EXHIBIT E:

ENVIRONMENTAL IMPACT/ECONOMIC BENEFIT ANALYSIS

ARKANSAS POLLUTION CONTROL & ECOLOGY COMMISSION

ECONOMIC IMPACT/ENVIRONMENTAL BENEFIT ANALYSIS

Rule Number & Title: Petitioner: Contact/Phone/Electronic mail: Analysis Prepared By: Date Analysis Prepared: Regulation No. 23, Hazardous Waste Management ADEQ Hazardous Waste Division Clyde Rhodes, 682-0831, rhodesc@adeq.state.ar.us Tom Ezell, (501) 682-0854 October 25, 2011

I. Federal Revisions

STEP 1: DETERMINATION OF ANALYSIS REQUIREMENT

Is the proposed rule exempt from economic impact/environment		
benefit analysis for one of the following reasons?	YES	NO
► The proposed rule incorporates the language of a federal statute or	Х	
regulation without substantive change		
► The proposed rule incorporates or adopts the language of an		
Arkansas state statute or regulation without substantive change		Х
► The proposed rule is limited to matters arising under Regulation		
No. 8 regarding the rules of practice or procedure before the		x
Commission		Λ
► The proposed rule makes only <i>de minimis</i> changes to existing rules		
or regulations, such as the correction of typographical errors, or the		X
renumbering of paragraphs or sections; or		Λ
► The proposed rule is an emergency rule that is temporary in		
duration.		Χ

If the proposed rulemaking does not require the following Analysis due to one or more of the exemptions listed above, state in the Petition to Initiate Rulemaking which exemptions apply, and explain specifically why each is applicable.

RULE SUMMARY:

I.1: Withdrawal of the Emission Comparable Fuel Exclusion. 75 FR 33712-33724, June 10, 2010. This federal rule withdrew a conditional exclusion from Federal regulations promulgated on December 19, 2008 at 73 FR 77954-78017 for so-called Emission Comparable Fuels (ECF). These are fuels produced from hazardous secondary materials which, when burned in industrial boilers under specified conditions, generate emissions that are comparable to emissions from burning fuel oil in those boilers. EPA

withdrew this conditional exclusion because the Agency concluded in response to public comments and subsequent litigation that ECF was more appropriately classified as a discarded material and regulated as a hazardous waste. Existing exclusions for comparable fuels and synthesis gas fuels were not addressed or otherwise affected by this rule. The Commission did not adopt the December 2008 Federal exclusion for emission comparable fuels. When EPA published this notice rescinding the exclusion for emission comparable fuels and reinstating most of the previous requirements under 40 CFR 261.38, numerous changes were made to the previous language at 40 CFR 261.38 and its accompanying Table 1, and the more stringent, 2008 federal standards for comparable fuels were carried over into the reinstatement of the provisions of this section. The Commission is therefore proposing to adopt the revised federal provisions at Regulation No. 23, Section 261.38 to maintain equivalence between the State regulations at § 261.38 and the corresponding Federal rules.

EPA estimated the potential costs and impacts of this rule on a national basis during its development of the federal final rule, and published these estimates at USEPA, "Assessment of the Potential Costs, Benefits, and Other Impacts of the Expansion of the Exclusion-Final Rule," RCRA Comparable Fuel May 14. 2008; http://frwebgate.access.gpo.gov/cgibin/leaving.cgi?from=leavingFR.html&log=linklog&to=http://www.sba.gov/idc/groups/p ublic/documents/sba homepage/serv sstd tablepdf.pdf; and USEPA. ``Revised Assessment of the Potential Costs, Benefits, and Other Impacts of the Expansion of the RCRA Comparable Fuel Exclusion-Final Rule," July 15, 2009. At the time that EPA's

initial promulgation of the revised ECF rule came up for adoption at state level, EPA had already provided public notice of its intent to significantly revise or to withdraw the federal rule. Therefore, ADEQ did not propose the December 2008 federal rule for adoption by the Commission. Thus, we anticipate no additional financial or economic impact from reinstatement of the previous federal requirements, which have remained in place in Arkansas. This rulemaking incorporates a number of changes made in the reinstated federal rule to ensure conformity with the existing federal regulations.

In Arkansas, one (1) facility is affected by this rule, Rineco Chemical Industries in Haskell, in Saline County, which blends and manufactures hazardous waste-derived fuels for the cement kiln industry.

1.2: Hazardous Waste Management System; Identification and Listing of Hazardous Waste; Removal of Saccharin and Its Salts from the Lists of Hazardous Constituents, Hazardous Wastes, and Hazardous Substances. 75 FR 78918-78926, December 17, 2010. This federal rule removed saccharin and its salts from the lists of hazardous constituents and commercial chemical products which are hazardous wastes when discarded or intended to be discarded.

No Arkansas generators have been identified for this waste stream within the past three (3) annual hazardous waste reporting cycles, therefore no impact is anticipated on Arkansas businesses.

I.3: Technical Corrections to the Standards Applicable to Generators of Hazardous Waste; Alternative Requirements for Hazardous Waste Determination and Accumulation of Unwanted Material at Laboratories Owned by Colleges and Universities and Other Eligible Academic Entities Formally Affiliated With Colleges and Universities. 75 FR 79304-79308, December 20, 2010. This Federal rule made technical corrections to six (6) provisions under the 40 CFR 262, Subpart K "Academic Laboratories" rule. There are no changes which affect the stringency of this rule.

In Arkansas, two (2) facilities have notified ADEQ of their intent to manage their laboratory wastes under the provisions of Section 262 Subsection K: the University of Arkansas for Medical Sciences (UAMS, ARD981158405) in Little Rock, and Southern Arkansas University (ARR000021956) in Magnolia.

I.4: Land Disposal Restrictions: Revision of the Treatment Standards for Carbamate Wastes. 76 FR 34147-34157, June 13, 2011. This Federal rule provided alternative treatment standards allowing for the use of best demonstrated available technologies (BDAT) and revises the Table of Treatment Standards for treating hazardous wastes from the production of carbamates and carbamate commercial chemical products, off-specification or manufacturing chemical intermediates and container residues that become hazardous wastes when they are discarded or intended to be discarded. In addition, this action removes carbamate regulated constituents from the table of Universal Treatment Standards in Section 268.

Facility	City	Waste Code	Quantity (2010)
Rineco Chemical Industries	Haskell	K161	25,548 lbs
BPS, Inc. Unit 2	Helena	U279	3,041 lbs
FutureFuels Chemical	Batesville	U404	1,029 lbs
Crop Production Services	Portland	U410	100 lbs

In Arkansas, this rule potentially affects four (4) facilities which generated these wastes during the 2010 annual hazardous waste reporting period:

I.5: Hazardous Waste Manifest Printing Specifications Correction Rule. 76 FR 36363-36366, June 22, 2011. This federal revision amended the printing specification regulations for uniform hazardous waste manifests to indicate that the use of red ink, as well as other distinct colors, or other methods to distinguish the copy distribution notations from the rest of the printed form and data entries is permissible for commercially-printed manifests as well as manifests from other authorized sources.

This revision affects only private companies which print hazardous waste manifests for their own use or for resale or distribution, and by removing the requirement for different colored inks, their printing and production costs are lessened. ADEQ no longer prints manifests, and so is unaffected by this rule. No Arkansas companies are currently approved by the U.S. EPA to print and sell or distribute manifest forms.

I.6: Miscellaneous Technical Corrections. In developing the Burden Reduction Rule, from which these revision are derived, EPA developed an economic cost and environmental benefit analysis which was summarized in the Final Rule at 71 FR 16899-16902, as well as published as an "Economic Background Document" as a component of the administrative record for the federal rule. ADEQ staff has reviewed these documents and compared them to the universe of facilities potentially subject to these proposed requirements, and concurs with EPA's assessment of the costs and benefits of these measures.

STEP 2: THE ANALYSIS

Federal revisions discussed in Paragraph I above are not subject to the requirement for economic analysis and environmental benefit, as they codify existing Federal regulations.

2A. ECONOMIC IMPACT

1. Who will be affected economically by this proposed rule?

State: a) the specific public or private entities affected by this rulemaking, indicating for each category if it is a positive or negative economic effect; and b) provide the estimated number of entities affected by this proposed rule.

See notes on affected facilities in the above discussion.

Sources and Assumptions:

- Arkansas RCRAInfo database
- Arkansas 2010 Annual Hazardous Waste Report
- U.S. EPA Hazardous Waste Manifest Registry, on-line at <u>http://www.epa.gov/osw/hazard/transportation/manifest/registry/printers.htm</u>
- See above discussion of the financial impact of each federal revision.

2. What are the economic effects of the proposed rule?

State: 1) the estimated increased or decreased cost for an average facility to implement the proposed rule; and 2) the estimated total cost to implement the rule.

In that the proposed revisions make administrative changes to existing waste management requirements, these revisions will not have a significant statewide adverse impact directly affecting business, including the ability of Arkansas businesses to compete with businesses in other states. Nor will these revisions adversely affect small businesses in Arkansas. ADEQ staff is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed revised regulations. The proposed regulatory revisions will have no effect on the creation or elimination of jobs in Arkansas. Nor will the proposed regulatory revisions have any effect on the creation of new businesses, the elimination of existing businesses, or the expansion of existing businesses doing business within Arkansas.

Sources and Assumptions: N/A

3. List any fee changes imposed by this proposal, and the justification for each.

None.

4. What is the probable cost to ADEQ in manpower and associated resources to implement and enforce this proposed change, and what is the source of revenue supporting this proposed rule?

No additional costs to ADEQ are anticipated from the state-initiated revisions in this proposed rulemaking.

Sources and Assumptions: N/A

5. Is there a known beneficial or adverse impact to any other relevant state agency to implement or enforce this proposed rule? Is there any other relevant state agency's rule that could adequately address this issue, or is this proposed rulemaking in conflict with or have any nexus to any other relevant state agency's rule? *Identify state agency and/or rule.*

No additional costs or savings have been identified to any state or local agency as a result of implementing the proposed regulatory revisions.

Sources and Assumptions: N/A

6. Are there any less costly, non-regulatory, or less intrusive methods that would achieve the same purpose as this proposed rule?

No reasonable alternative would be more or equally effective in carrying out the purposes for which the proposed regulations are intended, or less burdensome to affected private persons or businesses than the proposed action. Interested persons may present statements or arguments with respect to alternatives to the proposed regulations during the public comment period or at any hearing on this matter.

Sources and Assumptions: N/A

2B. ENVIRONMENTAL BENEFIT

1. What issues affecting the environment are addressed by this proposal?

See above discussion of the individual rules.

2. How does this rule protect, enhance, or restore the natural environment for the well being of all Arkansans?

Arkansas businesses will continue to benefit from a regulatory environment that is equivalent to the corresponding Federal requirements, and effective in ensuring that hazardous wastes and similar regulated materials are managed in an environmentally safe manner.

Sources and Assumptions: N/A

3. What detrimental effect will there be to the environment or to the public health and safety if this proposed rule is not implemented?

None. Existing rules are currently protective of health and the environment. These updates are adopted to maintain consistency with corresponding Federal regulations.

Sources and Assumptions: N/A

4. What risks are addressed by the proposal and to what extent are these risks anticipated to be reduced?

Lessens risk of potential mismanagement of hazardous wastes.

Sources and Assumptions: N/A

II. State Revisions:

RULE SUMMARY:

II. 1 Regulations Incorporated by Reference. This administrative amendment moves forward the window within which specific federal regulations listed at Section 3(b)(1) through (4) are incorporated by reference to those published in the Federal

Register on or before December 31, 2011. No economic impact is anticipated for this action.

STEP 1: DETERMINATION OF ANALYSIS REQUIREMENT

Is the proposed rule exempt from economic impact/environment		
benefit analysis for one of the following reasons?	YES	NO
► The proposed rule incorporates the language of a federal statute or		
regulation without substantive change	Χ	
► The proposed rule incorporates or adopts the language of an		Х
Arkansas state statute or regulation without substantive change		
► The proposed rule is limited to matters arising under Regulation		
No. 8 regarding the rules of practice or procedure before the		Х
Commission		
► The proposed rule makes only <i>de minimis</i> changes to existing rules		
or regulations, such as the correction of typographical errors, or the		Х
renumbering of paragraphs or sections; or		
► The proposed rule is an emergency rule that is temporary in		
duration.		Х

If the proposed rulemaking does not require the following Analysis due to one or more of the exemptions listed above, state in the Petition to Initiate Rulemaking which exemptions apply, and explain specifically why each is applicable.

STEP 2: THE ANALYSIS

2A. ECONOMIC IMPACT

1. Who will be affected economically by this proposed rule?

State: a) the specific public or private entities affected by this rulemaking, indicating for each category if it is a positive or negative economic effect; and b) provide the estimated number of entities affected by this proposed rule.

As the affected paragraph 3(b)(4) principally incorporates federal delisting decisions for facilities located outside Arkansas, only out-of-state generator facilities which have received a final delisting decision pursuant to 40 CFR 260.22 would be affected if their delistings were not applicable in Arkansas and the delisted wastes were shipped to an Arkansas TSDF or on public highways through Arkansas.

Sources and Assumptions:

• Regulation No. 23, Section 261, Appendix IX (approved delistings for Arkansas facilities)

• 40 CFR 261, Appendix IX (federally-approved delistings, nation-wide)

2. What are the economic effects of the proposed rule?

State: 1) the estimated increased or decreased cost for an average facility to implement the proposed rule; and 2) the estimated total cost to implement the rule.

In that the proposed revisions make administrative changes to existing waste management requirements, these revisions will not have a significant statewide adverse impact directly affecting business, including the ability of Arkansas businesses to compete with businesses in other states. Nor will these revisions adversely affect small businesses in Arkansas. ADEQ staff is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed revised regulations. The proposed regulatory revisions will have no effect on the creation or elimination of jobs in Arkansas. Nor will the proposed regulatory revisions have any effect on the creation of new businesses, the elimination of existing businesses, or the expansion of existing businesses doing business within Arkansas.

Sources and Assumptions: N/A

3. List any fee changes imposed by this proposal, and the justification for each.

None

4. What is the probable cost to ADEQ in manpower and associated resources to implement and enforce this proposed change, and what is the source of revenue supporting this proposed rule?

None; no additional revenue necessary for these specific revisions.

Sources and Assumptions: N/A

5. Is there a known beneficial or adverse impact to any other relevant state agency to implement or enforce this proposed rule? Is there any other relevant state agency's rule that could adequately address this issue, or is this proposed rulemaking in conflict with or have any nexus to any other relevant state agency's rule? *Identify state agency and/or rule.*

No additional costs or savings have been identified to any state or local agency as a result of implementing the proposed regulatory revisions.

Sources and Assumptions: N/A

6. Are there any less costly, non-regulatory, or less intrusive methods that would achieve the same purpose as this proposed rule?

No reasonable alternative would be more or equally effective in carrying out the purposes for which the proposed regulations are intended, or less burdensome to affected private persons or businesses than the proposed action. Interested persons may present statements or arguments with respect to alternatives to the proposed regulations during the public comment period or at any hearing on this matter.

Sources and Assumptions: N/A

2B. ENVIRONMENTAL BENEFIT

1. What issues affecting the environment are addressed by this proposal?

Consistency with Federal regulations concerning management of hazardous wastes.

2. How does this rule protect, enhance, or restore the natural environment for the well being of all Arkansans?

Arkansas businesses will continue to benefit from a regulatory environment that is equivalent to the corresponding Federal requirements, and effective in ensuring that hazardous wastes and similar regulated materials are managed in an environmentally safe manner.

Sources and Assumptions: N/A

3. What detrimental effect will there be to the environment or to the public health and safety if this proposed rule is not implemented?

None.

Sources and Assumptions: N/A

4. What risks are addressed by the proposal and to what extent are these risks anticipated to be reduced?

None, this revision is purely administrative in nature.

Sources and Assumptions: N/A