Appendix E COAL MINING DETAILED STUDY STATUS MEMORANDUM



TO: Tom Born, Task Manager Coal Mining Detailed Study

Carey Johnston, Work Assignment Manager

FROM: Jessica Wolford, ERG

Ellie Ku Codding, ERG

DATE: October 5, 2007

SUBJECT: Status of the Detailed Study of the Coal Mining Industry (40 CFR Part 434)

EPA is conducting a Detailed Study of the Coal Mining Industry (Part 434). Table 1 lists the documents prepared in support of EPA's Preliminary 2008 Effluent Guidelines Program Plan and the associated description, and document control number (DCN). These documents are available from http://www.regulations.gov, Docket EPA-HQ-OW-2006-0771.

Table 1. Detailed Study of the Coal Mining Industry (Part 434) Documents

Document Title	Document Date	Document Description	DCN ^a
Detailed Study Plan for	April 2007	Describes the objectives of the detailed	04433
the Coal Mining Point		study, the potential study questions,	
Source Category (Part		intended information collection, and	
434)		documentation.	
Draft Industry Profile for	September 19, 2007	Provides brief description of the	04346
the Coal Mining Point		industry. Describes current coal	
Source Category (Part		mining regulations, available data	
434)		sources, coal mining processes and	
		production, and coal mine wastewater	
		and treatment technologies.	
Preliminary Cost	August 17, 2007	Summarizes the preliminary cost	04429
Estimates for Treating		estimates for treating AMD with the	
Acid Mine Drainage		following treatment systems: chemical	
Memorandum		precipitation using caustic soda;	
		chemical precipitation using hydrated	
		lime; limestone bed with clay liner; and	
		limestone bed with synthetic liner.	
		Attachments are the draft cost modules	
		used to develop the preliminary cost	
		estimates.	
Model Mine Approach for	April 12, 2007	Describes the "model mine approach"	04347
Estimating Treatment		EPA plans to use to evaluate the cost	
Costs and Pollutant Loads		and performance of AMD treatment	
Memorandum		technologies in removing acidity, iron,	
		and manganese.	

Table 1. Detailed Study of the Coal Mining Industry (Part 434) Documents

Document Title	Document Date	Document Description	DCN ^a
Draft Summary of	September 4, 2007	Summarizes findings related to the	04434
Environmental Issues		following questions: 1) how significant	
Related to Manganese		are current impacts of manganese; 2)	
Discharges from Coal		how would impacts change if the	
Mines (Response to		manganese limit was less stringent; 3)	
Technical Directive: 4-05-		to what extent does manganese control	
01 (#1), Contract 68-C02-		address other metals; and 4) how	
095) Memorandum		significant are the impacts from other	
		metals and contaminants such as	
		sulfates and chloride.	
Summary of Acid Mine	September 19, 2007	Describes the available data sources	04438
Drainage (AMD)		and how the data will be used to	
Characterization Data		characterize pollutant loadings from	
Available for the Coal		AMD and estimate treatment system	
Mining Detailed Study		performance.	
(Part 434) Memorandum			
Findings from West	July 6, 2007	Summarizes how the West Virginia	04439
Virginia Permit Limit		Department of Environmental	
Database Memorandum		Protection determines National	
		Pollutant Discharge Elimination	
		System permit limits for coal mines	
		with AMD discharges.	
Quality Assurance Project	April 2007	Describes how EPA will evaluate the	04436
Plan for the 2007 Coal		quality of the data used in analyses and	
Mining Detailed Study		the minimum acceptance criteria.	
Scaling Up Findings for	October 5, 2007	Describes how cost estimates for	04435
the Coal Mining Detailed		treating AMD and pollutant loadings	
Study to the National		can be scaled up.	
Level Memorandum			

^aDocuments are published in the Docket EPA-HQ-OW-2006-0771. The documents can be found by searching for the DCN, which is part of the document's title.

Appendix F HEALTH SERVICES DETAILED STUDY STATUS MEMORANDUM



TO: Jan Matuszko, Task Manager Health Services Detailed Study

Carey Johnston, Work Assignment Manager

FROM: Meghan Camp, ERG

DATE: October 3, 2007

SUBJECT: Status of the Detailed Study of the Health Services Industry

The final 2006 Effluent Guidelines Program Plan identified the Health Services Industry for detailed study. The Health Services Industry includes establishments engaged in various aspects of human health (e.g. hospitals, dentists, medical/dental laboratories) and animal health (e.g. veterinarians). EPA selected the Health Services Industry for detailed study because comments received on its Preliminary 2004 and 2006 Effluent Guidelines Program Plans urged EPA to consider establishing guidelines and standards (ELGs) for this industry. In particular, commenters raised concerns about discharges of emerging pollutants of concern such as endocrine disruptors and mercury discharges from dentists.

Because of data and resource constraints, EPA has decided to limit the scope of this current study to an evaluation of control technologies and best management practices (BMPs) for mercury discharges from dentists and disposal to wastewater of spent pharmaceuticals. Table 1 lists the documents prepared in support of EPA's Preliminary 2008 Effluent Guidelines Program Plan and the associated description, and document control number (DCN). These documents are available from http://www.regulations.gov, Docket EPA-HQ-OW-2006-0771.

Table 1. Detailed Study of the Health Services Industry Documents

Document Title	Document Date	Document Description	DCN ^a
Draft Detailed Study Plan for the Health Services Industry Sector	3/1/2007	Describes EPA's detailed study of the health services industry and includes the following: background information about the industry and its pollutants of concern; and the potential study scope, study questions, and data sources for the detailed study.	05067
Memorandum to Jan Matuszko, U.S. EPA.: "Industry Profile for Dental Laboratories and Dental Offices"	7/11/2007	Provides an economic profile for dental laboratories and dental offices.	04500

Table 1. Detailed Study of the Health Services Industry Documents

Document Title	Document Date	Document Description	DCN ^a
Memorandum to Jan Matuszko, U.S. EPA: "Current Federal, State, Local and Industry Group Requirements and Guidance to Control Mercury Discharges from Dentists"	7/17/2007	Summarizes current federal, state, local, and industry group requirements and guidance to control mercury discharges from dental offices, practices, and clinics.	04668
Summary of: National Association of Clean Water Agencies (NACWA): Controlling Mercury in Wastewater Discharges from Dental Clinics: White Paper	8/13/2007	Summarizes NACWA's white paper and suggests additional references/research.	05027
Summary of: NACWA: Advanced Mercury Source Control Study: 2006 Annual Report Activity	8/13/2007	Summarizes the City of Palo Alto's annual report and suggests additional references/research.	05028
Summary of: Evaluation of Domestic Sources of Mercury - AMSA, August 2000	8/13/2007	Summarizes AMSA's 2000 evaluation report and suggests additional references/research.	05029
Summary of: Mercury Source Control and Pollution Prevention Program Evaluation, Final Report - AMSA, March 2002	8/13/2007	Summarizes AMSA's 2002 report and suggests additional references/research.	05030
Summary of: Potential Releases of Unused Medications in Subtitle D Landfill Leachate, Tischler, October 2006	8/13/2007	Summarizes Tischler's 2006 report and suggests additional references/research.	05031
Summary of: Effects of Human Pharmaceuticals on Aquatic Life: Next Steps	8/13/2007	Summarizes PhRMA's article and suggests additional references/research.	05032
Summary of: Human Pharmaceuticals in US Surface Waters: A Human Health Risk Assessment	8/13/2007	Summarizes Schwab's article and suggests additional references/research.	05054
Summary of: Screening Analysis of Human Pharmaceutical Compounds in U.S. Surface Waters	8/16/2007	Summarizes article from Anderson et al. and suggests additional references/research.	05056
Summary of: An Assessment of Mercury in the Form of Amalgam in Dental Wastewater in the United States, Vandeven and Steve McGinnis	8/13/2007	Summarizes Vandeven's assessment of mercury in the form of amalgam in dental wastewater and suggests additional references/research.	05055
Memorandum to Jan Matuszko, U.S. EPA.: "Dental Amalgam Separators: Summary of Removal Efficiencies, Current Use and Cost Effectiveness"	9/26/2007	Discusses the effectiveness of amalgam separators in removing dental mercury amalgam from dental office wastewater, costs of purchase, installation and maintenance of dental amalgam separators, and baseline information on the current use of amalgam separators and other filtration devices. Analyzes potential mercury reductions following the installation of amalgam separators in dental facilities, and potential costs.	04851

Table 1. Detailed Study of the Health Services Industry Documents

Document Title	Document Date	Document Description	DCN ^a
Memorandum to Jan Matuszko, U.S.	9/26/2007	Summarizes information on dental office	04852
EPA.: "Dental Amalgam Best		BMPs for dental amalgam and BMPs	
Management Practices: Summary of		published by national, state and local	
Effectiveness, Current Use and Cost"		industry groups and regulatory agencies.	
Memorandum to Jan Matuszko, U.S.	9/26/2007	Summarizes information on current	04853
EPA.: "Summary of Information on		discharges to POTWs from dentists,	
Current Discharges of Mercury in the		including measured, quantitative	
Form of Dental Amalgam from Dental		information on mercury reductions in	
Offices to Publicly-Owned Treatment		POTW influent, and where available,	
Works"		effluent and sludge, resulting from various	
		mercury control options implemented by	
		dentists.	
Memorandum to Jan Matuszko, U.S.	8/15/2007	Summarizes available information related to	04855
EPA.: "Veterinarians, Veterinary		veterinary associations, including contact	
Associations, and Spent		information, and spent pharmaceutical	
Pharmaceutical Disposal Practices"		disposal in veterinary practices.	
Memorandum to Jan Matuszko, U.S.	8/15/2007	Summarizes available information	04856
EPA.: "Hospitals, Long-Term Care		pertaining to current federal agency	
Facilities, Clinics and Veterinarians:		regulations, guidelines, and requirements	
Federal Agency Regulations,		for disposal of spent (unused)	
Guidelines and Requirements for		pharmaceuticals from hospitals, long-term	
Disposal of Spent Pharmaceuticals"		care facilities (LTCFs), clinics, and	
		veterinarians.	
Memorandum to Jan Matuszko, U.S.	8/20/2007	Provides an economic profile for long term	04511
EPA.: "Industry Profile for Long Term		care facilities, hospitals, clinics, and	
Health Care Facilities, Hospitals,		veterinary services.	
Clinics, and Veterinary Services"			
Memorandum to Jan Matuszko, U.S.	9/25/2007	Summarizes available information	04857
EPA.: "Regulations for Disposal of		pertaining to current federal and state	
Unused Pharmaceuticals from Long-		regulations for disposal of unused	
Term Care Facilities"		pharmaceuticals from LTCFs.	
Overview of EPA's Detailed Study of	9/27/2007	Summarizes EPA's review of the Health	05080
the Health Services Industry		Services Industry for the Preliminary 2008	
		Effluent Guidelines Program Plan	

^aDocuments are published in the Docket EPA-HQ-OW-2006-0771. The documents can be found by searching for the DCN, which is part of the document's title.