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Docket No. A-97-36
 Petroleum Refineries—Catalytic Cracking Units, Catalytic Reforming Units,
 and Sulfur Plant Units
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 EPA Studies or Contractor Reports

<u>Document No.</u>	<u>Description</u>
II-A-1	Report, Documentation for Developing the Initial Source Category List, EPA:OAQPS, EPA-450/3-91-030, July 1992, pp. 3-7 and A-26.
II-A-2	Report, Petroleum Refining Industry-Presence of Dioxins and Furans in Wastewater Generated by Reforming Operations, R. Kirby, EPA:OWEAD:EB, May 1994.
II-A-3	Report, Preliminary Presumptive MACT for Petroleum Refinery Process Vents: FCC Units, Reformers, and Sulfur Plants, EPA:OAQPS:ESD, February 28, 1997.
II-A-4	Report, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Steel Pickling—HCl process—Background Information for Prepared Standards, EPA:OAQPS, EPA-453/R-97-012, June 1997, pp. 4-37, 4-38, 4-40, and 4-43.
II-A-5	Report, Economic Impact Analysis for the Petroleum Refineries (Catalytic Cracking, Catalytic Reforming, and Sulfur Plant Units) NESHAP, EPA:OAQPS, December 18, 1997.
II-A-6	Report, Study of Hazardous Air Pollutant Emission from Electric Utility Steam Generating Units—Final Report to Congress, Volume I, EPA:OAQPS, EPA-453/R-98-004a, February 1998, pp. 13-22 through 13-28.
II-A-7	Report, Petroleum Refinery Enforcement Manual, EPA-340/1-80-008, March 1980, pp. 4.2-1 through 4.2-17, 4.5-1 through 4.5-13, and 4.16-1 through 4.16-18.
II-A-8	Report, Results of Dioxin Testing on the Catalytic Reformer Unit #1 Exhaust, Texaco Refinery, Bakersfield, California, prepared by Radian Corporation, August 8, 1991.

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<u>Document No.</u>	<u>Description</u>
II-A-9	Draft Report, Petroleum Refineries – Background Information for Proposed Standards, Catalytic Cracking (Fluid and Other) Units, Catalytic Reforming Units, and Sulfur Recovery Units, EPA-453/R-98-003, June 1998.

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 EPA Factual Memoranda

<u>Document No.</u>	<u>Description</u>
II-B-1	Memorandum, J. Coburn, Research Triangle Institute, to Refinery Vent PMACT Regulatory Team, March 15, 1995, Guidance for information of interest for the refinery PMACT.
II-B-2	Memorandum, J. Coburn, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, July 19, 1995, Regarding candidate facilities for site visits for the three refinery vents Presumptive MACT.
II-B-3	Memorandum, J. Coburn, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, August 10, 1995, Review of performance data available from the ICR database.
II-B-4	Memorandum, J. Coburn, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, September 27, 1995, Site visit to Star Enterprises in Convent, Louisiana, on August 31, 1995.
II-B-5	Memorandum, J. Coburn, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, February 29, 1996, Summary HAP emission data received from state agencies.

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<u>Document No.</u>	<u>Description</u>
II-B-6	Memorandum, J. Coburn, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, June 12, 1996, Preliminary assessment of alternative MACT standards.
II-B-7	Memorandum, J. Coburn, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, October 16, 1996, Process descriptions and emission points for petroleum refinery process vents: FCC Units, reformers and sulfur plants.
II-B-8	Memorandum, J. Coburn, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, October 24, 1996, Industry descriptions for petroleum refinery process vents: FCC units, reformers, and sulfur plants.
II-B-9	Memorandum, J. Coburn, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, April 22, 1997, Site visit to Marathon Oil Company in Garyville, Louisiana, on September 1, 1995 (Considered to be Confidential Business Information).
II-B-10	Memorandum, J. Coburn, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, April 22, 1997, Site visit to Point Refinery, Coastal Eagle Point Oil Company in Westville, New Jersey, on August 17, 1995 (Considered to be Confidential Business Information).
II-B-11	Memorandum, J. Coburn, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, April 23, 1997, Site visit to Girard Point Refinery, Sun Company, Incorporated, Philadelphia, Pennsylvania, on August 16, 1995 and site visit to Marcus Hook Refinery, Sun Company, Incorporated, Marcus Hook, Pennsylvania, on August 17, 1995 (Considered to be Confidential Business Information).

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<u>Document No.</u>	<u>Description</u>
II-B-12	Memorandum, J. Coburn, R. Zerbonia, and M.R. Branscome, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, July 10, 1997, MACT floor determination for petroleum refining catalytic reforming units catalyst regeneration vent.
II-B-13	Memorandum, J. Coburn, R. Zerbonia, and M.R. Branscome, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, July 10, 1997, MACT floor determination for petroleum refining sulfur recovery unit/sulfur plant vent.
II-B-14	Memorandum, J. Coburn and R. Zerbonia, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, November 7, 1997, MACT floor determination for petroleum refining catalytic cracking units catalyst regeneration vent.
II-B-15	Memorandum, J. Coburn, Research Triangle Institute, to R. Lucas and M. Laur, EPA:OAQPS:ESD:WCPG, November 20, 1997, Summary of data used to develop the API proposed nickel standard for CCUs.
II-B-16	Memorandum, J. Coburn, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, May 5, 1998, Site visit to Countrymark Cooperative, Incorporated, Mt. Vernon, Indiana, on September 12, 1997 (Considered to be Confidential Business Information).
II-B-17	Memorandum, J. Coburn, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, May 5, 1998, Site visit to Flying J, Incorporated in North Salt Lake, Utah, on September 17, 1997 (Considered to be Confidential Business Information).

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<u>Document No.</u>	<u>Description</u>
II-B-18	Memorandum, J. Coburn, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, May 6, 1998, Site visit to Crysen Refining in Woods Cross, Utah, on September 17, 1997 (Considered to be Confidential Business Information).
II-B-19	Memorandum, J. Coburn, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, May 21, 1998, Site visit to Frontier Refining, Incorporated in Cheyenne, Wyoming, on September 15, 1997 (Considered to be Confidential Business Information).
II-B-20	Memorandum, J. Coburn, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, May 27, 1998, Site visit to Wyoming Refining Company in New Castle, Wyoming, on September 16, 1997 (Considered to be Confidential Business Information).

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<u>Document No.</u>	<u>Description</u>
II-C-1	Letter and attachments, K. Hustvedt, EPA:OAQPS:ESD:WCPG, to G. Furlong, Sun Company, Incorporated, August 8, 1995, Confirmation of site visit to two of Sun's refineries near Philadelphia, Pennsylvania on August 16-17, 1995 (attachments are 1) identifies information to be obtained during site visit; 2) summary of EPA's authority to gathering information under Section 114 of CAA; 3) clarification of what EPA considers to be emission data; 4) letter stating that EPA has designated RTI as an authorized representative; and 5) Summarization of the EPA policies and procedures for handling privileged information).
II-C-2	Letter and attachments, K. Hustvedt, EPA:OAQPS:ESD:WCPG, to M. Anderson, August 8, 1995, Confirmation of site visit to Costal Eagle Point Oil Company refinery in Westville, New Jersey, on August 17, 1995 (attachments are 1) identifies information to be obtained during site visit; 2) summary of EPA's authority to gathering information under Section 114 of CAA; 3) clarification of what EPA considers to be emission data; 4) letter stating that EPA has designated RTI as an authorized representative; and 5) Summarization of the EPA policies and procedures for handling privileged information).

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<u>Document No.</u>	<u>Description</u>
II-C-3	Letter and attachments, K. Hustvedt, EPA:OAQPS:ESD:WCPG, to J. Wilkins, Marathon Oil Company, August 23, 1995, Confirmation of site visit to Marathon Oil Company refinery in Garyville, Louisiana, on September 1, 1995 (attachments are 1) identifies information to be obtained during site visit; 2) summary of EPA's authority to gathering information under Section 114 of CAA; 3) clarification of what EPA considers to be emission data; 4) letter stating that EPA has designated RTI as an authorized representative; and 5) Summarization of the EPA policies and procedures for handling privileged information).
II-C-4	Letter, R. Lucas, EPA:OAQPS:ESD:WCPG, to M. Douglas, STAPPA/ALAPCO, October 6, 1995, Asking for help to locate additional participants that have refinery expertise to participate in the presumptive MACT process.
II-C-5	Letter and attachments, B. Jordan, EPA:OAQPS:ESD, to R. Bragg, American Independent Refiners Association, October 10, 1995, Enclosing partnership procedures used to develop the Presumptive MACT standards, and further details on the presumptive MACT process.
II-C-6	Letter and attachments, B. Jordan, EPA:OAQPS:ESD, to C. Ensign, Small Refineries Coalition, October 10, 1995, Enclosing partnership procedures used to develop the Presumptive MACT standards, and further details on the presumptive MACT process.
II-C-7	Letter and attachments, B. Jordan, EPA:OAQPS:ESD, to K. Ritter, American Petroleum Institute, October 10, 1995, Enclosing partnership procedures used to develop the Presumptive MACT standards, and further details on the presumptive MACT process.

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<u>Document No.</u>	<u>Description</u>
II-C-8	Letter and attachments, B. Jordan, EPA:OAQPS:ESD, to N. Dee, National Petroleum Refiners Association, October 10, 1995, Enclosing partnership procedures used to develop the Presumptive MACT standards, and further details on the presumptive MACT process.
II-C-9	Letter and attachments, B. Jordan, EPA:OAQPS:ESD, to D. Shieman, Natural Resources Defense Council, October 17, 1995, enclosing MACT partnership procedures and details of Presumptive MACT process.
II-C-10	Letter and attachment, R. Lucas, EPA:OAQPS:ESD:WCPG, to Regulatory Team, November 13, 1995, enclosing first draft of Presumptive MACT document for review (for final Presumptive MACT document, see II-A-9).
II-C-11	Letter and attachment, R. Lucas, EPA:OAQPS:ESD:WCPG, to N. Dee, National Petroleum Refiners Association, March 8, 1996, enclosing copies of minute meetings from the December 1 and 7, 1995 meetings (For a final copy of the meeting minutes, see II-E-1 and II-E-2).
II-C-12	Letter and attachments, J. Coburn, Research Triangle Institute, to G. Tannahill, Exxon Company, USA, May 20, 1996, Enclosing draft tables summarizing ICR/114 data and proposed MACT floor memorandum (For copy of enclosures, see II-D-1 and II-D-3).
II-C-13	Electronic Mail and attachment, J. Coburn, Research Triangle Institute, to R. Nishimura, Bay Area Air Quality Management District, July 16, 1996, Enclosing copy of the sampling and analysis plan outline for refinery vents.
II-C-14	Memorandum, J. Coburn, Research Triangle Institute, to G. Linder and C. Castronovo, CARB, August 24, 1996, Regarding comments on the preliminary draft source test plan for Chevron.

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<u>Document No.</u>	<u>Description</u>
II-C-15	Letter and attachments, K. Hustvedt, EPA:OAQPS:ESD:WCPG, to C. McIntosh, Chevron U.S.A., Incorporated, November 22, 1996, Confirmation of site visit to Chevron's refinery in Richmond, California, (attachments are 1) identifies information to be obtained during testing; 2) summary of EPA's authority to gathering information under Section 114 of CAA; 3) clarification of what EPA considers to be emission data; 4) letter stating that EPA has designated RTI as an authorized representative; and 5) Summarization of the EPA policies and procedures for handling privileged information).
II-C-16	Letter, K. Hustvedt, EPA:OAQPS:ESD:WCPG, to K. Ritter, API, January 14, 1997, Requesting survey information and complete computer spreadsheet that API recently obtained and compiled on emissions and control devices associated with CCU and CRU.
II-C-17	Letter, R. Lucas, EPA:OAQPS:ESD:WCPG, to C. McIntosh, Chevron Products Company, April 22, 1997, Requesting Nickel content in the fluid catalytic cracking unit (FCCU) to be reported during the multiple metal emission source testing being performed by the California Air Resource Board at the Chevron refinery in Richmond, California, on April 22-25, 1997.
II-C-18	Letter and attachment, R. Lucas, EPA:OAQPS:ESD:WCPG, to M. DeSimone, Sun Company, Incorporated, June 3, 1997, Enclosing draft trip report for site visit at Girard Point Refinery, Philadelphia, Pennsylvania, on August 16, 1995, for comment (For final trip report, see II-B-11).

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II-C-19	Letter and attachment, R. Lucas, EPA:OAQPS:ESD:WCPG, to H. Chelpaty, Sun Company Incorporated, June 3, 1997, Enclosing draft trip report for site visit at Marcus Hook, Pennsylvania refinery on August 17, 1995, for comment (For final trip report, see II-B-11).
II-C-20	Letter and attachment, R. Lucas, EPA:OAQPS:ESD:WCPG, to M. Anderson, Coastal Eagle Point Oil Company, June 3, 1997, Enclosing draft trip report for site visit at refinery in Westville, New Jersey, on August 17, 1995, for comment (For final trip report, see II-B-10).
II-C-21	Letter and attachment, R. Lucas, EPA:OAQPS:ESD:WCPG, to J. Wilkins, Marathon Oil Company, June 3, 1997, Enclosing draft trip report to Marathon Oil Garyville, Louisiana, facility on September 1, 1995, for comment (For final trip report, see II-B-9).
II-C-22	Letter and attachment, R. Lucas, EPA:OAQPS:ESD:WCPG, to R. Anderson, Star Enterprise, June 5, 1997, Enclosing draft trip report to Star Enterprise Convent, Louisiana, facility on August 31, 1995, for comment (For final trip report, see II-B-4).
II-C-23	Paper, R. Lucas, EPA:OAQPS:ESD:WCPG, to API, July 3, 1997, entitled, "NESHAP: Petroleum Refineries – CCU, CRU, and Sulfur Plants, Current Thoughts on Monitoring, Recordkeeping, Reporting, and Subcategories," Outline of Draft Recordkeeping and Reporting Requirements.

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II-C-24	Letter and attachments, K. Hustvedt, EPA:OAQPS:ESD:WCPG, to M. Burdick, Countrymark Cooperative, Incorporated, September 10, 1997, confirming site visit to refinery in Mt. Vernon, Indiana on September 12, 1997 (attachments are 1) identifies information to be obtained during site visit; 2) summary of EPA's authority to gathering information under Section 114 of CAA; 3) clarification of what EPA considers to be emission data; 4) letter stating that EPA has designated RTI as an authorized representative; and 5) Summarization of the EPA policies and procedures for handling privileged information).
II-C-25	Letter and attachments, K. Hustvedt, EPA:OAQPS:ESD:WCPG, to G. Faudel, Frontier Refinery, September 11, 1997, confirming site visit to refinery in Cheyenne, Wyoming, on September 15, 1997 (attachments are 1) identifies information to be obtained during site visit; 2) summary of EPA's authority to gathering information under Section 114 of CAA; 3) clarification of what EPA considers to be emission data; 4) letter stating that EPA has designated RTI as an authorized representative; and 5) Summarization of the EPA policies and procedures for handling privileged information).

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<u>Document No.</u>	<u>Description</u>
II-C-26	Letter and attachments, K. Hustvedt, EPA:OAQPS:ESD:WCPG, to B. Nuefeld, Wyoming Refining Company, September 11, 1997, confirming site visit to refinery in Newcastle, Wyoming, on September 16, 1997 (attachments are 1) identifies information to be obtained during site visit; 2) summary of EPA's authority to gathering information under Section 114 of CAA; 3) clarification of what EPA considers to be emission data; 4) letter stating that EPA has designated RTI as an authorized representative; and 5) Summarization of the EPA policies and procedures for handling privileged information).
II-C-27	Letter and attachments, K. Hustvedt, EPA:OAQPS:ESD:WCPG, to T. Thompson, Crysen Refining, September 11, 1997, confirming site visit to refinery in Woods Cross, Utah, on September 17, 1997 (attachments are 1) identifies information to be obtained during site visit; 2) summary of EPA's authority to gathering information under Section 114 of CAA; 3) clarification of what EPA considers to be emission data; 4) letter stating that EPA has designated RTI as an authorized representative; and 5) Summarization of the EPA policies and procedures for handling privileged information).

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<u>Document No.</u>	<u>Description</u>
II-C-28	Letter and attachments, K. Hustvedt, EPA:OAQPS:ESD:WCPG, to V. Memmott, Flying J, September 11, 1997, confirming site visit to refinery in North Salt Lake City, Utah, on September 17, 1997 (attachments are 1) identifies information to be obtained during site visit; 2) summary of EPA's authority to gathering information under Section 114 of CAA; 3) clarification of what EPA considers to be emission data; 4) letter stating that EPA has designated RTI as an authorized representative; and 5) Summarization of the EPA policies and procedures for handling privileged information).
II-C-29	Electronic mail, R. Lucas, EPA:OAQPS:ESD:WCPG, to K. Ritter, API, September 25, 1997, EPA/API Meeting follow-up.
II-C-30	Facsimile, R. Lucas, EPA:OAQPS:ESD:WCPG and R. Zerbonia, Research Triangle Institute, to P. Mullings, API, November 26, 1997, Enclosing summary slides relating the EPA's draft standard for CCU metallic HAP.
II-C-31	Letter and attachment, R. Lucas, EPA:OAQPS:ESD:WCPG, to M. Burdick, Countrymark Cooperative, Incorporated, June 25, 1998, Enclosing trip report for site visit to Mt. Vermont, Indiana facility on September 12, 1997, for comment (For final trip report, see II-B-16).
II-C-32	Letter and attachment, R. Lucas, EPA:OAQPS:ESD:WCPG, to V. Memmott, Flying J Incorporated, June 25, 1998, Enclosing trip report for site visit to New Castle, Wyoming facility on September 17, 1997, for comment (For final trip report, see II-B-17).

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<u>Document No.</u>	<u>Description</u>
II-C-33	Letter and attachment, R. Lucas, EPA:OAQPS:ESD:WCPG, to T. Thompson, Crysens Refining, June 25, 1998, Enclosing trip report for site visit to Woods Cross, Utah facility on September 17, 1997, for comment (For final trip report, see II-B-18).
II-C-34	Letter and attachment, R. Lucas, EPA:OAQPS:ESD:WCPG, to R. Neufeld, Wyoming Refining Company, June 25, 1998, Enclosing trip report for site visit to New Castle, Wyoming facility on September 16, 1997 (For final trip report, see II-B-20).
II-C-35	Letter and attachment, R. Lucas, EPA:OAQPS:ESD:WCPG, to G. Faudel, Frontier Refining, Incorporated, June 25, 1998, Enclosing trip report for site visit to Cheyenne, Wyoming on September 15, 1997 (For final trip report, see II-B-19).
II-C-36	Electronic mail, R. Lucas, EPA:OAQPS:ESD:WCPG, to D. Hathaway, Louisiana Department of Environmental Quality, September 24, 1997, Enclosing question concerning refinery process vent MACT draft.
II-C-37	Electronic mail, R. Lucas, EPA:OAQPS:ESD:WCPG, to D. Hathaway, Louisiana Department of Environmental Quality, September 24, 1997, Enclosing comments concerning draft regulation.
II-C-38	Electronic mail, R. Lucas, EPA:OAQPS:ESD:WCPG, to K. Ritter, American Petroleum Institute, August 22, 1997, Enclosing draft regulation for refinery vents MACT.
II-C-39	Electronic mail, R. Lucas, EPA:OAQPS:ESD:WCPG, to K. Ritter, American Petroleum Institute, and N. Dee, National Petroleum Refiners Association, March 26, 1998, Enclosing OMB version of preamble and regulation.

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<u>Document No.</u>	<u>Description</u>
II-C-40	Electronic mail, R. Lucas, EPA:OAQPS:ESD:WCPG, to K. Ritter and E. Siegler, American Petroleum Institute, April 17, 1998, Enclosing draft preamble language
II-C-41	Electronic mail, R. Lucas, EPA:OAQPS:ESD:WCPG, to K. Ritter and E. Siegler, American Petroleum Institute, April 22, 1998, Enclosing the red-lined version of Alternative CCU Standard section.
II-C-42	Electronic mail, R. Lucas, EPA:OAQPS:ESD:WCPG, to C. Farmer, Conoco, Incorporated, July 17, 1998, Enclosing the draft regulation.
II-C-43	Electronic mail, R. Lucas, EPA:OAQPS:ESD:WCPG, to C. Keyt, Private Citizen, July 17, 1998, Enclosing the draft regulation.
II-C-44	Memorandum, L. Sorrels, EPA:OAQPS:AQSSD:ISEG, to R. Lucas, EPA:OAQPS:ESD:WCPG, August 7, 1998, Small business impacts of proposed petroleum refineries process vent NESHAP.

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<u>Document No.</u>	<u>Description</u>
II-D-1	Letter and attachments, M. Zarate, Radian Corporation, to J. Durham, EPA:CPB, August 25, 1993, Enclosing draft copy of tables developed to present information obtained from the Section 114 and ICR responses.
II-D-2	Letter and attachments, M. Zarate, Radian Corporation, to J. Durham, EPA:CPB, August 31, 1993, Enclosing memorandum entitled, "Process vent information collection request data quality analysis."
II-D-3	Letter and attachments, M. Zarate, Radian Corporation, to J. Durham, EPA:CPB, November 12, 1993, Enclosing MACT floor memorandum for process vents.
II-D-4	Letter and attachments, M. Zarate, Radian Corporation, to J. Durham, EPA:CPB, November 30, 1993, Enclosing memorandum summarizing costs for the MACT floor level of control or control options for controlling emissions from four process vent sources at petroleum refineries.
II-D-5	Memorandum, M. Zarate, Radian Corporation, to J. Durham, EPA:CPB, March 28, 1994, Summary of nationwide hazardous air pollutant and volatile organic compound emission estimates from miscellaneous process vents at petroleum refineries.
II-D-6	Letter, R. Oommen, Radian Corporation, to R. Lucas, EPA:OAQPS:ESD:WCPG, April 19, 1995, Informing of transmittal of information on sulfur recovery plants, fluid catalytic catalyst regenerators, and catalytic reforming units that was gathered in the petroleum refinery NESHAP project and enclosing ICR responses from 115 refineries (For copies of the attachments, see II-D-1 through II-D-5 and for copies of the ICR responses, see Docket No. A-93-48, subcategory II-D.).

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<u>Document No.</u>	<u>Description</u>
II-D-7	Letter and attachments, M. Lalley, Radian Corporation, to R. Lucas, EPA:OAQPS:ESD:WCPG, June 12, 1995, Enclosing two diskettes with data obtained through the Petroleum Refinery NESHAP questionnaires regarding process vents from fluidized catalytic cracking units, reformers, and sulfur plants, also enclosed are matrix of facility identification codes, and section 114 database on facility ID codes and column heading descriptions (Note: Data was put on the one attached diskette).
II-D-8	Letter and attachments, M. DeSimone, Sun Company, Incorporated, to K. Hustvedt, EPA:OAQPS:ESD:WCPG, August 16, 1995, Enclosing information requested by G. Furlong in letter, dated August 8, 1995.
II-D-9	Letter and attachments, H. Chelpaty, Sun Company, Incorporated, to R. Lucas, EPA:OAQPS:ESD:WCPG, October 12, 1995, Enclosing example operating logs, during steps when chloride is injected to the system from three different recent catalyst regenerations.
II-D-10	Letter, H. Chelpaty, Sun Company Incorporated, to R. Lucas, EPA:OAQPS:ESD:WCPG, October 23, 1995, Revision of letter sent on October 12, 1995 (For copy of October 12, 1995 letter, see II-D-9).
II-D-11	Letter and attachments, A. Ghasemi, to R. Lucas, EPA:OAQPS:ESD:WCPG, February 2, 1996, Enclosing the AB-2588 pooled source test results prepared by the Almega Corporation for Western States Petroleum Association.
II-D-12	Letter, K. Ritter, American Petroleum Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, February 5, 1996, Providing comments on EPA's status summary, dated November 14, 1995.

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<u>Document No.</u>	<u>Description</u>
II-D-13	Facsimile, H. Naour, State of Illinois Environmental Protection Agency, to R. Lucas, EPA:OAQPS:ESD:WCPG, March 15, 1996, Enclosing two letters: 1) P. Guillemette, Mobil Oil Corporation, to B. Kohlmeyer, regarding concerns and comments related to the Presumptive Refinery MACT II Process, dated January 4, 1996, and 2) P. Bailey, American Petroleum Institute, to B. Jordan, EPA:OAQPS, regarding concerns related to the Refinery MACT.
II-D-14	Facsimile, K. Ritter, American Petroleum Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, May 10, 1996, Enclosing proposed agenda, questions on the RTI survey, and data “dump” received from RTI for the meeting on May 14, 1996.
II-D-15	Letter and attachments, G. Tannahill, Exxon Company, USA, to J. Coburn, Research Triangle Institute, May 16, 1996, Enclosing 3 memoranda: 1) Process Vent Data Summary Report, dated May 19, 1992; 2) Summary of Nationwide Volatile Organic Compound and Hazardous Air Pollutant Emission Estimates from Petroleum Refineries, dated August 26, 1998, and 3) Process Vent Databases, dated March 28, 1994.
II-D-16	Facsimile, K. Ritter, American Petroleum Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG and J. Coburn, Research Triangle Institute, May 20, 1996, Enclosing process descriptions and diagrams.
II-D-17	Letter and attachments, K. Ritter, American Petroleum Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, July 18, 1996, Recommendations for changes to the Presumptive MACT for Petroleum Refinery Process Vents, FCC units, Reformers, and Sulfur Plants.

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<u>Document No.</u>	<u>Description</u>
II-D-18	Letter, N. Dee, National Petroleum Refiners Association, to R. Lucas, EPA:OAQPS:ESD:WCPG, November 5, 1996, Submission of comments on the preliminary Presumptive MACT for Petroleum Process Vents: FCC units, Reformers, and Sulfur Plants, dated August 6, 1996.
II-D-19	Letter, K. Ritter, American Petroleum Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, November 8, 1996, Comments on the Presumptive MACT document for Petroleum Process Vents: FCC units, Reformers, and Sulfur Plants, dated August 6, 1996.
II-D-20	Letter and attachments, K. Ritter, American Petroleum Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, November 19, 1996, Enclosing comments on the August 6, 1996 draft Presumptive MACT.
II-D-21	Letter, A. Tepedino, Citgo Petroleum Corporation, to R. Lucas, EPA:OAQPS:ESD:WCPG, November 22, 1996, Comment on Presumptive MACT for Petroleum Process Vents: FCC units, Reformers, and Sulfur Plants, dated August 6, 1996.
II-D-22	Letter and attachment, D. Hansel, Energy and Environmental, Research Corporation, to R. Lucas, EPA:OAQPS:ESD:WCPG, January 23, 1997, Enclosing electronic and paper copy of the American Petroleum Institute CCU and CRU Database Summary, Version 2 (Note: only paper copy included in docket).
II-D-23	Letter and attachment, N. Dee, National Petroleum Refiners Association, to R. Lucas, EPA:OAQPS:ESD:WCPG, January 27, 1997, Enclosing preliminary HAP data that NPRA and API collected on Sulfur Recovery Units.

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<u>Document No.</u>	<u>Description</u>
II-D-24	Letter and attachment, C. McIntosh, Chevron Products Company, to E. Weaver and J. Coburn, Research Triangle Institute, January 27, 1997, Enclosing FCC process data (Considered to be Confidential Business Information).
II-D-25	Letter and attachment, D. Hansell, Energy and Environmental Research Corporation, to R. Lucas, EPA:OAQPS:ESD:WCPG, April 11, 1997, Enclosing electronic and paper copy of the American Petroleum Institute CCU and CRU Database Summary, Version 3 (Note: only paper copy included in docket).
II-D-26	Letter and attachment, C. McIntosh, Chevron Products Company, to J. Coburn, Research Triangle Institute, May 8, 1997, Enclosing FCC process data (Considered to be Confidential Business Information).
II-D-27	Letter, N. Dee, NPRA, to R. Lucas, EPA:OAQPS:ESD:WCPG, June 12, 1997, MACT II transmittals (Note: only paper copy included in docket).
II-D-28	Letter, N. Dee, NPRA, to R. Lucas, EPA:OAQPS:ESD:WCPG, June 12, 1997, Discussion on sulfur recovery unit subcategorization.
II-D-29	Letter, N. Dee, NPRA, to R. Lucas, EPA:OAQPS:ESD:WCPG, June 26, 1997, Discussion on TCC subcategorization.
II-D-30	Letter and attachment, P. Dziubinski, Coastal Eagle Point Company, to R. Lucas, EPA:OAQPS:ESD:WCPG, July 7, 1997, Enclosing comments for draft trip report for site visit to the refinery in Westville, New Jersey, on August 17, 1995 (For final trip report, see II-B-10).

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<u>Document No.</u>	<u>Description</u>
II-D-31	Letter and attachment, R. Anderson, Star Enterprise, to R. Lucas, EPA:OAQPS:ESD:WCPG, July 8, 1997, enclosing commented copy of draft trip report (For final trip report, see II-B-4).
II-D-32	Letter, N. Dee, NPRA, to R. Lucas, EPA:OAQPS:ESD:WCPG, July 22, 1997, Confirmation of Small Business Meeting on July 29, 1997.
II-D-33	Facsimile, K. Ritter, API, to R. Lucas, EPA:OAQPS:ESD:WCPG and J. Coburn, Research Triangle Institute, July 22, 1997, Enclosing Refining MACT II costs taken from API report entitled, "Cumulative Impact of Environmental Regulations on the US Petroleum Refining, Transportation, and Marketing Industries."
II-D-34	Letter, N. Dee, NPRA, to R. Lucas, EPA:OAQPS:ESD:WCPG, August 15, 1997, SBREFA Meeting (Identical letters faxed to attached list of Addressees.).
II-D-35	Letter and attachments, B. Neufeld, Wyoming Refining Company, to B. Lucas, EPA:OAQPS:ESD:WCPG, October 6, 1997, Enclosing copy of documents viewed during recent site visit.
II-D-36	Letter and attachment, K. Ritter, API, to R. Lucas, EPA:OAQPS:ESD:WCPG, November 10, 1997, Enclosing an API/NPRA position paper Refinery MACT II – 63 Subpart UUU.
II-D-37	Letter and attachment, D. Hansell, Energy and Environmental Research Corporation, to J. Coburn, Research Triangle Institute, November 13, 1997, Enclosing supporting information for the "Refinery CCU Vent Inorganic HAP MACT Discussion," presented by API on September 24, 1997.

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<u>Document No.</u>	<u>Description</u>
II-D-38	Letter and attachment, D. Hansell, Energy and Environmental Research Corporation, to R. Lucas, EPA: OAQPS:ESD:WCPG, November 24, 1997, Enclosing a draft paper entitled, "MACT II Applicability Threshold," dated November 24, 1997.
II-D-39	Letter, N. Dee, NPRA, to R. Lucas, EPA: OAQPS:ESD:WCPG, December 16, 1997, NPRA comments on draft on MACT II Proposed Rule.
II-D-40	Letter, K. Ritter, API, to R. Lucas, EPA: OAQPS:ESD:WCPG, December 19, 1997, API comments on draft on MACT II Proposed Rule.
II-D-41	Memorandum, N. Dee, NPRA, to R. Lucas, EPA: OAQPS:ESD:WCPG, February 17, 1998, Comments on draft BID document.
II-D-42	Letter, K. Ritter, API, to R. Lucas, EPA: OAQPS:ESD:WCPG, March 2, 1998, Follow-up letter to EPA, NPRA, and API meeting held on February 18, 1998.
II-D-43	Letter, S. Crockett, Tosco Refining Company, to J. Coburn, Research Triangle Institute, March 20, 1998, Providing information in support of the proposed subcategorization of thermo for catalytic cracking units in connection with the new MACT standards for fluid catalytic cracking units and other refinery process vents.
II-D-44	Facsimile, E. Siegler, API, to R. Lucas, EPA: OAQPS:ESD:WCPG, April 20, 1998, Enclosing comments on draft preamble language.
II-D-45	Letter, K. Ritter, API, to R. Lucas, EPA: OAQPS:ESD:WCPG, April 23, 1998, Comments on proposed NESHAP for Petroleum Refineries.

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<u>Document No.</u>	<u>Description</u>
II-D-46	Letter, K. Ritter, API, to R. Lucas, EPA:OAQPS:ESD:WCPG, June 2, 1998, Comments on the March 26, 1998, draft of the proposal 40 CFR Part 63, Subpart UUU.
II-D-47	Letter, B. Neufeld, Wyoming Refining Company, to R. Lucas, EPA:OAQPS:ESD:WCPG, July 24, 1998, No comments on site visit report to Wyoming Refining Company.
II-D-48	Letter, U. Sternfels, National Petrochemical and Refiners Association, to C. Browner, EPA, July 31, 1998, Requesting the Administrator to expedite the signature process of the petroleum refineries package for publication in the <i>Federal Register</i> .

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EPA Memoranda of Meetings and Telephone Conversations With Outside
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<u>Document No.</u>	<u>Description</u>
II-E-1	Memorandum, J. Coburn and R. Zerbonia, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, December 15, 1995, Summary of December 1, 1995 Regulatory Project Team teleconference kick-off meeting to present and discuss the Preliminary Presumptive MACT for Refinery Process Vents.
II-E-2	Memorandum, J. Coburn and R. Zerbonia, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, January 26, 1996, Summary of December 7, 1995 teleconference meeting with industry representatives to present and discuss the preliminary Presumptive MACT for Refinery Process Vents.
II-E-3	Letter and attachments, R. Lucas, EPA:OAQPS:ESD:WCPG, to N. Dee, National Petroleum Refiners Association, March 11, 1996, Enclosing meeting minutes from the December 1, 1995 Regulatory Team meeting, and minutes from the December 7, 1995 industry meeting discussing preliminary Presumptive MACT for Petroleum Refinery Process Vents.
II-E-4	Letter and attachments, R. Lucas, EPA:OAQPS:ESD:WCPG, to K. Ritter, American Petroleum Institute, March 11, 1996, Enclosing meeting minutes from the December 1, 1995 Regulatory Team meeting, and minutes from the December 7, 1995 industry meeting discussing preliminary Presumptive MACT for Petroleum Refinery Process Vents.
II-E-5	Memorandum and attachments, R. Lucas, EPA:OAQPS:ESD:WCPG, to Regulatory Team, March 11, 1996, Enclosing meeting minutes from the December 1, 1995 Regulatory Team meeting, and minutes from the December 7, 1995 industry meeting discussing preliminary Presumptive MACT for Petroleum Refinery Process Vents.

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<u>Document No.</u>	<u>Description</u>
II-E-6	Memorandum, J. Coburn and R. Zerbonia, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, April 3, 1996, Summary of March 13, 1996 Regulatory Project Team teleconference meeting to discuss options and priorities for gathering additional information on the three petroleum refinery process vents.
II-E-7	Memorandum, J. Coburn and R. Zerbonia, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, July 3, 1996, Summary of May 14, 1996 teleconference with industry representatives to discuss the data available to support the development of MACT standards for three refinery process vents.
II-E-8	Memorandum, J. Coburn, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, October 7, 1996, Summary of October 2, 1996 Regulatory Project Team teleconference meeting to discuss preliminary Presumptive MACT recommendations for Petroleum Refinery Process Vents: FCC Units, Reformers, and Sulfur Plants.
II-E-9	Electronic mail, J. Coburn, Research Triangle Institute, to D. Colville, Research Triangle Institute, October 11, 1996, Summary of teleconference with Chevron regarding source tests.
II-E-10	Meeting minutes, November 15, 1996, Meeting with R. Lucas on Petroleum Refinery 3 Vent MACT.
II-E-11	Memorandum, M. Branscome, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, December 4, 1996, Summary of EPA:OAQPS meeting with representatives of the American Petroleum Institute (API) and the National Refiners Association (NPRA) on November 22, 1996.

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<u>Document No.</u>	<u>Description</u>
II-E-12	Memorandum, R. Zerbonia, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, February 24, 1997, Summary of EPA meeting with API and NPRA on January 30, 1997.
II-E-13	Memorandum, R. Zerbonia, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, April 9, 1997, Summary of EPA meeting with API and NPRA on April 9, 1997.
II-E-14	Memorandum, R. Zerbonia, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, April 23, 1997, Summary of Minutes of Refinery Process Vent MACT Regulatory Team Meeting on April 23, 1997.
II-E-15	Memorandum, R. Zerbonia, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, July 10, 1997, Summary of Minutes of API and NPRA Meeting/Teleconference on July 10, 1997.
II-E-16	Memorandum, J. Coburn and M. Branscome, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, July 30, 1997, revised September 4, 1997, Summary of Minutes of NPRA/Small Business Refineries Meeting on July 29, 1997.
II-E-17	Memorandum, R. Zerbonia, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, September 5, 1997, Summary of Minutes of API and NPRA Meeting/Teleconference on September 5, 1997.
II-E-18	Memorandum, R. Zerbonia, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, September 24, 1997, Summary of Minutes of API and NPRA Meeting on September 24, 1997.

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<u>Document No.</u>	<u>Description</u>
II-E-19	Memorandum, M. Laur, EPA:OAQPS:ESD:WCPG, to R. Lucas, EPA:OAQPS:ESD:WCPG, November 13, 1997, Summary of conference call for Petroleum 3-Vent with CARB on November 12, 1997.
II-E-20	Memorandum, R. Zerbonia, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, December 1, 1997, Summary of Minutes of API and NPRA Meeting/Teleconference on December 1, 1997.
II-E-21	Memorandum, R. Zerbona, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, December 3, 1997, Summary of Minutes of API and NPRA Meeting/Teleconference on December 3, 1997.
II-E-22	Memorandum, M. Laur, EPA:OAQPS:ESD:WCPG, to R. Lucas, EPA:OAQPS:ESD:WCPG, December 8, 1997, Summary of Meeting Minutes of Petroleum 3-Vent Rule with EPA and CARB on December 3, 1997.
II-E-23	Memorandum, R. Zerbonia, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, December 9, 1997, Summary of Meeting Minutes of APR and NPRA Meeting/Teleconference on December 9, 1997.
II-E-24	Memorandum, R. Zerbonia, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, January 14, 1998, Summary of Meeting Minutes of API and NPRA Meeting on January 14, 1998.
II-E-25	Memorandum, R. Zerbonia, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, February 6, 1998, Summary of Meeting Minutes of API and NPRA Meeting on February 6, 1998.

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<u>Document No.</u>	<u>Description</u>
II-E-26	Memorandum, R. Zerbonia, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, February 18, 1998, Summary of Meeting Minutes of API and NPRA Meeting on February 18, 1998.
II-E-27	Memorandum, R. Zerbonia, Research Triangle Institute, to R. Lucas, EPA:OAQPS:ESD:WCPG, April 2, 1998, Summary of Meeting Minutes of API and NPRA Meeting on April 2, 1998.
II-E-28	Telephone Contact Summary, R. Lucas, EPA:OAQPS:ESD:WCPG, with E. Siegler, API, April 20, 1998, Comments on the revised preamble.

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Interagency Review Materials

<u>Document No.</u>	<u>Description</u>
II-F-1	Letter and attachment, R. Wilson, EPA:Acting Assistant Administrator for Air and Radiation, to D. Gardiner, EPA:Assistant Administrator for Policy, Planning, and Evaluation, March 16, 1998, Enclosing preamble, rule, and SF-83 with Supporting Statement for National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries – Catalytic Cracking (Fluid and Other) Units, Catalytic Reforming Units, and Sulfur Plants <i>Federal Register</i> notice for OMB review.
II-F-2	Electronic mail and attachment, L. Sorrels, EPA, to E. Haxthausen, EPA:OMB, May 12, 1998, enclosing copy of report entitled, "Economic Impact Analysis for the Petroleum Refineries (Catalytic Cracking, Catalytic Reforming, and Sulfur Plant Units) NESHAP, EPA:OAQPS," dated, December 18, 1997.
II-F-3	Electronic mail, S. Witkin, EPA:OMB, to R. Lucas, EPA:OAQPS:ESD:WCPG, August 6, 1998, OMB response on clearance.

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 References *Not* Readily Available to the Public Elsewhere

<u>Document No.</u>	<u>Description</u>
II-I-1	Data table, Summary of emissions rates (10-6 LBS./MMBTU) including blank subtract, undated.
II-I-2	Data table, HAPDATA, HAP emissions from FCCU regeneration vent, and HAP emissions from catalytic reformers vent, undated.
II-I-3	Data table, State regulations for California, Texas, and Louisiana, undated.
II-I-4	Data, B. Nishimura, Bay Area Air Quality Management District, enclosing petroleum refinery data from California refineries (attachments include 1) Cat Reformer Information, 2) table showing compositions of feed stream and tail gas streams from a 94 percent efficient Claus unit and incineration, 3) table showing composition of stack gas from sulfur recovery tail gas treating units, 4) reports of continuous emission monitor field accuracy tests, 5) Shell Oil Company report for the twelve caustic liquid samples for CAT reformer from Enseco, 6) Exxon Company report describing results of water sampling for dioxins and furans, 7) Tosco letter summarizing test results and report entitled, "Efforts to Reduce Dioxins and Furans in Wastewater Tosco Refining Company — Avon Refinery," March 25 to October 25, 1993, dated November 1993, and 8) Western States Petroleum Association report on AB2588 Pooled Source Emission Test Program), undated.
II-I-5	Draft report, Refinery MACT Discussions: Process Vents Claus Sulfur Recovery Units, June 21, 1993.
II-I-6	Letter and attachments, H. Taback, HAL Taback Company, to K. Ritter, American Petroleum Institute, November 5, 1993, Enclosing Final 114 Process Vent Data.

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References *Not* Readily Available to the Public Elsewhere

<u>Document No.</u>	<u>Description</u>
II-I-7	Article, <i>Worldwide Refining</i> , M. Williamson, <i>Oil and Gas Journal Special</i> , December 19, 1994, pp. 53, 56, 89-92, 94-97, and 100-103.
II-I-8	Electronic mail, R. Lucas, EPA:OAQPS:ESD:WCPG, to R. Zerbonia, Research Triangle Institute, December 13, 1995, Providing stack test data from a Louisiana refinery.
II-I-9	Draft report, Summary: Ideas for Small Refinery Cutoffs, September 10, 1996
II-I-10	Draft report, Summary of the Data Base for Three Refinery Vents, October 7, 1996
II-I-11	Draft report, Available Data and Data Gaps, November 21, 1996
II-I-12	Technical paper, Compliance Investigations and Enforcement of Existing Air Emissions Regulations at Region 5 Petroleum Refineries, EPA:Region 5 Petroleum Refinery Workgroup, submitted to National Petroleum Refiners Association Environmental Conference, October 15-17, 1995.

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Federal Register Notices

<u>Document No.</u>	<u>Description</u>
II-J-1	59 FR 36130-36157 (Proposed Rule and Notice of Public Hearing), <i>Federal Register</i> , National Emission Standards for Hazardous Air Pollutants for Source Categories: Petroleum Refineries, July 15, 1994.
II-J-2	60 FR 43245-43296 (Rule), <i>Federal Register</i> , National Emission Standards for Hazardous Air Pollutants: Petroleum Refineries; Final Rule, August 18, 1995.
II-J-3	62 FR 7937-7939 (Rule), <i>Federal Register</i> , National Emission Standards for Hazardous Air Pollutants: Petroleum Refineries; Direct Final Rule, February 21, 1997.
II-J-4	62 FR 7977-7978 (Proposed Rule), <i>Federal Register</i> , National Emission Standards for Hazardous Air Pollutants: Petroleum Refineries, February 21, 1997.

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Notice of Proposed Rulemaking

<u>Document No.</u>	<u>Description</u>
III-1 A-	63 FR 48890-48924 (Proposed Rule), <i>Federal Register</i> , National Emission Standards for Hazardous Air Pollutants: Petroleum Refineries, September 11, 1998.

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 Additional Items Considered after Proposal, in Developing Final Rule
 Subcategory IV-C
 Additional EPA Correspondence to Outside Persons

<u>Document No.</u>	<u>Description</u>
IV-C-1	Note, EPA/OAQPS, to Docket A-97-36, October 6, 1998, Notice of public hearing to be held on October 14, 1998 to discuss the proposed standards for petroleum refineries (63, FR 48890, September 11, 1998) (See III-A-1).
IV-C-2	Electronic Mail and attachment, J. Coburn, RTI, to D. Hansel, Energy and Environmental Research Corporation, September 29, 1998, attaching the Proposed rule support worksheets (diskette).
IV-C-3	Electronic Mail and attachment, J. Coburn, RTI, to T. Walker, Belco, October 20, 1998, attaching spreadsheet used to calculate venturi wet scrubber costs.
IV-C-4	Letter, K. Hustvedt, EPA:OAQPS:ESD:WCPG, to U. Sternfels, National Petrochemical & Refineries Association, October 28, 1998, Explaining the intended timetable to promulgate a final rule for Petroleum Refineries--Catalytic Cracking (Fluid and Other) Units, Catalytic Reforming Units, and Sulfur Plant Units, Writing in response to letter dated July 31, 1998.
IV-C-5	Facsimile, R. Lucas, EPA:OAQPS:ESD:WCPG, to N. Dee, National Petrochemical & Refineries Association, October 29, 1998, Regarding the extension of the comment period to December 1, 1998.
IV-C-6	Letter, R. Lucas, EPA:OAQPS:ESD:WCPG, to L. Anderson, Grandparents of East Harris County, November 30, 1998, Responding to letter dated, November 13, 1998, requesting public hearing and extension of comment period, and tentatively setting up conference call for Friday, December 11, 1998 (For letter see IV-D-33).

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 Additional Comments Received

<u>Document No.</u>	<u>Description</u>
IV-D-1	Letter and attachment, P. Rao, Economist, to C. Browner, EPA, May 3, 1998, enclosing research paper on: Economic Analysis of MACT Controls on Petroleum Refinery Cracking and Reforming Units.
IV-D-2	Letter, U. Sternfels, National Petrochemical & Refiners Association, to C. Browner, EPA, July 31, 1998, encouraging EPA to proceed expeditiously through the rulemaking process for the MACT standards for the Petroleum Refining Industry.
IV-D-3	E-Mail, B. Kriley, Fina Oil and Chemical Company, to B. Lucas, EPA:OAQPS:ESD:WCPG, September 16, 1998, regarding a question about the proposed rule 40 CFR 63, Subpart UUU.
IV-D-4	Letter and attachment, N. Dee, National Petrochemical & Refiners Association, to B. Jordan, EPA:OAQPS:ESD, September 25, 1998, regarding the MACT standard for Ni emissions.
IV-D-5	Letter, N. Dee, National Petrochemical & Refiners Association, to J. Collins, EPA, October 1, 1998, Request for public hearing on MACT II for Petroleum Refineries.
IV-D-6	Letter and attachment, D. Draeger, Indian Refining, to J. Justice, Illinois Division of Pollution control, March 23, 1993, enclosing test report for the FCC stacks.
IV-D-7	Report, Particulate Emission Evaluation, Envisage Environmental Incorporated for BP Oil Refinery (Lima, OH), January 19, 1994.
IV-D-8	Letter and attachment, R. Hickman, Ashland Petroleum Company, to L. Hill, EPA:ARD, June 13, 1994, enclosing Ashland Petroleum Company Canton Refinery-Report of May 4, 1994 FCC Stack Test.

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<u>Document No.</u>	<u>Description</u>
IV-D-9	Letter and attachment, P. Sagert, Sun Refining and Marketing Company, to L. Hill, EPA:ARD, July 26, 1994, enclosing FCCU emission test report.
IV-D-10	Report, Emission Sampling Performed for Total Petroleum, Inc. Alma MI, on the FCC CO Boiler Exhaust, April 18, 1996.
IV-D-11	Letter and attachment, N. Dee, National Petrochemical and Refiners Association, to B. Lucas, EPA:OAQPS:ESD, October 16, 1998, requesting 3 week time extension for comments on MACT for Petroleum Refinery Vents.
IV-D-12	Electronic Mail, D. Hansell, Energy and Environmental Research Corporation, to B. Lucas, EPA:OAQPS:ESD, October 19, 1998, attaching the ECAT/FINES data.
IV-D-13	Memorandum, D. Young, RTI, to Docket, October 20, 1998, Section 114 survey responses for FCCU Particulate Matter and Carbon Monoxide (37 attachments).
IV-D-14	Memorandum, D. Young, RTI, to Docket, October 20, 1998, FCCU Test Reports for Clark Refining and Marketing, Inc., Blue Island, Illinois (2 attachments).
IV-D-15	Memorandum, D. Young, RTI, to Docket, October 20, 1998, FCCU Test Reports for Marathon Petroleum Refinery, Detroit, Michigan (4 attachments).
IV-D-16	Memorandum, D. Young, RTI, to Docket, October 20, 1998, FCCU Test Reports for Mobil Oil Corporation, Joliet, Illinois (3 attachments).
IV-D-17	Memorandum, D. Young, RTI, to Docket, October 20, 1998, FCCU Test Reports for Shell Oil Company, Wood River, Illinois (5 attachments).

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<u>Document No.</u>	<u>Description</u>
IV-D-18	Memorandum, D. Young, RTI, to Docket, October 20, 1998, FCCU Test Reports for UNO-VEN Company, Lemont, Illinois (4 attachments).
IV-D-19	Memorandum, D. Young, RTI, to Docket, October 22, 1998, FCCU Test Reports for Clark Oil and Refining Corporation, Hartford, Illinois (10 attachments).
IV-D-20	Memorandum, D. Young, RTI, to Docket, October 22, 1998, FCCU Test Reports for Marathon Oil Company, Robinson, Illinois (6 attachments).
IV-D-21	Memorandum, D. Young, RTI, to Docket, October 22, 1998, FCCU Test Reports for Murphy Oil USA, Incorporated, Superior, Wisconsin (3 attachments).
IV-D-22	Letter and attachment, R. Smith, Inland Refining, Incorporated, to R. Lucas, EPA:OAQPS:ESD:WCPG, August 7, 1998, Enclosing comments on site visit report dated September 17, 1997 to Crysen Refinery at Woods Cross, UT (Considered to be Confidential Business Information).
IV-D-23	Letter and attachment, P. Rao, Economist, to R. Lucas, EPA:OAQPS:ESD:WCPG, November 4, 1998, Enclosing comments on EPA's Refinery MACT proposal.
IV-D-24	Electronic Mail, P. Rao, Economist, to Docket, November 2, 1998, Enclosing a text version of paper entitled, "Economics of MACT Controls on Refinery Cracking and Reforming Vents," presented at the 19 th Annual Conference of the United States Association for Energy Economics, Albuquerque, New Mexico, October 1998 (Diskette attached).

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<u>Document No.</u>	<u>Description</u>
IV-D-25	Letter and attachment, J. Thornton, Minnesota Pollution Control Agency, Policy and Planning Division, to Docket, November 5, 1998, Enclosing comments on Petroleum Refineries NESHAP–CCU, CRU, and SRU.
IV-D-26	Letter, E. Campobenedetto, Institute of Clean Air Companies, to Docket, November 6, 1998, Enclosing comments on Petroleum Refineries NESHAP–CCU, CRU, and SRU.
IV-D-27	Letter, M. Blair, State of Colorado, Colorado Department of Public Health and Environment, Air Pollution Control Division, to Docket, November 6, 1998, Enclosing comments on Petroleum Refineries NESHAP–CCU, CRU, and SRU.
IV-D-28	Letter and attachment, W. O’Sullivan, State of New Jersey, Department of Environmental Protection, Air Quality Permitting Program, to Docket, November 10, 1998, Enclosing comments on Petroleum Refineries NESHAP–CCU, CRU, and SRU.
IV-D-29	Letter, R. Bishop, Oklahoma Department of Environmental Quality, Air Quality Division, to Docket, November 10, 1998, Enclosing comments on Petroleum Refineries NESHAP–CCU, CRU, and SRU.
IV-D-30	Letter and attachment, P. Rao, Economist, to R. Lucas, EPA: OAQPS:ESD:WCPG, November 12, 1998, Enclosing additional comments on Petroleum Refineries NESHAP–CCU, CRU, and SRU (See IV-D-24 for additional comments).

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<u>Document No.</u>	<u>Description</u>
IV-D-31	Letter and attachment, L. Epstein, Environmental Defense Fund, to Docket, November 13, 1998, Enclosing comments on Petroleum Refineries NESHAP–CCU, CRU, and SRU (Comments by P. Rao, Economist, to R. Lucas, EPA: OAQPS: ESD: WCPG, November 4, 1998, Enclosing comments on Petroleum Refineries NESHAP–CCU, CRU, and SRU.).
IV-D-32	Letter and attachment (no cover letter attached), P. Rao, Economist, to Docket, November 18, 1998, Enclosing paper with handwritten corrections entitled “Economic Analysis of MACT Controls on Petroleum Refinery Cracking and Reforming Units,” presented at the 19 th Annual Conference of the United States Association for Energy Economics (USAEE), Albuquerque, New Mexico, October 1998.
IV-D-33	Letter, L. Anderson, Grandparents of East Harris County, to J. Collins, EPA: OAQPS: ESD: WCPG, November 13, 1998, Requesting a public hearing to be held in Texas and an extension to the December 1, 1998 comment period deadline.
IV-D-34	Facsimile, N. Dee, NPRA, to R. Lucas, EPA: OAQPS: ESD: WCPG, November 20, 1998, Enclosing paper entitled, “Commercial Strategies for Gasoline Sulfur Reduction.”
IV-D-35	Letter, E. Becker, Global Sulfur Systems, Incorporated, to Docket, November 23, 1998, Enclosing comments on Petroleum Refineries NESHAP–CCU, CRU, and SRU.
IV-D-36	Letter, J. Wilson, Conoco, Incorporated, to Docket, November 23, 1998, Enclosing comments on Petroleum Refineries NESHAP–CCU, CRU, and SRU.

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<u>Document No.</u>	<u>Description</u>
IV-D-37	Letter, G. Theriot, Exxon Company, USA, to Docket and R. Lucas, EPA:OAQPS:ESD:WCPG, November 24, 1998, Enclosing comments on Petroleum Refineries NESHAP–CCU, CRU, and SRU.
IV-D-38	Letter, L. Epstein, Environmental Defense Fund, to Docket, November 25, 1998, Enclosing additional comments on Petroleum Refineries NESHAP–CCU, CRU, and SRU (See IV-D-31 for previous comments).
IV-D-39	Letter, J. Thompson, CITGO Petroleum Corporation, to Docket, November 15, 1998, Enclosing comments on Petroleum Refineries NESHAP–CCU, CRU, and SRU.
IV-D-40	Letter, T. Jackson, Equiva Services, LLC, to Docket, November 27, 1998, Enclosing comments on Petroleum Refineries NESHAP–CCU, CRU, and SRU.
IV-D-41	Electronic mail, P. Rao, Economist, to Docket, November 30, 1998, Enclosing additional comments on Petroleum Refineries NESHAP–CCU, CRU, and SRU (For previous comments, see IV-D-30 and IV-D-32).
IV-D-42	Letter and attachment, A. Miller, Tosco Corporation, to Docket, November 30, 1998, Enclosing comments on Petroleum Refineries NESHAP–CCU, CRU, and SRU.
IV-D-43	Letter and attachment, G. Furlong, Sun Company, Incorporated, to Docket, November 30, 1998, Enclosing comments on Petroleum Refineries NESHAP–CCU, CRU, and SRU.
IV-D-44	Letter, J. Ross, Phillips 66 Company, to Docket, November 30, 1998, Enclosing comments on Petroleum Refineries NESHAP–CCU, CRU, and SRU.

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<u>Document No.</u>	<u>Description</u>
IV-D-45	Letter and attachment, R. Glaser, Amoco Petroleum Products, Mandan Refinery, to Docket, November 30, 1998, Enclosing comments on Petroleum Refineries NESHAP–CCU, CRU, and SRU (diskette attached).
IV-D-46	Letter and attachment, E. Green, Sierra Club, Great Lakes Ecoregion Program, to Docket, November 30, 1998, Enclosing comments on Petroleum Refineries NESHAP–CCU, CRU, and SRU.
IV-D-47	Letter, W. Beck, Mobil Corporation, to Docket, November 30, 1998, Enclosing comments on Petroleum Refineries NESHAP–CCU, CRU, and SRU.
IV-D-48	Letter and attachment, A. Ellett, BP Oil Company, Toledo Refinery, to Docket, November 30, 1998, Enclosing comments on Petroleum Refineries NESHAP–CCU, CRU, and SRU.
IV-D-49	Letter and attachment, N. Dee, NPRA, to Docket, December 1, 1998, Enclosing comments on Petroleum Refineries NESHAP–CCU, CRU, and SRU (attached are comments, paper entitled “Commercial Strategies for Gasoline Sulfur Reduction presented at 1998 NPRA Environmental Conference in Texas on November 3-5, 1998; Assessment of EPA baseline and controlled national inorganic HAP emission estimates; Letter to C. Browner dated July 31, 1998 requesting signature of proposal to be expedited; and API chart showing CCU Inorganic HAPs – Principles).
IV-D-50	Letter and attachment, P. Cavanaugh, The Chevron Companies, to Docket, December 1, 1998, Enclosing comments on Petroleum Refineries NESHAP–CCU, CRU, and SRU.

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<u>Document No.</u>	<u>Description</u>
IV-D-51	Facsimile and attachment, P. Gangul and M. Friedman, New Jersey Department of Environmental Protection, to M. Branscome, RTI, December 7, 1998, Enclosing stack test results for Coastal Eagle Point Oil Company.
IV-D-52	Letter and attachment, S. Pavel, Coastal Catalyst Technology, Incorporated, to R. Lucas, EPA: OAQPS: ESD: WCPG, November 30, 1998, Enclosing comments on Petroleum Refineries NESHAP–CCU, CRU, and SRU (attached are comments, papers on ACT and DEMET technologies presented at National Petroleum Refiners Association meetings, scanning electron micrographs, and particle size distributions of fresh and equilibrium catalyst particles and “fines”).
IV-D-53	Letter and attachment, K. Ritter, American Petroleum Institute, to R. Lucas, EPA: OAQPS: ESD: WCPG, December 1, 1998, Enclosing comments on Petroleum Refineries NESHAP–CCU, CRU, and SRU.
IV-D-54	Letter and attachment, R. Hermanson, Amoco Corporation, to Docket, December 1, 1998, Enclosing comments on Petroleum Refineries NESHAP–CCU, CRU, and SRU (attached are comments and article entitled “Complete Combustion of CO in cracking process,” Chemical Engineering, November 24, 1975).
IV-D-55	Letter and attachment, R. Hermanson, Amoco Corporation, to Docket, December 1, 1998, Supplemental testimony of D. Parus, Amoco Corporation, Enclosing FCCU process and emissions information for the Yorktown Refinery from January 1997 to August 1998 requested in public hearing on October 14, 1998 (For transcript of hearing see IV-F-1).

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<u>Document No.</u>	<u>Description</u>
IV-D-56	Electronic Mail and attachment, N. Carman, Lone Star Chapter of the Sierra Club, to R. Lucas, EPA: OAQPS: ESD: WCPG, December 1, 1998, Enclosing comments on Petroleum Refineries NESHAP–CCU, CRU, and SRU.
IV-D-57	Letter, P. Rao, Economist, to R. Lucas, EPA: OAQPS: ESD: WCPG, November 19, 1998, Providing additional comments on Petroleum Refineries NESHAP–CCU, CRU, and SRU (For previous comments see IV-D-23, IV-D-30, IV-D-32, and IV-D-41).
IV-D-58	Electronic Mail, K. Veron, Marathon Ashland Petroleum, to Docket, November 30, 1998, Providing comments on Petroleum Refineries NESHAP–CCU, CRU, and SRU.
IV-D-59	Letter, A. Ainsworth, Lyondell-Citgo Refining Company Ltd., to Docket, November 30, 1998, Providing comments on Petroleum Refineries NESHAP–CCU, CRU, and SRU.
IV-D-60	Letter and attachment, T. McGrath, Energy and Environmental Research Corporation, to R. Lucas, EPA: OAQPS: ESD: WCPG, January 13, 1999, Enclosing two test protocol documents from American Petroleum Institute (For attachments see IV-J-6 and IV-J-7).
IV-D-61	Letter, P. Rao, Economist, to R. Lucas, EPA: OAQPS: ESD: WCPG, January 21, 1999, Providing information about suppliers of Electro-Dynamic Venturis (EDVs).

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<u>Document No.</u>	<u>Description</u>
IV-D-62	Letter and attachment, C. Castronovo, California Environmental Protection Agency, to R. Lucas, EPA: OAQPS: ESD: WCPG, March 9, 1999, Enclosing test report entitled "Determination of Emissions from the No. 3 Reformer at Tosco Refining Company, San Francisco Area Refinery at Avon."

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Subcategory IV-E
EPA Memoranda of Meetings and Telephone Conversations

<u>Document No.</u>	<u>Description</u>
IV-E-1	Telephone Contact Summary, J. Coburn, RTI, with T. Walker, Belco Technologies Corporation, October 20, 1998, To determine need to shut-down FCCU to size a control device.
IV-E-2	Telephone Contact Summary, B. Lucas, EPA:OAQPS:ESD, with N. Dee, National Petrochemical and Refiners Association and Karin Ritter, API, October 21, 1998, left messages that EPA intended to extend the comment period an additional 3 weeks for Refinery MACT II.
IV-E-3	Memorandum, J. Coburn, RTI, to R. Lucas, EPA:OAQPS:ESD:WCPG, June 24, 1996, Summary of Meeting Minutes of ICAC and Belco meeting on June 19, 1996.
IV-E-4	Memorandum and attachment, J. Coburn and R. Zerbonia, RTI, to R. Lucas, EPA:OAQPS:ESD:WCPG, March 8, 1999, Summary of Meeting Minutes of EPA and BP Amoco meeting on March 5, 1999 (Enclosing discussion questions from the meeting).
IV-E-5	Memorandum and attachments, J. Coburn and R. Zerbonia, RTI, to R. Lucas, EPA:OAQPS:ESD:WCPG, June 29, 1999, Summary of Meeting Minutes of API and NPRA meeting on March 16, 1999 (Enclosing meeting agenda and presentation of current impact estimates for CCU metal HAP control).

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Transcript of Hearings

<u>Document No.</u>	<u>Description</u>
IV-F-1	Transcript, United States Environmental Protection Agency Public Hearing, In RE: Proposed Air Emission Rules for Petroleum Refineries, Durham, North Carolina, October 14, 1998.
IV-F-2	Sign in sheet for Public Hearing - Petroleum Refineries NESHAP, held on October 14, 1998.
IV-F-3	Memorandum, D. Young, RTI, to Docket, October 22, 1998, Written statements for the Public Hearing - Petroleum Refineries NESHAP, held on October 14, 1998 (3 attachments).

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 Late Public Comments Received

<u>Document No.</u>	<u>Description</u>
IV-G-1	Letter, P. Rao, Economist, to R. Lucas, EPA: OAQPS: ESD: WCPG, December 7, 1998, Adding information to previous comments on the proposed MACT rule (For previous comments see IV-D-30, IV-D-32, and IV-D-41).
IV-G-2	Letter, S. Vredenburg, Pennzoil-Quaker State Company, to R. Lucas, EPA: OAQPS: ESD: WICG, January 5, 1999, Enclosing comments on Petroleum Refineries NESHAP–CCU, CRU, and SRU.
IV-G-3	Electronic Mail and attachments, P. Rao, Economist, to R. Lucas, EPA: OAQPS: ESD: WCPG, February 19, 1999, Enclosing two versions of paper entitled “Refinery MACT economics: The interaction of technology, feed quality, and regulatory standards” containing comments on Petroleum Refineries NESHAP–CCU, CRU, and SRU.
IV-G-4	Letter and attachments, P. Rao, Economist, to R. Lucas, EPA: OAQPS: ESD: WCPG, June 29, 1999, Enclosing two documents concerning the Petroleum Refineries NESHAP–CCU, CRU, and SRU.
IV-G-5	Letter, P. Rao, Economist, to R. Lucas, EPA: OAQPS: ESD: WCPG, July 30, 1999, Commenting on the Petroleum Refineries NESHAP–CCU, CRU, and SRU (For previous comments see IV-D-30, IV-D-32, IV-D-41, and IV-G-1).
IV-G-6	Letter, P. Rao, Economist, to R. Lucas, EPA: OAQPS: ESD: WCPG, August 7, 1999, Commenting on the Petroleum Refineries NESHAP–CCU, CRU, and SRU (For previous comments see IV-D-30, IV-D-32, IV-D-41, IV-G-1, and IV-G-5).

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Miscellaneous *Federal Register* Notices Published After Proposal

<u>Document No.</u>	<u>Description</u>
IV-I-1	63 FR 65725 (Extension of public comment period), <i>Federal Register</i> , National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries–Catalytic Reforming Units, and Sulfur Recovery Units, November 30, 1998.

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 References Not Readily Available to the Public Elsewhere

<u>Document No.</u>	<u>Description</u>
IV-J-1	Material Safety Data Sheet, Grace Davison, Baltimore, Maryland, for the product: Spent (used) Fluid Cracking Catalyst, May 10, 1994.
IV-J-2	Article, Worldwide Refining Survey, M. Radler, Oil and Gas Journal Special, December 22, 1997, pp. 41-90.
IV-J-3	Technical Paper, C. Curtis, EPA:ARD, The Benefits of CEM as Enhanced Monitoring: a Study Based on Two Investigative Approaches at Petroleum Refineries, October 25-27, 1995, from the EPA website at http://www.epa.gov/ARD-R5/enforce/cemrefpp.htm , March 9, 1998.
IV-J-4	Technical Paper, P. McCoy, S. Boone, T. Dincer, and C. Mijares, EPA:ARD, Stastical Review of U. S. EPA Region 5's CEM Database, March 1, 1996, from the EPA website at http://www.epa.gov/ARD-R5/enforce/r5cempp2.htm , October 20, 1998.
IV-J-5	Report, Semiannual Emission Report for January 1, 1998 through June 30, 1998, July 1998, Prepared for Marathon Ashland Petroleum, LLC, Garyville, Louisiana, Prepared by Tetra Tech EM Inc.
IV-J-6	Report, Characterization of Hazardous Air Pollutant Emissions from FCCU, CRU, and SRU Process Vents, volume I—Test Guidelines for Measuring HAP Emissions to Atmosphere, prepared for American Petroleum Institute, prepared by Energy and Environmental Research Corporation, November 20, 1995.

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 References Not Readily Available to the Public Elsewhere

<u>Document No.</u>	<u>Description</u>
IV-J-7	Report, Characterization of Hazardous Air Pollutant Emissions from FCCU, CRU, and SRU Process Vents, volume II—Supplemental Test Guidelines for Measuring HAP Concentrations at Intermediate Process Locations, prepared for American Petroleum Institute, prepared by Energy and Environmental Research Corporation, November 30, 1995.
IV-J-8	Report, RCRA Trial Burn Report for CO Boiler No. 1 at the Shell Oil Company, Martinez Manufacturing Complex, Martinez, California, prepared by Acurex Corporation, prepared for Shell Oil Company, April 1989 (Revised October 1989).
IV-J-9	Report, Test report for Exxon Company, USA, Benecia, California, prepared by Best Environmental, prepared for Exxon Company, February 12-20, 1990.
IV-J-10	Report, Determination of Air Toxics Emission Rates - FCCU volume I and volume II, Mobil Oil Corporation, Torrance, California, prepared by The Almega Corporation, prepared for Mobil Oil Corporation, May 16, 30 and 31, 1990.
IV-J-11	Report, Results of Dioxin Testing on the Catalytic Reformer Unit #1 Exhaust, Texaco Refinery, Bakersfield, California, prepared by Radian Corporation, prepared for Texaco Refining and Marketing, Incorporated, August 8, 1991.
IV-J-12	Report, RCRA Trial Burn Report for CO Boiler No. 2 at the Shell Oil Company, Martinez Manufacturing Complex, Martinez, California, prepared by Galson Corporation, prepared for Bechtel Environmental, Incorporated and Shell Oil Company, November 1991.

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References Not Readily Available to the Public Elsewhere

<u>Document No.</u>	<u>Description</u>
IV-J-13	Report, Trial Burn Report for CO Boiler No. 3 at the Shell Oil Company, Martinez Manufacturing Complex, Martinez, California, prepared by Radian Corporation, prepared for Shell Oil Company, December 16, 1993.
IV-J-14	Report, NO _x , SO ₂ , CO, Sulfates and Particulate Compliance Emission Test Program—Heavy Oil Cracker Scrubber Exhaust (EPN 121) 70,000 BBL/Day Without NaHCO ₃ Injection, Valero Refining Company, Corpus Christi, Texas, prepared by ARI Environmental, Incorporated, prepared for Valero Refining Company, March 15, 1995.
IV-J-15	Report, AB2588 Air Toxics Emissions Test Report FCCU CO Boiler Volume I—Main Report, Texaco Refining and Marketing, Los Angeles Plant, Wilmington, California, prepared by AirKinetics, Incorporated, prepared for Texaco Refining and Marketing, May 24, 1996.
IV-J-16	Memorandum, J. Coburn, RTI, to Docket, April 15, 1999, E-Cat Data Provided by API and its Contractor (Energy and Environmental Research Corporation).

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 Miscellaneous *Federal Register* Notices Considered After Proposal

<u>Document No.</u>	<u>Description</u>
IV-K-1	62 FR 33625-33639 (Notice), <i>Federal Register</i> , Notice of draft source category listing, June 20, 1997.
IV-K-2	63 FR 31358-31361 (Rule), <i>Federal Register</i> , National Emission Standards for Hazardous Air Pollutants: Petroleum Refineries, June 9, 1998.
IV-K-3	63 FR 31398-31400 (Proposed Rule), <i>Federal Register</i> , National Emission Standards for Hazardous Air Pollutants: Petroleum Refineries, June 9, 1998.
IV-K-4	63 FR 44135-44143, (Final Rule Amendments), <i>Federal Register</i> , National Emissions Standards for Hazardous Air Pollutants: Petroleum Refineries, August 18, 1998.
IV-K-5	64 FR 26004-26142, (Proposed Rule), <i>Federal Register</i> , Control of Air Pollution from New Motor Vehicles: Proposed Tier 2 Motor Vehicle Emissions Standards and Gasoline Sulfur Control Requirements, May 13, 1999.
IV-K-6	64 FR 26142-26155, (Advanced Notice of Proposed Rulemaking), <i>Federal Register</i> , Control of Diesel Fuel Quality, May 13, 1999.
IV-K-7	64 FR 26743-26745, (Notice of Revisions to Promulgation Schedule for Standards), <i>Federal Register</i> , NESHAP: Revision of Schedule for Standards Under Section 112 of the Clean Air Act.