selenium, molybdenum, and cobalt at levels that exceed federal and state groundwater standards, and acknowledged that this pollution is occurring in groundwater that communicates with the Cedar Creek Reservoir and could migrate offsite. *The revised Clean Water Act permit must impose requirements to clean up and eliminate pollution leaks and seeps into hydrogeologically connected ground and surface waters.*

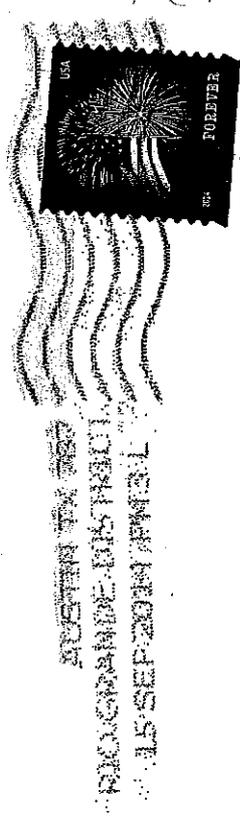
In sum, it does not appear that the existing permit, if renewed, would comply with the federal Clean Water Act ("CWA") or state law, including the Texas Water Code and the Texas Surface Water Quality Standards. We respectfully request that TCEQ hold a public meeting to provide an opportunity for the public to address these critical public health threats.

Thank you for considering these comments and my request for a public meeting.

Sincerely,

TEXAS PECAN GROWERS' ALLIANCE, PRES.  
Printed Name: TEXAS PECAN GROWERS ALLIANCE  
Mailing Address:  
5932 BACA ROAD  
FAYETTEVILLE, TX. 78940  
Email: N/A

*Mr. Jay's Pecan Growers Alliance  
5932 Boca Rd  
Fayetteville, TX 78940*



AUSTIN TX 787  
PROGRANDE-DISTRICT  
15 SEP 2014 10:25

TEXAS  
COMMISSION  
ON ENVIRONMENTAL  
QUALITY

2014 SEP 16 10:25  
CHIEF CLERK'S OFFICE

*Bridget C. Bohac, Chief Clerk, MC 205  
Texas Commission on Environmental Quality  
P.O. Box 13087  
Austin, Tex. 78711-3087*

RECEIVED  
SEP 16 2014  
TCEQ MAIL CENTER  
JC



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**Marisa Weber**

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**From:** PUBCOMMENT-OCC  
**Sent:** Monday, September 15, 2014 4:16 PM  
**To:** PUBCOMMENT-OCC2  
**Subject:** FW: Public comment on Permit Number WQ0002105000  
**Attachments:** 2014-09-15-FINAL\_LCRA Fayette Application Comments.pdf

PM  
H

*JWD  
93275*

**From:** [jduggan@environmentalintegrity.org](mailto:jduggan@environmentalintegrity.org) [<mailto:jduggan@environmentalintegrity.org>]  
**Sent:** Monday, September 15, 2014 3:41 PM  
**To:** donotreply  
**Subject:** Public comment on Permit Number WQ0002105000

**REGULATED ENTY NAME** LCRA SAM SEYMOUR FAYETTE POWER PROJECT

**RN NUMBER:** RN100226844

**PERMIT NUMBER:** WQ0002105000

**DOCKET NUMBER:**

**COUNTY:** FAYETTE

**PRINCIPAL NAME:** LOWER COLORADO RIVER AUTHORITY

**CN NUMBER:** CN600253637

**FROM**

**NAME:** Jennifer Duggan

**E-MAIL:** [jduggan@environmentalintegrity.org](mailto:jduggan@environmentalintegrity.org)

**COMPANY:** Environmental Integrity Project

**ADDRESS:** 1000 VERMONT AVE NW Suite 1100  
WASHINGTON DC 20005-4903

**PHONE:** 8022256774

**FAX:**

**COMMENTS:** Please see the attached for comments, which include requests for a public meeting and a contested case hearing, submitted on behalf of the Environmental Integrity Project and Sierra Club regarding

*CM*

the Notice of Application and Intent to Obtain Water Quality Permit Renewal for LCRA Fayette Power Plant's water quality (TPDES) permit number WQ0002105000.



September 15, 2014

Chief Clerk, MC-105  
Texas Commission on Environmental Quality  
P.O. Box 13087  
Austin, Texas 78711-3087  
<http://www14.tceq.texas.gov/epic/eComment/>

***RE: Notice of Application and Intent to Obtain Water Quality Permit Renewal for the LCRA Fayette Power Plant / TPDES No. WQ0002105000***

Dear Chief Clerk:

The Environmental Integrity Project (EIP) and Sierra Club (collectively, Public Interest Groups) submit these comments on the Lower Colorado River Authority's (LCRA) application and intent to obtain a water quality permit for the Fayette Power Plant in La Grange, Texas.

***Request for Public Meeting and Contested Case Hearing***

EIP and Sierra Club request a public meeting to discuss this application given the fact that the Fayette Plant has contaminated nearby waters with toxic pollutants like arsenic, cobalt, selenium, and molybdenum.

EIP and Sierra Club also request a contested case hearing on the application and renewal of Texas Pollutant Discharge Elimination System (TPDES) No. WQ0002105000. EIP is a nonpartisan, nonprofit organization founded in 2002 to advocate for more effective enforcement of environmental laws. EIP has offices in Washington, DC and Austin, Texas. EIP's three objectives are: to provide objective analysis of how the failure to enforce or implement environmental laws increases pollution and affects the public's health; to hold federal and state agencies, as well as individual corporations, accountable for failing to enforce or comply with environmental laws; and to help local communities in key states obtain the protection of environmental laws.

EIP advocates for laws to protect public health and the environment from air and water pollution from coal-fired power plants and other large sources of pollution. As part of its efforts to ensure effective enforcement of environmental laws, EIP participates in federal and state rulemakings and permit proceedings to curb water pollution from coal-fired power plants.

Sierra Club is the nation's oldest grassroots public interest environmental organization, with offices, programs, and 22,500 members in Texas. The Sierra Club's purpose is to explore, enjoy, and protect the wild places of the earth; to practice and promote the responsible use of the

earth's ecosystems and resources; to educate and enlist humanity to protect and restore the quality of the natural and human environments; and to use all lawful means to carry out these objectives. As part of Sierra Club's Beyond Coal Campaign, Sierra Club works to ensure that coal-fired power plants comply with the Clean Water Act and other environmental laws. Sierra Club's Texas members include affected persons as defined by the Commission's public participation rules. Thus, EIP and Sierra Club have a significant interest in ensuring that any permit issued complies with all applicable statutory and regulatory requirements that protect public health and aquatic wildlife, minimize environmental impacts, and improve water quality.

## INTRODUCTION

Each day across the United States, coal-burning power plants like the LCRA Fayette Power Plant dump millions of gallons of wastewater loaded with toxic pollutants like arsenic, boron, cadmium, chromium, lead, mercury, and selenium into our rivers, lakes, and streams. This pollution is discharged directly from plants; flows from old, unlined surface impoundments that many plants use to store toxic slurries of coal ash and smokestack scrubber sludge; and seeps from unlined ponds and landfills into ground and surface waters. EPA estimates that *at least 5.5 billion pounds* of pollution are released into the environment by coal-burning power plants every year.<sup>1</sup> Coal-burning power plants are responsible for at least 50 to 60 percent of the toxic pollutants discharged into waters of the U.S.—more than the other nine top polluting industries *combined*.<sup>2</sup>

Coal plant water pollution has serious public health consequences and causes lasting harm. Coal combustion waste (i.e. coal ash) wastewaters contain a slew of toxic pollutants that can be harmful to humans and aquatic life in even small doses. Due to the bio-accumulative nature of many of these toxins, this pollution persists in the environment and poses a risk to public health, and even short-term exposure can result in long-term damage to aquatic ecosystems. According to EPA, power plant pollution has caused over 160 water bodies not to meet state water quality standards, prompted government agencies to issue fish consumption advisories for 185 waters, and degraded 399 water bodies across the country that serve as public drinking water supplies.<sup>3</sup>

In June of 2013, EPA identified the coal ash disposal units at the Fayette Power Plant as a “potential damage case.”<sup>4</sup> “Potential damage cases” are those where an exceedance of a primary MCL or health based standard has been documented “directly beneath or in very close proximity” to a coal ash dump.<sup>5</sup> Groundwater near the coal ash ponds and a landfill at the Fayette Plant contains levels of arsenic, selenium, cobalt, and molybdenum exceeding Texas

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<sup>1</sup> EPA, Environmental Assessment for the Proposed Effluent Limitation Guidelines and Standards for the Steam Electric Power Generating Point Source Category 3-14 (Apr. 2013), Docket No. EPA-HQ-OW-2009-0819-2260 [hereinafter EA].

<sup>2</sup> *Id.* at 3-13.

<sup>3</sup> <http://water.epa.gov/scitech/wastetech/guide/steam-electric/proposed.cfm>.

<sup>4</sup> EPA, *Final Determination of Identified Proven Damage and Recently Alleged Damage Cases*, [DCN SE01966], Docket No. EPA-HQ-OW-2009-0819-2212.

<sup>5</sup> *Id.*

Protective Contamination Levels (PCLs) and federal Maximum Contaminant Levels (MCLs).<sup>6</sup> Selenium levels have reached more than 4 times the PCL and MCL, cobalt levels have reached more than 3 times the PCL, and molybdenum has exceeded the federal Life-time Health Advisory by nearly 4 times and exceeded the PCL in water downgradient or crossgradient of ash disposal areas.<sup>7</sup> Aluminum, chloride, manganese, sulfate and total dissolved solids exceed federal secondary MCLs.<sup>8</sup>

Many of the groundwater monitoring wells are located within the shallow groundwater bearing Middle Sand Unit.<sup>9</sup> LCRA acknowledges that the “Middle Sand is believed to be in communication with the Cedar Creek Reservoir,” and that contaminated groundwater “could migrate beyond the boundaries of the [Fayette Power Plant] property.”<sup>10</sup> In short, pollution discharged via outfalls and from the Fayette Plant’s leaking coal ash dumps could potentially impact water quality in the Cedar Creek Reservoir, Cedar Creek, and other downstream waters, as well as nearby residential drinking water wells.<sup>11</sup>

TCEQ Permit No. WQ0002105000 should set required technology-based effluent limits on discharges of toxic pollution in coal combustion residual leachate and other wastewaters, and address leaking coal ash disposal units that have contaminated groundwater with a direct connection to surface waters.

#### **I. Coal Combustion Waste Wastewater Discharges at LCRA Fayette Plant**

Several processes and waste handling systems at the LCRA Fayette Plant generate toxic water pollution. According to the Application, LCRA claims that it does not discharge wastewater from its three wet limestone flue gas desulfurization (FGD) controls and fly and bottom ash handling systems.<sup>12</sup> With respect to the FGD controls, LCRA operates a dewatering system that separates wastewater and solids from the spent limestone slurry.<sup>13</sup> Solids are either sold or disposed of at the on-site coal combustion waste landfill, while the wastewater is sent to Reclaim Pond and other holding tanks so that it may be recycled in the FGD system.<sup>14</sup> Although the current permit prohibits “direct” discharge of wastewater from the Reclaim Pond to waters of the State, the permit authorizes discharges from the Reclaim Pond to the Coal Pile Runoff Pond, which discharges via Outfall 003 to a tributary of Cedar Creek or Outfall 301 to the Cedar Creek Reservoir.<sup>15</sup> Thus, LCRA may ultimately discharge FGD wastewaters to waters of the State via the Coal Pile Runoff Pond.

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<sup>6</sup> Annual Groundwater Monitoring Report: 2009 Data Summary submitted by Lower Colorado River Authority to the Texas Commission on Environmental Quality (May 2010).

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

<sup>8</sup> *Id.*

<sup>9</sup> *Id.* at 3.

<sup>10</sup> *Id.*

<sup>11</sup> *Id.*

<sup>12</sup> Application, Attachment FPP-TECH 1: WW Generation.

<sup>13</sup> *Id.*

<sup>14</sup> *Id.*

<sup>15</sup> Permit, 17.

Similarly, the current permit prohibits discharges of fly and bottom ash transport water to waters of the State.<sup>16</sup> Yet LCRA is authorized to transfer bottom and fly ash transport water from the closed Ash Pond to the Reclaim Pond and Coal Pile Runoff Pond, which discharges to a tributary of Cedar Creek or the Cedar Creek Reservoir.<sup>17</sup>

LCRA is also permitted to discharge leachate from the coal combustion waste landfill, which collects in the Combustion Byproducts Landfill Pond, from Outfall 004 to a tributary of Cedar Creek or to the Reclaim Pond and Coal Pile Runoff Pond, which discharges to a tributary of Cedar Creek or the Cedar Creek Reservoir.<sup>18</sup>

In addition to the coal combustion waste leachate and wastewaters discharged from the Coal Pile Runoff Pond and Combustion Byproducts Landfill Pond to tributaries of Cedar Creek and the Cedar Creek Reservoir, the coal ash disposal units are leaking into groundwater that has a direct connection to Cedar Creek Reservoir.<sup>19</sup> According to the Application, none of the waste disposal units are lined with a protective composite liner.<sup>20</sup> EPA identified the Fayette Power Plant as a “potential damage case” in 2013 because concentrations of toxic pollutants in groundwater monitoring wells exceed federal drinking water standards.<sup>21</sup> LCRA’s own monitoring data reveal exceedances of federal and state health based drinking water standards for arsenic, selenium, cobalt, and molybdenum.<sup>22</sup> Thus, LCRA is discharging leachate from leaking coal combustion waste disposal units into groundwater that has a direct connection to surface waters.

## II. Clean Water Act Permitting Requirements for Steam Electric Power Plants

The current Permit does not set technology-based effluent limits for the numerous pollutants that are regularly discharged in coal combustion waste leachate and impoundment wastewaters.<sup>23</sup> Under the CWA, NPDES permits must include TBELs for all discharged pollutants.<sup>24</sup> TBELs must reflect pollutant controls constituting the “best available technology economically achievable” (“BAT”), and these effluent limitations “shall require the elimination of discharges of all pollutants if the Administrator finds, on the basis of information available to

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<sup>16</sup> *Id.* at 15.

<sup>17</sup> *Id.* at 17.

<sup>18</sup> *Id.*

<sup>19</sup> *See, e.g.*, Annual Groundwater Monitoring Report: 2009 Data Summary submitted by Lower Colorado River Authority to the Texas Commission on Environmental Quality (May 2010).

<sup>20</sup> Permit, Attachment FPP-TECH 4: Pond Liner Information.

<sup>21</sup> EPA, *Final Determination of Identified Proven Damage and Recently Alleged Damage Cases*, [DCN SE01966], Docket No. EPA-HQ-OW-2009-0819-2212.

<sup>22</sup> *See, e.g.*, Annual Groundwater Monitoring Report: 2009 Data Summary submitted by Lower Colorado River Authority to the Texas Commission on Environmental Quality (May 2010).

<sup>23</sup> Permit, 2 – 2g.

<sup>24</sup> *See* 33 U.S.C. §§ 1311 (establishing technology based effluent limitations) & 1342(a)(1) (requiring that NPDES permits incorporate technology-based effluent limits); 40 C.F.R. § 122.44(a) (“Each NPDES permit shall include...technology-based effluent limitations and standards based on: effluent limitations and standards promulgated under section 301 of the CWA, or new source performance standards promulgated under section 306 of CWA, or case-by-case effluent limitations determined under section 402(a)(1) of CWA, or a combination of the three, in accordance with § 125.3 of this chapter”); 40 C.F.R. § 122.44(e) (“Each NPDES permit shall include...technology-based controls for toxic pollutants”); 30 TEX. ADMIN. CODE § 305.531 (incorporating 40 C.F.R. § 122.44 by reference).

him . . . that such elimination is technologically and economically achievable.”<sup>25</sup> All sources and all pollutants must be subject to technology-based effluent limits,<sup>26</sup> unless more stringent water quality-based effluent limits are required to avoid exceedances of water quality standards.<sup>27</sup>

To implement the CWA’s technology-based effluent limit requirements, the U.S. Environmental Protection Agency (“EPA”) is required to promulgate national effluent limitations and guidelines (“ELGs”) to control discharges of pollutants into the waters of the United States from industrial point sources.<sup>28</sup> EPA and states look first to the ELGs when setting technology-based effluent limits, which represent the minimum standards of protection.<sup>29</sup> Where EPA has not yet promulgated ELGs for particular pollutants discharged by a given point source category, the CWA requires the TCEQ to stand in the shoes of EPA and use its best professional judgment (“BPJ”) to set case-by-case TBELs for these pollutants in NPDES permits.<sup>30</sup> EPA last promulgated ELGs for the steam electric power generation industry in 1982 – approximately 30 years ago – before the agency was fully cognizant of threats posed by waste waters from coal ash handling and air pollution control systems. With respect to waste streams from power plants, such as the LCRA Fayette Plant, the outdated ELGs cover only (1) pH and PCBs, (2) total suspended solids (“TSS”), and (3) oil and grease.<sup>31</sup>

EPA has not yet finalized ELGs for metals and other pollutants in waste streams from power plants. The steam electric power generating industry is by far the largest discharger of toxic pollutants and has caused widespread contamination of our rivers, lakes, and streams.<sup>32</sup> EPA has stated:

An increasing amount of evidence indicates that the characteristics of coal combustion wastewater have the potential to impact human health and the environment. Many of the common pollutants found in coal combustion wastewater (e.g., selenium, mercury, and arsenic) are known to cause environmental harm and can potentially represent a human health risk. Pollutants in coal combustion wastewater are of particular concern because they can occur in large quantities (i.e., total pounds) and at high concentrations (i.e., exceeding Maximum Contaminant Levels (MCLs)) in discharges and leachate to groundwater and surface waters. In addition, some pollutants in coal combustion wastewater present an increased ecological threat due to their tendency to persist

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<sup>25</sup> 33 U.S.C. § 1311(b)(2)(A).

<sup>26</sup> *See id.*

<sup>27</sup> *See id.* § 1312(a).

<sup>28</sup> *Id.* §§ 1311(b), 1314(b).

<sup>29</sup> *See Natural Res. Def. Council v. Env'tl. Prot. Agency*, 859 F.2d 156, 183 (D.C. Cir. 1988).

<sup>30</sup> 33 U.S.C. § 1311(b)(2)(A); 33 U.S.C. § 1342 (a)(1)(B); 40 C.F.R. § 125.3(c), (d); *Natural Res. Def. Council v. Env'tl. Prot. Agency*, 863 F.2d 1420, 1425 (9th Cir. 1988).

<sup>31</sup> *See* 40 C.F.R. §§ 423.12, 423.13 (also regulating for cooling tower blowdown waste streams only; chlorine, chromium, and zinc, in addition to 126 pollutants contained in chemicals added for cooling tower maintenance, and for metal cleaning wastes and chemical and non-chemical waste streams only; copper and iron).

<sup>32</sup> *See, e.g.* EA.

in the environment and bioaccumulate in organisms, which often results in slow ecological recovery times following exposure.<sup>33</sup>

Specifically, EPA has identified 27 pollutants to analyze in coal ash wastewaters, including: aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, molybdenum, nickel, selenium, silver, sodium, thallium, tin, titanium, vanadium, yttrium, and zinc.<sup>34</sup>

The agency has published a proposal to revise the ELGs for power plants to include metals and other pollutants as the Clean Water Act requires.<sup>35</sup> EPA does not plan to issue a final rule until at least September 30, 2015.<sup>36</sup> Thus, it could still be a number of years before EPA finalizes ELGs for metals and other pollutants from power plants. Accordingly, in the interim, the Clean Water Act requires that TCEQ use its best professional judgment to set BAT-based TBELs to limit pollution and protect waters that receive pollution from the LCRA Fayette Plant.<sup>37</sup>

### **III. TPDES Permit No. WQ0002105000 must set technology-based effluent limits for discharges associated with coal combustion residual leachate.**

The current permit does not set TBELs on toxic pollutants in coal combustion residual leachate<sup>38</sup> despite the fact that the permit allows LCRA to discharge coal combustion leachate from Outfalls 003, 301, and 004 to tributaries of Cedar Creek and Cedar Creek Reservoir.<sup>39</sup> Although EPA has identified 27 pollutants found in coal ash wastewaters (including, aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, molybdenum, nickel, selenium, silver, sodium, thallium, tin, titanium, vanadium, yttrium, and zinc),<sup>40</sup> the current permit for the Fayette Plant only imposes limits on one toxic—selenium.<sup>41</sup> As discussed in section II, the Clean Water Act requires that TCEQ use its best professional judgment to set BAT-based TBELs on toxic pollutants in discharges of coal combustion waste wastewaters.<sup>42</sup>

<sup>33</sup> U.S. EPA, *Steam Electric Power Generating Point Source Category: Final Detailed Study Report*, EPA 821-R-09-008, 3-19 (October 2009).

<sup>34</sup> *Id.* at 3-34; see also U.S. EPA, *Notice of Final 2008 Effluent Guidelines Program Plan*, 73 Fed. Reg. 53,218 (Sept. 15, 2008).

<sup>35</sup> Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category, 78 Fed. Reg. 34,432 (June 7, 2013).

<sup>36</sup> EPA, Proposed Effluent Guidelines for the Steam Electric Power Generating Category, <http://water.epa.gov/scitech/wastetech/guide/steam-electric/proposed.cfm#consent> (last visited on May 14, 2014).

<sup>37</sup> 33 U.S.C. § 1311(b)(2)(A).

<sup>38</sup> In its 2013 proposal, EPA proposes to define combustion residual leachate as leachate from landfills or surface impoundments containing residuals from the combustion of fossil or fossil-derived fuel. Leachate includes liquid, including any suspended or dissolved constituents in the liquid, that has percolated through or drained from waste or other materials placed in a landfill, or that pass through the containment structure (e.g., bottom, dikes, berms) of a surface impoundment. Leachate also includes the terms seepage, leak, and leakage, which are generally used in reference to leachate from an impoundment. 78 Fed. Reg. at 34,533.

<sup>39</sup> Permit, at 17; see discussion in section I.

<sup>40</sup> EA at 3-34; see also U.S. EPA, *Notice of Final 2008 Effluent Guidelines Program Plan*, 73 Fed. Reg. 53,218 (Sept. 15, 2008).

<sup>41</sup> Permit, 2-2g

<sup>42</sup> 33 U.S.C. § 1311(b)(2)(A).

TCEQ must undertake the BPJ analysis for leachate with the goal of eliminating pollutant discharges, not as a substitute for setting TBELs.<sup>43</sup> Although zero-discharge may not be strictly attainable in all settings, the best available technologies must be applied in an effort to get as close as possible to zero discharge. TCEQ can and must consider the same mandatory factors that EPA would consider in setting national effluent limitations, including the age of facilities, the process employed, engineering aspects of various control techniques, process changes, and non-water environmental impacts.<sup>44</sup> While a thorough review of available technologies including their cost and performance is required, the vast majority of this analysis has already been done by EPA. EPA signed a comprehensive proposed rule and published detailed supporting documents on April 19, 2013.<sup>45</sup> Prior to the proposal, EPA published guidance and *Steam Electric Power Generating Point Source Category* reports.<sup>46</sup> EPA also made extensive materials available to state permit writers, and over the course the multi-year study of the Steam Electric industry conducted prior to the proposed rule, it coordinated directly with state and regional permit writers.<sup>47</sup> In addition, the Public Interest Groups have submitted extensive legal and technical comments on EPA's proposal with respect to coal combustion residual discharges and other wastestreams.<sup>48</sup> Thus, TCEQ has—and has had—the information it needs to conduct the BPJ analysis required by law.

Although total loadings from coal combustion residual leachate may be small in relation to FGD and ash transport wastewaters, coal combustion residual leachate is responsible for significant, adverse impacts on public health and the environment. As is the case at the Fayette Plant, impoundments and landfills often directly discharge or leak and seep into groundwater and/or smaller creeks and streams that are tributaries of larger rivers and lakes. Toxic pollution in small streams and creeks will result in higher concentrations of selenium, cadmium, and other pollutants that are toxic to aquatic life in minute concentrations. In addition, humans recreating in and around these smaller water bodies will also face a greater risk of adverse health effects from exposure to higher concentrations of coal combustion waste pollution.

In fact, combustion residual leachate is responsible for a significant number of EPA proven and potential damage cases. Nearly half (30 of 67) of EPA's documented surface water damage cases were caused by leachate seeping into groundwater flowing into surface water.<sup>49</sup>

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<sup>43</sup> *Natural Res. Def. Council v. EPA*, 863 F.2d at 1426 (“BAT should represent ‘a commitment of the maximum resources economically possible to the ultimate goal of eliminating all polluting discharges.’”)

<sup>44</sup> *Natural Res. Def. Council v. EPA*, 859 F.2d at 183; 33 U.S.C. §1314(b)(2)(B).

<sup>45</sup> Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category, 78 Fed. Reg. 34,432 (June 7, 2013).

<sup>46</sup> See Memorandum from James Hanlon, EPA, Director of the Office of Wastewater Management to EPA Water Division Directors, Regions 1-10 & Attachment A: Technology Based Effluent Limits, Flue Gas Desulfurization (FGD) at Steam Electric Facilities (June 7, 2010) [hereinafter, Hanlon Memo].

<sup>47</sup> *Id.*

<sup>48</sup> Environmental Integrity Project, Earthjustice, and Sierra Club comments on EPA's Proposal to Revise the Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category, Docket No. EPA-HQ-OW-2009-0819-4684 (Sept. 20, 2013). The comments and appendices and exhibits are available at [www.regulations.gov](http://www.regulations.gov). Because these documents are voluminous, we hereby incorporate them by reference instead of providing them as attachments.

<sup>49</sup> EA at A-29-A-39.

For all these reasons, it is critical that TCEQ conduct a BPJ analysis to set BAT limits to clean up these dangerous discharges and protect public health and the environment.

**IV. TPDES Permit No. WQ0002105000 Should Prohibit Discharges of FGD Wastewaters to Waters of the State.**

LCRA Fayette claims that the Plant does not discharge wastewater associated with FGD pollution controls.<sup>50</sup> Similar to the prohibition on discharge of ash transport wastewaters in the current permit,<sup>51</sup> TCEQ should expressly prohibit discharges of FGD wastewater to waters of the State since LCRA claims to achieve “zero discharge” by recycling wastewater within the plant.

**V. TCEQ must require LCRA to clean up and prevent pollution from its leaking coal ash disposal units.**

Discharges of leachate from the landfill and impoundments to surface waters and/or groundwater with a hydrogeological connection to surface water without a permit are prohibited by the Clean Water Act. Discharges to groundwater with a direct hydrogeological connection to “waters of the U.S.” fall within the scope of the Clean Water Act.<sup>52</sup> All unpermitted discharges from a point source to these waters are violations of the CWA.<sup>53</sup> Leaks in a pollution containment system, like coal combustion waste landfills and impoundments, are point sources.<sup>54</sup> Thus, discharges of toxic pollution from leaks in coal combustion waste landfills and impoundments are prohibited without an NPDES permit.<sup>55</sup>

EPA—and LCRA itself—have identified concentrations of pollutants like arsenic, selenium, molybdenum, and cobalt at levels that exceed federal and state groundwater standards.<sup>56</sup> LCRA has also acknowledged that this pollution is occurring in groundwater that communicates with the Cedar Creek Reservoir and could migrate offsite.<sup>57</sup>

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<sup>50</sup> Application, Attachment FPP-TECH 1.

<sup>51</sup> Permit, at 15.

<sup>52</sup> See, e.g., *Hernandez v. Esso Standard Oil Co.*, 599 F.Supp.2d 175, 181 (D. Puerto Rico 2009) (reviewing federal case law and holding “that the CWA extends federal jurisdiction over groundwater that is hydrologically connected to surface waters that are themselves waters of the United States”).

<sup>53</sup> *Id.*

<sup>54</sup> 33 U.S.C. § 1362(14) (defining “point source” broadly and specifically including “container” in the definition); See, e.g., *United States v. Earth Sciences, Inc.*, 599 F.2d 368 (10<sup>th</sup> Cir.) (noting that “[w]hen a [closed circulating system] fails because of flaws in the construction or inadequate size to handle the fluids utilized, with resulting discharge, whether from a fissure in the dirt bern or overflow of a wall, the escape of liquid from the confined system is a point source”).

<sup>55</sup> In fact, discharges that result from leaks and other failures of a pollution containment system should never be authorized by an NPDES permit because BAT is to contain the pollution. See 33 U.S.C. §§ 1311(b)(1), 1311(b)(2)(A), and 1314(b) (mandating that permitting agencies set technology-based effluent limits for all discharges).

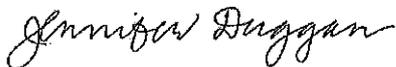
<sup>56</sup> EPA, *Final Determination of Identified Proven Damage and Recently Alleged Damage Cases*, [DCN SE01966], Docket No. EPA-HQ-OW-2009-0819-2212; Annual Groundwater Monitoring Report: 2009 Data Summary submitted by Lower Colorado River Authority to the Texas Commission on Environmental Quality (May 2010).

<sup>57</sup> Annual Groundwater Monitoring Report: 2009 Data Summary submitted by Lower Colorado River Authority to the Texas Commission on Environmental Quality (May 2010).

## CONCLUSION

In conclusion, TCEQ must address these serious issues before any renewal permit is issued. Thank you for considering our comments, and please contact Jennifer Duggan or Joshua Smith if you have any questions.

Sincerely,



Jennifer Duggan  
Managing Attorney  
Environmental Integrity Project  
1000 Vermont Ave NW, Suite 1100  
Washington, DC 20005  
(802) 225-6774  
jduggan@environmentalintegrity.org

Joshua Smith  
Staff Attorney  
Sierra Club Environmental Law Program  
85 Second Street, 2<sup>nd</sup> Floor  
San Francisco, CA 94105  
(415) 977-5560  
joshua.smith@sierraclub.org



September 15, 2014

Chief Clerk, MC-105  
Texas Commission on Environmental Quality  
P.O. Box 13087  
Austin, Texas 78711-3087  
<http://www14.tceq.texas.gov/epic/eComment/>

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APR 09 2015

AT PUBLIC MEETING

**RE: *Notice of Application and Intent to Obtain Water Quality Permit Renewal for the LCRA Fayette Power Plant / TPDES No. WQ0002105000***

Dear Chief Clerk:

The Environmental Integrity Project (EIP) and Sierra Club (collectively, Public Interest Groups) submit these comments on the Lower Colorado River Authority's (LCRA) application and intent to obtain a water quality permit for the Fayette Power Plant in La Grange, Texas.

***Request for Public Meeting and Contested Case Hearing***

EIP and Sierra Club request a public meeting to discuss this application given the fact that the Fayette Plant has contaminated nearby waters with toxic pollutants like arsenic, cobalt, selenium, and molybdenum.

EIP and Sierra Club also request a contested case hearing on the application and renewal of Texas Pollutant Discharge Elimination System (TPDES) No. WQ0002105000. EIP is a nonpartisan, nonprofit organization founded in 2002 to advocate for more effective enforcement of environmental laws. EIP has offices in Washington, DC and Austin, Texas. EIP's three objectives are: to provide objective analysis of how the failure to enforce or implement environmental laws increases pollution and affects the public's health; to hold federal and state agencies, as well as individual corporations, accountable for failing to enforce or comply with environmental laws; and to help local communities in key states obtain the protection of environmental laws.

EIP advocates for laws to protect public health and the environment from air and water pollution from coal-fired power plants and other large sources of pollution. As part of its efforts to ensure effective enforcement of environmental laws, EIP participates in federal and state rulemakings and permit proceedings to curb water pollution from coal-fired power plants.

Sierra Club is the nation's oldest grassroots public interest environmental organization, with offices, programs, and 22,500 members in Texas. The Sierra Club's purpose is to explore, enjoy, and protect the wild places of the earth; to practice and promote the responsible use of the

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earth's ecosystems and resources; to educate and enlist humanity to protect and restore the quality of the natural and human environments; and to use all lawful means to carry out these objectives. As part of Sierra Club's Beyond Coal Campaign, Sierra Club works to ensure that coal-fired power plants comply with the Clean Water Act and other environmental laws. Sierra Club's Texas members include affected persons as defined by the Commission's public participation rules. Thus, EIP and Sierra Club have a significant interest in ensuring that any permit issued complies with all applicable statutory and regulatory requirements that protect public health and aquatic wildlife, minimize environmental impacts, and improve water quality.

## INTRODUCTION

Each day across the United States, coal-burning power plants like the LCRA Fayette Power Plant dump millions of gallons of wastewater loaded with toxic pollutants like arsenic, boron, cadmium, chromium, lead, mercury, and selenium into our rivers, lakes, and streams. This pollution is discharged directly from plants; flows from old, unlined surface impoundments that many plants use to store toxic slurries of coal ash and smokestack scrubber sludge; and seeps from unlined ponds and landfills into ground and surface waters. EPA estimates that *at least 5.5 billion pounds* of pollution are released into the environment by coal-burning power plants every year.<sup>1</sup> Coal-burning power plants are responsible for at least 50 to 60 percent of the toxic pollutants discharged into waters of the U.S.—more than the other nine top polluting industries *combined*.<sup>2</sup>

Coal plant water pollution has serious public health consequences and causes lasting harm. Coal combustion waste (i.e. coal ash) wastewaters contain a slew of toxic pollutants that can be harmful to humans and aquatic life in even small doses. Due to the bio-accumulative nature of many of these toxins, this pollution persists in the environment and poses a risk to public health, and even short-term exposure can result in long-term damage to aquatic ecosystems. According to EPA, power plant pollution has caused over 160 water bodies not to meet state water quality standards, prompted government agencies to issue fish consumption advisories for 185 waters, and degraded 399 water bodies across the country that serve as public drinking water supplies.<sup>3</sup>

In June of 2013, EPA identified the coal ash disposal units at the Fayette Power Plant as a “potential damage case.”<sup>4</sup> “Potential damage cases” are those where an exceedance of a primary MCL or health based standard has been documented “directly beneath or in very close proximity” to a coal ash dump.<sup>5</sup> Groundwater near the coal ash ponds and a landfill at the Fayette Plant contains levels of arsenic, selenium, cobalt, and molybdenum exceeding Texas

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<sup>1</sup> EPA, Environmental Assessment for the Proposed Effluent Limitation Guidelines and Standards for the Steam Electric Power Generating Point Source Category 3-14 (Apr. 2013), Docket No. EPA-HQ-OW-2009-0819-2260 [hereinafter EA].

<sup>2</sup> *Id.* at 3-13.

<sup>3</sup> <http://water.epa.gov/scitech/wastetech/guide/steam-electric/proposed.cfm>.

<sup>4</sup> EPA, *Final Determination of Identified Proven Damage and Recently Alleged Damage Cases*, [DCN SE01966], Docket No. EPA-HQ-OW-2009-0819-2212.

<sup>5</sup> *Id.*

Protective Contamination Levels (PCLs) and federal Maximum Contaminant Levels (MCLs).<sup>6</sup> Selenium levels have reached more than 4 times the PCL and MCL, cobalt levels have reached more than 3 times the PCL, and molybdenum has exceeded the federal Life-time Health Advisory by nearly 4 times and exceeded the PCL in water downgradient or crossgradient of ash disposal areas.<sup>7</sup> Aluminum, chloride, manganese, sulfate and total dissolved solids exceed federal secondary MCLs.<sup>8</sup>

Many of the groundwater monitoring wells are located within the shallow groundwater bearing Middle Sand Unit.<sup>9</sup> LCRA acknowledges that the “Middle Sand is believed to be in communication with the Cedar Creek Reservoir,” and that contaminated groundwater “could migrate beyond the boundaries of the [Fayette Power Plant] property.”<sup>10</sup> In short, pollution discharged via outfalls and from the Fayette Plant’s leaking coal ash dumps could potentially impact water quality in the Cedar Creek Reservoir, Cedar Creek, and other downstream waters, as well as nearby residential drinking water wells.<sup>11</sup>

TCEQ Permit No. WQ0002105000 should set required technology-based effluent limits on discharges of toxic pollution in coal combustion residual leachate and other wastewaters, and address leaking coal ash disposal units that have contaminated groundwater with a direct connection to surface waters.

#### **I. Coal Combustion Waste Wastewater Discharges at LCRA Fayette Plant**

Several processes and waste handling systems at the LCRA Fayette Plant generate toxic water pollution. According to the Application, LCRA claims that it does not discharge wastewater from its three wet limestone flue gas desulfurization (FGD) controls and fly and bottom ash handling systems.<sup>12</sup> With respect to the FGD controls, LCRA operates a dewatering system that separates wastewater and solids from the spent limestone slurry.<sup>13</sup> Solids are either sold or disposed of at the on-site coal combustion waste landfill, while the wastewater is sent to Reclaim Pond and other holding tanks so that it may be recycled in the FGD system.<sup>14</sup> Although the current permit prohibits “direct” discharge of wastewater from the Reclaim Pond to waters of the State, the permit authorizes discharges from the Reclaim Pond to the Coal Pile Runoff Pond, which discharges via Outfall 003 to a tributary of Cedar Creek or Outfall 301 to the Cedar Creek Reservoir.<sup>15</sup> Thus, LCRA may ultimately discharge FGD wastewaters to waters of the State via the Coal Pile Runoff Pond.

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<sup>6</sup> Annual Groundwater Monitoring Report: 2009 Data Summary submitted by Lower Colorado River Authority to the Texas Commission on Environmental Quality (May 2010).

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

<sup>8</sup> *Id.*

<sup>9</sup> *Id.* at 3.

<sup>10</sup> *Id.*

<sup>11</sup> *Id.*

<sup>12</sup> Application, Attachment FPP-TECH 1: WW Generation.

<sup>13</sup> *Id.*

<sup>14</sup> *Id.*

<sup>15</sup> Permit, 17.

Similarly, the current permit prohibits discharges of fly and bottom ash transport water to waters of the State.<sup>16</sup> Yet LCRA is authorized to transfer bottom and fly ash transport water from the closed Ash Pond to the Reclaim Pond and Coal Pile Runoff Pond, which discharges to a tributary of Cedar Creek or the Cedar Creek Reservoir.<sup>17</sup>

LCRA is also permitted to discharge leachate from the coal combustion waste landfill, which collects in the Combustion Byproducts Landfill Pond, from Outfall 004 to a tributary of Cedar Creek or to the Reclaim Pond and Coal Pile Runoff Pond, which discharges to a tributary of Cedar Creek or the Cedar Creek Reservoir.<sup>18</sup>

In addition to the coal combustion waste leachate and wastewaters discharged from the Coal Pile Runoff Pond and Combustion Byproducts Landfill Pond to tributaries of Cedar Creek and the Cedar Creek Reservoir, the coal ash disposal units are leaking into groundwater that has a direct connection to Cedar Creek Reservoir.<sup>19</sup> According to the Application, none of the waste disposal units are lined with a protective composite liner.<sup>20</sup> EPA identified the Fayette Power Plant as a “potential damage case” in 2013 because concentrations of toxic pollutants in groundwater monitoring wells exceed federal drinking water standards.<sup>21</sup> LCRA’s own monitoring data reveal exceedances of federal and state health based drinking water standards for arsenic, selenium, cobalt, and molybdenum.<sup>22</sup> Thus, LCRA is discharging leachate from leaking coal combustion waste disposal units into groundwater that has a direct connection to surface waters.

## II. Clean Water Act Permitting Requirements for Steam Electric Power Plants

The current Permit does not set technology-based effluent limits for the numerous pollutants that are regularly discharged in coal combustion waste leachate and impoundment wastewaters.<sup>23</sup> Under the CWA, NPDES permits must include TBELs for all discharged pollutants.<sup>24</sup> TBELs must reflect pollutant controls constituting the “best available technology economically achievable” (“BAT”), and these effluent limitations “shall require the elimination of discharges of all pollutants if the Administrator finds, on the basis of information available to

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<sup>16</sup> *Id.* at 15.

<sup>17</sup> *Id.* at 17.

<sup>18</sup> *Id.*

<sup>19</sup> *See, e.g.*, Annual Groundwater Monitoring Report: 2009 Data Summary submitted by Lower Colorado River Authority to the Texas Commission on Environmental Quality (May 2010).

<sup>20</sup> Permit, Attachment FPP-TECH 4: Pond Liner Information.

<sup>21</sup> EPA, *Final Determination of Identified Proven Damage and Recently Alleged Damage Cases*, [DCN SE01966], Docket No. EPA-HQ-OW-2009-0819-2212.

<sup>22</sup> *See, e.g.*, Annual Groundwater Monitoring Report: 2009 Data Summary submitted by Lower Colorado River Authority to the Texas Commission on Environmental Quality (May 2010).

<sup>23</sup> Permit, 2 – 2g.

<sup>24</sup> *See* 33 U.S.C. §§ 1311 (establishing technology based effluent limitations) & 1342(a)(1) (requiring that NPDES permits incorporate technology-based effluent limits); 40 C.F.R. § 122.44(a) (“Each NPDES permit shall include...technology-based effluent limitations and standards based on: effluent limitations and standards promulgated under section 301 of the CWA, or new source performance standards promulgated under section 306 of CWA, or case-by-case effluent limitations determined under section 402(a)(1) of CWA, or a combination of the three, in accordance with § 125.3 of this chapter”); 40 C.F.R. § 122.44(e) (“Each NPDES permit shall include...technology-based controls for toxic pollutants”); 30 TEX. ADMIN. CODE § 305.531 (incorporating 40 C.F.R. § 122.44 by reference).

him . . . that such elimination is technologically and economically achievable.”<sup>25</sup> All sources and all pollutants must be subject to technology-based effluent limits,<sup>26</sup> unless more stringent water quality-based effluent limits are required to avoid exceedances of water quality standards.<sup>27</sup>

To implement the CWA’s technology-based effluent limit requirements, the U.S. Environmental Protection Agency (“EPA”) is required to promulgate national effluent limitations and guidelines (“ELGs”) to control discharges of pollutants into the waters of the United States from industrial point sources.<sup>28</sup> EPA and states look first to the ELGs when setting technology-based effluent limits, which represent the minimum standards of protection.<sup>29</sup> Where EPA has not yet promulgated ELGs for particular pollutants discharged by a given point source category, the CWA requires the TCEQ to stand in the shoes of EPA and use its best professional judgment (“BPJ”) to set case-by-case TBELs for these pollutants in NPDES permits.<sup>30</sup> EPA last promulgated ELGs for the steam electric power generation industry in 1982 – approximately 30 years ago – before the agency was fully cognizant of threats posed by waste waters from coal ash handling and air pollution control systems. With respect to waste streams from power plants, such as the LCRA Fayette Plant, the outdated ELGs cover only (1) pH and PCBs, (2) total suspended solids (“TSS”), and (3) oil and grease.<sup>31</sup>

EPA has not yet finalized ELGs for metals and other pollutants in waste streams from power plants. The steam electric power generating industry is by far the largest discharger of toxic pollutants and has caused widespread contamination of our rivers, lakes, and streams.<sup>32</sup> EPA has stated:

An increasing amount of evidence indicates that the characteristics of coal combustion wastewater have the potential to impact human health and the environment. Many of the common pollutants found in coal combustion wastewater (e.g., selenium, mercury, and arsenic) are known to cause environmental harm and can potentially represent a human health risk. Pollutants in coal combustion wastewater are of particular concern because they can occur in large quantities (i.e., total pounds) and at high concentrations (i.e., exceeding Maximum Contaminant Levels (MCLs)) in discharges and leachate to groundwater and surface waters. In addition, some pollutants in coal combustion wastewater present an increased ecological threat due to their tendency to persist

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<sup>25</sup> 33 U.S.C. § 1311(b)(2)(A).

<sup>26</sup> *See id.*

<sup>27</sup> *See id.* § 1312(a).

<sup>28</sup> *Id.* §§ 1311(b), 1314(b).

<sup>29</sup> *See Natural Res. Def. Council v. Envtl. Prot. Agency*, 859 F.2d 156, 183 (D.C. Cir. 1988).

<sup>30</sup> 33 U.S.C. § 1311(b)(2)(A); 33 U.S.C. § 1342 (a)(1)(B); 40 C.F.R. § 125.3(c), (d); *Natural Res. Def. Council v. Envtl. Prot. Agency*, 863 F.2d 1420, 1425 (9th Cir. 1988).

<sup>31</sup> *See* 40 C.F.R. §§ 423.12, 423.13 (also regulating for cooling tower blowdown waste streams only: chlorine, chromium, and zinc, in addition to 126 pollutants contained in chemicals added for cooling tower maintenance, and for metal cleaning wastes and chemical and non-chemical waste streams only: copper and iron).

<sup>32</sup> *See, e.g.* EA.

in the environment and bioaccumulate in organisms, which often results in slow ecological recovery times following exposure.<sup>33</sup>

Specifically, EPA has identified 27 pollutants to analyze in coal ash wastewaters, including: aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, molybdenum, nickel, selenium, silver, sodium, thallium, tin, titanium, vanadium, yttrium, and zinc.<sup>34</sup>

The agency has published a proposal to revise the ELGs for power plants to include metals and other pollutants as the Clean Water Act requires.<sup>35</sup> EPA does not plan to issue a final rule until at least September 30, 2015.<sup>36</sup> Thus, it could still be a number of years before EPA finalizes ELGs for metals and other pollutants from power plants. Accordingly, in the interim, the Clean Water Act requires that TCEQ use its best professional judgment to set BAT-based TBELs to limit pollution and protect waters that receive pollution from the LCRA Fayette Plant.<sup>37</sup>

### **III. TPDES Permit No. WQ0002105000 must set technology-based effluent limits for discharges associated with coal combustion residual leachate.**

The current permit does not set TBELs on toxic pollutants in coal combustion residual leachate<sup>38</sup> despite the fact that the permit allows LCRA to discharge coal combustion leachate from Outfalls 003, 301, and 004 to tributaries of Cedar Creek and Cedar Creek Reservoir.<sup>39</sup> Although EPA has identified 27 pollutants found in coal ash wastewaters (including, aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, molybdenum, nickel, selenium, silver, sodium, thallium, tin, titanium, vanadium, yttrium, and zinc),<sup>40</sup> the current permit for the Fayette Plant only imposes limits on one toxic—selenium.<sup>41</sup> As discussed in section II, the Clean Water Act requires that TCEQ use its best professional judgment to set BAT-based TBELs on toxic pollutants in discharges of coal combustion waste wastewaters.<sup>42</sup>

<sup>33</sup> U.S. EPA, *Steam Electric Power Generating Point Source Category: Final Detailed Study Report*, EPA 821-R-09-008, 3-19 (October 2009).

<sup>34</sup> *Id.* at 3-34; *see also* U.S. EPA, *Notice of Final 2008 Effluent Guidelines Program Plan*, 73 Fed. Reg. 53,218 (Sept. 15, 2008).

<sup>35</sup> *Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category*, 78 Fed. Reg. 34,432 (June 7, 2013).

<sup>36</sup> EPA, *Proposed Effluent Guidelines for the Steam Electric Power Generating Category*, <http://water.epa.gov/scitech/wastetech/guide/steam-electric/proposed.cfm#consent> (last visited on May 14, 2014).

<sup>37</sup> 33 U.S.C. § 1311(b)(2)(A).

<sup>38</sup> In its 2013 proposal, EPA proposes to define combustion residual leachate as leachate from landfills or surface impoundments containing residuals from the combustion of fossil or fossil-derived fuel. Leachate includes liquid, including any suspended or dissolved constituents in the liquid, that has percolated through or drained from waste or other materials placed in a landfill, or that pass through the containment structure (e.g., bottom, dikes, berms) of a surface impoundment. Leachate also includes the terms seepage, leak, and leakage, which are generally used in reference to leachate from an impoundment. 78 Fed. Reg. at 34,533.

<sup>39</sup> Permit, at 17; *see* discussion in section I.

<sup>40</sup> EA at 3-34; *see also* U.S. EPA, *Notice of Final 2008 Effluent Guidelines Program Plan*, 73 Fed. Reg. 53,218 (Sept. 15, 2008).

<sup>41</sup> Permit, 2-2g

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TCEQ must undertake the BPJ analysis for leachate with the goal of eliminating pollutant discharges, not as a substitute for setting TBELs.<sup>43</sup> Although zero-discharge may not be strictly attainable in all settings, the best available technologies must be applied in an effort to get as close as possible to zero discharge. TCEQ can and must consider the same mandatory factors that EPA would consider in setting national effluent limitations, including the age of facilities, the process employed, engineering aspects of various control techniques, process changes, and non-water environmental impacts.<sup>44</sup> While a thorough review of available technologies including their cost and performance is required, the vast majority of this analysis has already been done by EPA. EPA signed a comprehensive proposed rule and published detailed supporting documents on April 19, 2013.<sup>45</sup> Prior to the proposal, EPA published guidance and *Steam Electric Power Generating Point Source Category* reports.<sup>46</sup> EPA also made extensive materials available to state permit writers, and over the course the multi-year study of the Steam Electric industry conducted prior to the proposed rule, it coordinated directly with state and regional permit writers.<sup>47</sup> In addition, the Public Interest Groups have submitted extensive legal and technical comments on EPA's proposal with respect to coal combustion residual discharges and other wastestreams.<sup>48</sup> Thus, TCEQ has—and has had—the information it needs to conduct the BPJ analysis required by law.

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<sup>43</sup> *Natural Res. Def. Council v. EPA*, 863 F.2d at 1426 (“BAT should represent ‘a commitment of the maximum resources economically possible to the ultimate goal of eliminating all polluting discharges.’”)

<sup>44</sup> *Natural Res. Def. Council v. EPA*, 859 F.2d at 183; 33 U.S.C. §1314(b)(2)(B).

<sup>45</sup> Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category, 78 Fed. Reg. 34,432 (June 7, 2013).

<sup>46</sup> See Memorandum from James Hanlon, EPA, Director of the Office of Wastewater Management to EPA Water Division Directors, Regions I-10 & Attachment A: Technology Based Effluent Limits, Flue Gas Desulfurization (FGD) at Steam Electric Facilities (June 7, 2010) [hereinafter, Hanlon Memo].

<sup>47</sup> *Id.*

<sup>48</sup> Environmental Integrity Project, Earthjustice, and Sierra Club comments on EPA's Proposal to Revise the Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category, Docket No. EPA-HQ-OW-2009-0819-4684 (Sept. 20, 2013). The comments and appendices and exhibits are available at [www.regulations.gov](http://www.regulations.gov). Because these documents are voluminous, we hereby incorporate them by reference instead of providing them as attachments.

<sup>49</sup> EA at A-29-A-39.

For all these reasons, it is critical that TCEQ conduct a BPJ analysis to set BAT limits to clean up these dangerous discharges and protect public health and the environment.

**IV. TPDES Permit No. WQ0002105000 Should Prohibit Discharges of FGD Wastewaters to Waters of the State.**

LCRA Fayette claims that the Plant does not discharge wastewater associated with FGD pollution controls.<sup>50</sup> Similar to the prohibition on discharge of ash transport wastewaters in the current permit,<sup>51</sup> TCEQ should expressly prohibit discharges of FGD wastewater to waters of the State since LCRA claims to achieve “zero discharge” by recycling wastewater within the plant.

**V. TCEQ must require LCRA to clean up and prevent pollution from its leaking coal ash disposal units.**

Discharges of leachate from the landfill and impoundments to surface waters and/or groundwater with a hydrogeological connection to surface water without a permit are prohibited by the Clean Water Act. Discharges to groundwater with a direct hydrogeological connection to “waters of the U.S.” fall within the scope of the Clean Water Act.<sup>52</sup> All unpermitted discharges from a point source to these waters are violations of the CWA.<sup>53</sup> Leaks in a pollution containment system, like coal combustion waste landfills and impoundments, are point sources.<sup>54</sup> Thus, discharges of toxic pollution from leaks in coal combustion waste landfills and impoundments are prohibited without an NPDES permit.<sup>55</sup>

EPA—and LCRA itself—have identified concentrations of pollutants like arsenic, selenium, molybdenum, and cobalt at levels that exceed federal and state groundwater standards.<sup>56</sup> LCRA has also acknowledged that this pollution is occurring in groundwater that communicates with the Cedar Creek Reservoir and could migrate offsite.<sup>57</sup>

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<sup>50</sup> Application, Attachment FPP-TECH 1.

<sup>51</sup> Permit, at 15.

<sup>52</sup> See, e.g., *Hernandez v. Esso Standard Oil Co.*, 599 F.Supp.2d 175, 181 (D. Puerto Rico 2009) (reviewing federal case law and holding “that the CWA extends federal jurisdiction over groundwater that is hydrologically connected to surface waters that are themselves waters of the United States”).

<sup>53</sup> *Id.*

<sup>54</sup> 33 U.S.C. § 1362(14) (defining “point source” broadly and specifically including “container” in the definition); See, e.g., *United States v. Earth Sciences, Inc.*, 599 F.2d 368 (10<sup>th</sup> Cir.) (noting that “[w]hen a [closed circulating system] fails because of flaws in the construction or inadequate size to handle the fluids utilized, with resulting discharge, whether from a fissure in the dirt bern or overflow of a wall, the escape of liquid from the confined system is a point source”).

<sup>55</sup> In fact, discharges that result from leaks and other failures of a pollution containment system should never be authorized by an NPDES permit because BAT is to contain the pollution. See 33 U.S.C. §§ 1311(b)(1), 1311(b)(2)(A), and 1314(b) (mandating that permitting agencies set technology-based effluent limits for all discharges).

<sup>56</sup> EPA, *Final Determination of Identified Proven Damage and Recently Alleged Damage Cases*, [DCN SE01966], Docket No. EPA-HQ-OW-2009-0819-2212; Annual Groundwater Monitoring Report: 2009 Data Summary submitted by Lower Colorado River Authority to the Texas Commission on Environmental Quality (May 2010).

<sup>57</sup> Annual Groundwater Monitoring Report: 2009 Data Summary submitted by Lower Colorado River Authority to the Texas Commission on Environmental Quality (May 2010).

## CONCLUSION

In conclusion, TCEQ must address these serious issues before any renewal permit is issued. Thank you for considering our comments, and please contact Jennifer Duggan or Joshua Smith if you have any questions.

Sincerely,



Jennifer Duggan  
Managing Attorney  
Environmental Integrity Project  
1000 Vermont Ave NW, Suite 1100  
Washington, DC 20005  
(802) 225-6774  
jduggan@environmentalintegrity.org ✓

Joshua Smith  
Staff Attorney  
Sierra Club Environmental Law Program  
85 Second Street, 2<sup>nd</sup> Floor  
San Francisco, CA 94105  
(415) 977-5560  
joshua.smith@sierraclub.org

September 14, 2014

Bridget C. Bohac  
Chief Clerk, MC-105  
Texas Commission on Environmental Quality  
P.O. Box 13087  
Austin, Texas 78711-3087  
<http://www5.tceq.state.tx.us/rules/ecomments/>

REVIEWED  
SEP 17 2014  
By [Signature]  
CHIEF CLERK'S OFFICE  
2014 SEP 17 AM 9:33  
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

**RE: Notice of Application and Intent to Obtain Water Quality Permit Renewal for the LCRA Fayette Power Plant, Permit No. WQ0002105000**

Dear Chief Clerk:

We are writing to request a public meeting to discuss the Lower Colorado River Authority's ("LCRA") application and intent to obtain a water quality permit for the Fayette Power Plant. Each day across the United States, coal-burning power plants like the LCRA Fayette Power Plant dump millions of gallons of wastewater loaded with toxic pollutants like arsenic, boron, cadmium, chromium, lead, mercury, and selenium into our rivers, lakes, and streams. This toxic soup can be harmful to humans and aquatic life in even small doses. This pollution is discharged directly from plants and waste pits; flows from old, unlined surface impoundments that many plants use to store toxic slurries of coal ash and smokestack scrubber sludge; and seeps from unlined ponds and landfills into ground and surface waters.

LCRA's own 2010 annual groundwater monitoring report shows that groundwater near the coal ash ponds and a landfill at the Fayette Plant contains levels of arsenic, selenium, cobalt, and molybdenum exceeding Texas Protective Contamination Levels (PCLs) and federal Maximum Contaminant Levels (MCLs). Selenium levels have reached more than 4 times the PCL and MCL, cobalt levels have reached more than 3 times the PCL, and molybdenum has exceeded the federal Life-time Health Advisory by nearly 4 times and exceeded the PCL in water down-gradient or cross-gradient of ash disposal areas. Aluminum, chloride, manganese, sulfate and total dissolved solids exceed federal secondary MCLs.

Moreover, according to LCRA's report, many of the groundwater monitoring wells are located within the shallow groundwater bearing Middle Sand Unit. LCRA acknowledges that the "Middle Sand is believed to be in communication with the Cedar Creek Reservoir," and that contaminated groundwater "could migrate beyond the boundaries of the [Fayette Power Plant] property." In short, pollution from the Fayette Plant's leaking coal ash dumps could potentially impact water quality in the Cedar Creek Reservoir and nearby residential drinking water wells.

Despite this imminent public health risk, the current draft Clean Water Act permit fails to set effluent limits for almost all of the toxic pollutants found in coal ash wastewaters, or address the seeps and leaks from the plant's coal ash disposal units. In addition:

- **The current Draft Permit does not set effluent limits for the numerous toxic pollutants that are regularly discharged in coal ash wastewaters.** Under the Clean

[Handwritten signature]

Water Act, Clean Water Act permits must include technology-based effluent limits for all discharged pollutants. Despite the fact that EPA has identified 27 pollutants found in coal ash wastewaters (including, aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, molybdenum, nickel, selenium, silver, sodium, thallium, tin, titanium, vanadium, yttrium, and zinc), the current permit for the Fayette Plant only imposes limits on one toxic pollutant—selenium. *The revised Clean Water Act permit must impose effluent limits that eliminate or control toxic discharges as required by law.*

- **TCEQ must also require LCRA to clean up and prevent pollution from its leaking coal ash disposal units.** Discharges, including leaks and seeps, of leachate from the Plant's coal ash impoundments and landfills to surface waters and/or groundwater with a hydrogeological connection to surface water without a permit are prohibited by the Clean Water Act. LCRA itself has identified concentrations of pollutants like arsenic, selenium, molybdenum, and cobalt at levels that exceed federal and state groundwater standards, and acknowledged that this pollution is occurring in groundwater that communicates with the Cedar Creek Reservoir and could migrate offsite. *The revised Clean Water Act permit must impose requirements to clean up and eliminate pollution leaks and seeps into hydrogeologically connected ground and surface waters.*

In sum, it does not appear that the existing permit, if renewed, would comply with the federal Clean Water Act ("CWA") or state law, including the Texas Water Code and the Texas Surface Water Quality Standards. We respectfully request that TCEQ hold a public meeting to provide an opportunity for the public to address these critical public health threats.

Thank you for considering these comments and my request for a public meeting.

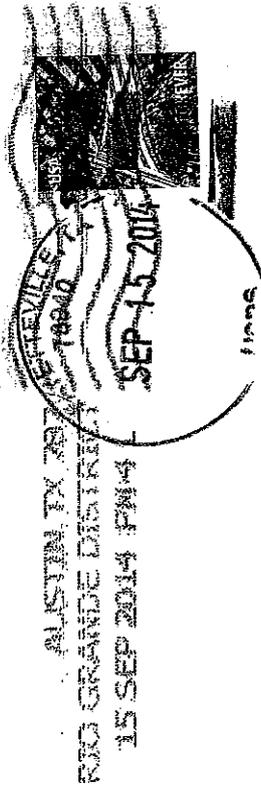
Sincerely,



Charla A. Hengst  
4370 Leslie Road  
Fayetteville, Texas

I demand this hearing to discuss the water and air qualities coming out of the Power Plant. This amounts to a slow murder if you allow this application to be approved. This plant has already ruined a wonderful creek that my neighbors own, and has destroyed the land for many years. I hope you do not bow down to big business, otherwise, you are a useless state agency.

Charla A. Hengst  
4370 Leslie Road  
Fayetteville, Texas 78940



AUSTIN, TX 787  
RIO GRANDE DISTRICT  
15 SEP 2014 PM 4

**RECEIVED**

SEP 17 2014

TCEQ MAIL CENTER  
CS

Bridget Bohac  
Chief Clerk, MC-105  
TCEQ  
P.O. Box 13084  
Austin, Texas 78711-3087

TEXAS  
COMMISSION  
ON ENVIRONMENTAL  
QUALITY

2014 SEP 17 AM 9:33

CHIEF CLERKS OFFICE



78711308484

**Marisa Weber**

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**From:** PUBCOMMENT-OCC  
**Sent:** Wednesday, September 17, 2014 8:14 AM  
**To:** PUBCOMMENT-OCC2  
**Subject:** CORRECTION Fayette Power Plant

PM  
H

LWD  
93275

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**From:** CHIEFCLK  
**Sent:** Tuesday, September 16, 2014 8:39 AM  
**To:** PUBCOMMENT-OCC  
**Subject:** FW: Fayette Power Plant  
**Importance:** High

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**From:** Robert Malina [<mailto:rmalina@1skyconnect.net>]  
**Sent:** Monday, September 15, 2014 10:09 PM  
**To:** CHIEFCLK  
**Subject:** Fayette Power Plant  
**Importance:** High

Dear Ms Bohac:

I believe it is essential that the LCRA application and intent to obtain water quality permit renewal for the LCRA Fayette Power Plant, Permit No. WQ0002105000 be openly discussed at a public meeting. The negative consequences of coal pollution per se and the toxic substances and heavy metals, specifically mercury and lead, for the health of the population and especially children, are well documented. The potential for the leaking of toxic substances and heavy metals from the coal ash pit of the power plant into the Colorado River is real. The recent case of Duke Energy is well documented. More to the point, leaking of toxic substances and heavy metals into the Colorado River can be potentially devastating to Matagorda Bay per se and the associated wetlands which are vital to the shrimp and fishing industries and also to the local bird population.

Given these concerns, the need for a public hearing on the LCRA application for water quality permit renewal is obvious. Such a hearing will serve the public good and bring attention to the potentially negative effects of the coal fired power plant on the population and the environment.

Respectfully submitted,

Robert M. Malina, PhD, FACSM  
Professor Emeritus, University of Texas at Austin

10735 FM 2668  
Bay City, TX 77414

[rmalina@1skyconnect.net](mailto:rmalina@1skyconnect.net)

✓

*RM*

**Marisa Weber**

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PM

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Professor Emeritus, University of Texas at Austin

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Bay City, TX 77414

[rmalina@1skyconnect.net](mailto:rmalina@1skyconnect.net)

*LWD  
9/32/15*

*RM*