

Is Technology to Control Mercury Commercially Available? Yes

• “[T]hese new brominated carbons are now commercially available for use by any plant.” Attachment A. Sorbent Technologies Letter to EPA, Dec. 30, 2004. Page 2

• “ACI has been commercially used to reduce mercury emissions from municipal solid waste incinerators for over twenty years. The systems are simple and easily commercially available. Already full-scale ACI systems have been installed on at least 20 U.S. coal-fired boilers in temporary ACI trials.” Attachment A. Sorbent Technologies Letter to EPA, Dec. 30, 2004. Page 16

• “Activated carbon injection systems are simple, reliable, and commercially available.” Attachment B. ADA-Environmental Solutions letter to EPA, Dec. 30, 2004. Page 10

• “Activated carbon injection is currently being sold now to utilities. ACI equipment is identical for all coal types....The specific sorbents may vary for different coals and operating times.” Attachment C. Institute of Clean Air Companies comments to EPA, Jan. 3, 2005. Page 5.

How Much Does it Cost to Install Equipment to Control Mercury?

• Capital cost for ACI installation are less than \$1 million per installation. Attachment D. ADA-ES presentation Advances in Mercury Control Technology to Meet Future Needs, Dec. 2, 2005, Page 11.

• By comparison DEQ estimated that control equipment for PM10, SO2, and NOx at the Roundup Power Project would cost \$230-300 million.

Can Control Technology Control Mercury from Subbituminous/Western Coals with lower chlorine content?

• “Coal chlorine content has now been made irrelevant.” Attachment A. Sorbent Technologies Letter to EPA, Dec. 30, 2004. Page 2

• “Not only was greater than 90% mercury removal performance observed in each and every one of the low-chlorine coal trials, but net costs (were far less than DOE estimates).” Attachment A. Sorbent Technologies Letter to EPA, Dec. 30, 2004. Page 16

Has Testing Been Done on Subbituminous/Western Coals? Yes

• “Multiple DOE-co-sponsored full-scale retrofit demonstrations by different contractors of ACI with brominated carbons at plants burning low-chlorine fuels this past year consistently achieved mercury emissions rates of less than 1.0 lb Hg/Tbtus at very low costs.” Attachment A. Sorbent Technologies Letter to EPA, Dec. 30, 2004. Page 16

• See list of trials. Attachment A. Sorbent Technologies Letter to EPA, Dec. 30, 2004. Page 16.

What is a Reasonable Emission Limit for Mercury?

• “MACT floor levels of 1.0 lb Hg/Tbtu or below (are reasonable).” Attachment A. Sorbent Technologies Letter to EPA, Dec. 30, 2004. Page 2

• Chart shows subbituminous coals achieving reductions of 94%, 93%, and 93% with emissions of 0.3 lb/TBU, 0.7 lbs/TBU, and .8 lbs/Tbtu. Attachment A. Sorbent Technologies Letter to EPA, Dec. 30, 2004. Page 4

- Based on data provided by EPA to the utility MACT working group, the following can be calculated:

- The average emission rate achieved by the top 12% of the best performing subbituminous-fired units during three 3-hour emission tests is 0.76 lb/TBtu.

- The best performing subbituminous-fired units and their emission rates during the short-term tests were:

- AES Hawaii (an FBC): 0.46 lbs./TBtu

- Clay Boswell: 0.66 lbs./TBtu

- Craig: 0.73 lbs./TBtu

- Cholla: 1.2 lbs./TBtu

What is a reasonable date by which all companies can comply with low emission rates?

- All companies nationwide could comply by Jan. 1, 2008. Attachment A. Sorbent Technologies Letter to EPA, Dec. 30, 2004. Page 18

We should not wait for EPA to set a standard.

- “In some cases, the Maximum Achievable” rates (EPA proposal) are more than ten times or 1000% higher than those actually demonstrated this year.” Attachment A. Sorbent Technologies Letter to EPA, Dec. 30, 2004. Page 5

- See chart on page 5 for specifics.