

Docket No. OAR-2002-0052, Legacy Docket A-95-41
Lime Manufacturing NESHAP
Category IV
Additional Items Considered after Proposal, in Developing Final Rule
Subcategory IV-A
Additional EPA Studies or Contractor Reports

<u>Document No.</u>	<u>Description</u>
IV-A-1	Report, Kraft Pulp Industry Particulate Emissions Source Category Report, prepared for EPA, Office of Research and Development, Air and Energy Engineering Research Laboratory, prepared by Acurex Corporation, EPA/600/7-87/006, February 1987.
IV-A-2	Report, BACT Analysis for Calcimatic Kiln Particulate Matter Control, prepared for Global Stone Chemstone Corporation, prepared by Air Control Techniques, PC, March 15, 2002.
IV-A-3	Report, Mineral Industry Surveys, prepared by US Geological Survey and US Department of Interior, November 2002.
IV-A-4	Report, Economic Impact Analysis for the Lime Manufacturing MACT Standard, prepared for EPA:OAQPS: Innovative Strategies and Economics Group, prepared by RTI International, Health, Social, and Economics Research, EPA-452/R-03-013, July 2003.
IV-A-5	Report, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Lime Manufacturing Background Information Document, Volume II, Public Comments and Responses, EPA:OAQPS:ESD, August 2003.

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Subcategory IV-B
Additional EPA Factual Memoranda

<u>Document No.</u>	<u>Description</u>
IV-B-1	Memorandum, to docket, from M. Pimentel, EPA, Risk and Exposure Assessment Group, undated, EPA response to comment on the proposed NESHAP concerning the use of Interim Acute Exposure Guideline Levels in a risk analysis performed by National Lime Association for the emissions of hazardous air pollutants from lime manufacturing plants (See comment at OAR-2002-0052).
IV-B-2	Memorandum and attachments, M. Laney, RTI International, to docket, April 22, 2003, State and local information on Western Lime, Chemical Lime Apex, and Graymont Western.
IV-B-3	Memorandum and attachments, F. Thompson, Group Leader, EPA:SMAG, to J. Crowder, Group Leader, EPA:MICG, June 24, 2003, Voluntary consensus standard results for the Lime Manufacturing NESHAP final rule.
IV-B-4	Memorandum, J. Turner, RTI International, to K. Barnett, EPA:MICG, July 3, 2003, Update on the feasibility of venturi scrubbers in meeting 0.12 lb/ton outlet particulate matter level.
IV-B-5	Memorandum, K. Barnett, EPA:MICG, to docket, July 7, 2003, Changes to proposed lime manufacturing NESHAP based on EPA review.
IV-B-6	Memorandum, D. Green, RTI International, to K. Barnett, EPA:MICG, July 23, 2003, Regarding lime response concerning unsupported claim that metals will vaporize and escape dry particulate matter controls.
IV-B-7	Memorandum, M. Laney, RTI International, to K. Barnett, EPA:MICG, July 29, 2003, Impacts on NO _x , SO ₂ , and particulate matter emission as result of increased energy demand associated with lime manufacturing NESHAP.

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Additional EPA Factual Memoranda

<u>Document No.</u>	<u>Description</u>
IV-B-8	Memorandum, M. Laney, RTI International and K. Barnett, EPA:MICG, to docket, August 4, 2003, Final lime manufacturing NESHAP: national baseline emissions and emissions reductions estimates.
IV-B-9	Memorandum, M. Laney, RTI International and K. Barnett, EPA:MICG, to docket, August 6, 2003, Environmental impacts of decision on best control for wet scrubber-controlled kilns.
IV-B-10	Memorandum, M. Laney, RTI International, to K. Barnett, EPA:MICG, August 14, 2003, National water impacts of upgrading wet scrubbers to meet final particulate matter limit of 0.6 lb/ton stone feed.
IV-B-11	Memorandum, M. Laney, RTI International, to docket, August 14, 2003, Cost comparison of upgrading existing wet scrubbers to venturi scrubbers versus the cost of upgrading to fabric fillers (with water sprays).

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Additional EPA Correspondence to Outside Persons

<u>Document No.</u>	<u>Description</u>
IV-C-1	Electronic mail, K. Barnett, EPA:MICG, to H. Prillaman, National Lime Association, February 10, 2003, Comment procedure for lime MACT.
IV-C-2	Electronic mail, D. Green, RTI International, to E. Males, National Lime Association, May 1, 2003, Additional questions regarding public comments on lime NESHAP.
IV-C-3	Electronic mail, D. Green, RTI International, to E. Males, National Lime Association, May 5, 2003, Additional questions regarding public comments on lime NESHAP.
IV-C-4	Electronic mail, K. Barnett, EPA:MICG, to E. Males, National Lime Association, May 20, 2003, Response to questions concerning compliance date for lime MACT.

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Additional Comments Received (including any correspondence from
outsiders, whether or not labeled as a public comment

<u>Document No.</u>	<u>Description</u>
IV-D-24	Electronic mail, H. Prillaman, National Lime Association, to K. Barnett, EPA:MICG, February 6, 2003, Comment procedure for lime MACT.
IV-D-25	Electronic mail and attachments, E. Males, National Lime Association to D. Green, RTI International, March 21, 2003, Response to questions related to opacity data submitted with National Lime Association's comment on lime NESHAP.
IV-D-26	Electronic mail and attachment, M. Laney, RTI International, to K. Barnett, EPA:MICG, April 22, 2003, Enclosing facsimile from C. Shih, Nevada Department of Air Quality Management, to M. Laney, RTI International, April 22, 2003, Enclosing recent particulate matter and opacity test result for Chemical Lime Apex plant in Nevada.
IV-D-27	Electronic mail and attachments, E. Males, National Lime Association to D. Green, RTI International, April 25, 2003, Response to questions related to opacity data submitted with National Lime Association's comment on lime NESHAP.
IV-D-28	Electronic mail and attachments, E. Males, National Lime Association, to D. Green, RTI International, May 6, 2003, Response to additional questions regarding public comment on lime NESHAP.
IV-D-29	Electronic mail, E. Males, National Lime Association, to K. Barnett, EPA:MICG, May 14, 2003, Questions concerning the compliance date for lime MACT.
IV-D-30	Electronic mail and facsimile, E. Males, National Lime Association, to K. Barnett, EPA:MICG, June 30, 2003, SO ₂ emission factors.

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Additional Comments Received (including any correspondence from
outsiders, whether or not labeled as a public comment**

<u>Document No.</u>	<u>Description</u>
IV-D-31	Electronic mails, A. Seeger, National Lime Association, to K. Barnett, EPA:MICG, July 7, 2003, Concerning SO ₂ from baghouse and scrubber-equipped kiln at Austin White Lime.

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EPA Memoranda of Meetings and Telephone Conversations

<u>Document No.</u>	<u>Description</u>
IV-E-1	Telephone Contact Summary, J. Turner, RTI International, with S. Foley, Air Permit Manager, Virginia Department of Environmental Protection, March 12, 2003, Discuss global stone venturi scrubber performance for lime kilns.
IV-E-2	Telephone Contact Summary, J. Turner, RTI International, with R. Patterson, Envitech Company, April 14, 15, and 21, 2003, Discuss venturi Scrubbers for lime kilns.
IV-E-3	Telephone Contact Summary, K. Barnett, EPA:MICG, to B. Allen, OMB, June 4, 2003, Questions about averaging kiln emissions.
IV-E-4	Telephone Contact Summary, K. Barnett, EPA:MICG, to A. Seeger, National Lime Association, June 4, 5, and 30, 2003, Questions concerning averaging kiln emissions, three hour rolling average for operating parameters, and source of the National Lime Association's source for SO ₂ emission factors.

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Interagency Review Materials

<u>Document No.</u>	<u>Description</u>
IV-H-1	Electronic mail and attachment, K. Barnett, EPA:MICG, to B. Allen, OMB and K. Bromberg, SBA, May 30, 2003, Wet scrubber technical feasibility and costs.
IV-H-2	Electronic mail and attachment, K. Barnett, EPA:MICG to K. Bromberg, SBA, June 5, 2003, Enclosing basis for HCl and SO ₂ emissions estimates.
IV-H-3	Electronic mail, K. Barnett, EPA:MICG, to K. Bromberg, SBA, June 6, 2003, Basis for HCl and SO ₂ emissions estimates can be shared with National Lime Association for technical comment.
IV-H-4	Electronic mail, K. Barnett, EPA:MICG to K. Bromberg, SBA, June 13, 2003, Responding to questions concerning SO ₂ emission estimates.
IV-H-5	Electronic mail and attachments, K. Bromberg, SBA, to K. Barnett, EPA:MICG, June 13, 2003, Discussion concerning National Lime Association analysis for particulate matter and SO ₂ .
IV-H-6	Electronic mail and attachment, K. Barnett, EPA:MICG, to B. Allen, OMB, June 17, 2003, Enclosing scrubber technical issues and costs.
IV-H-7	Electronic mail, K. Bromberg, SBA, to K. Barnett, EPA:MICG, June 17, 2003, EPA needs to review the calculation about the increase in PM 2.5.
IV-H-8	Electronic mail and attachment, K. Barnett, EPA:MICG, to B. Allen, OMB, June 17, 2003, Changes to Lime Manufacturing NESHAP since proposal.
IV-H-9	Electronic mail and attachments, K. Barnett, EPA:MICG, to K. Bromberg, SBA, June 19, 2003, Comments on scrubber technical issues and costs.

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<u>Document No.</u>	<u>Description</u>
IV-H-10	Electronic mail and attachment, K. Bromberg, SBA, to K. Barnett, EPA:MICG, June 19, 2003, Comments on scrubber technical issues and costs, need clarification.
IV-H-11	Electronic mail and attachment, K. Bromberg, SBA, to K. Barnett, EPA:MICG, June 20, 2003, Questions concerning costs of baghouses compared to scrubbers and cost of scrubber upgrades.
IV-H-12	Electronic mail, K. Bromberg, SBA, to K. Barnett, EPA:MICG, June 23, 2003, More questions concerning feasibility for wet scrubbers.
IV-H-13	Electronic mail and attachment, K. Bromberg, SBA, to K. Barnett, EPA:MICG, June 23, 2003, Enclosing Letter, J. Richards, President, Air Control Techniques, to A. Seeger, Executive Director, National Lime Association, June 20, 2003, Lime kiln inlet particle size data.
IV-H-14	Electronic mail and attachments, K. Bromberg, SBA, to K. Barnett, EPA:MICG, June 23, 2003, Enclosing materials from National Lime Association concerning the feasibility of meeting 0.12 standard from wet scrubbers.
IV-H-15	Electronic mail, K. Barnett, EPA:MICG, to K. Bromberg, SBA, June 20, 2003, Lime manufacturing NESHAP costs.
IV-H-16	Electronic mail and attachment, K. Bromberg, SBA, to K. Barnett, EPA:MICG, June 30, 2003, Additional questions concerning lime manufacturing NESHAP costs.
IV-H-17	Electronic mail and attachments, K. Barnett, EPA:MICG, to K. Bromberg, SBA, July 2, 2003, Response to additional questions concerning lime manufacturing NESHAP costs.
IV-H-18	Electronic mail, K. Barnett, EPA:MICG, to B. Allen, OMB, July 11, 2003, Discussion of why 0.12 lb/tsf represents best control for lime kilns.