

- + UCC_Doc_Outline
 1. UCC Confession, 1975
 - "We have been aware of the hazardous potential of asbestos consistent with the state of medical and toxicological knowledge at any particular time and are also aware of the degree of uncertainty, even at the present time, in defining what constitutes a biological hazard."
 2. When does UCC think it should NOT sell asbestos?
 - "If there is really an APPRECIABLE chance that the use of our product will result in serious injury to a SUBSTANTIAL number of people we should not be supplying it for that end use."
 - 5/30/75
 - 37/014127
 - UCC_37_CuII\LabelNoCancerUCC014127-014129.pdf
 3. "Now is the time to establish the way to provide the worker with a realistic and reasonable level of protection without effectively prohibiting the use of important materials by massive over regulation."
 - 40/018194
 - "Realistic" and "Reasonable" Level of Protection
 4. SILICA – Double hazard, Knowledge; drywall, sanding, exposure. 4/16/75
 - Subject: "Osha regulations on Occupational Exposure to Crystalline Silica."
 5. "... Almost anyone sanding a finished tape joint will be well over the [silica] limit."
 - 37/014116
 6. How UCC Manipulates Data to Meet the TLV.
 - 4/8/75
 - + "The last item, long term exposure, is easy to discuss but hard to define quantitatively. The approach taken is that the sanding and grinding data remove a substantial depth of material in a very short time. If the total fibers found is averaged over several years, the level should be indistinguishable from background."
 - 23/010044
 - UCC_23_CuII\RespTricksKeyUCC010043-010044.pdf
 7. Toxicology Studies Showing Danger of Calidria Asbestos are Concealed
 - UCC Asbestos is Most Toxic in UCC Secret Tests1966
 - 1971 Toxicology Study
 - Sayers To UCC: Let me Publish

- Asbestos Toxicology Studies Concealed 11/29/82
- 8. Fine fibers = disease
 - Thin, Dangerous Fibers
 - Coalinga Asbestos is More Dangerous
 - Mesothelioma – Animal Tests – Thin Chrysotile is highest % of Animals Getting Mesothelioma (Wagner, 1974)
- 9. UCC Law Dept. Lies 5/22/73
 - Law Department “TLV Lie” 5/22/73
 - Law Department “Low Exposure Lie” 5/22/73
 - What UCC Does With the Other Half
 - Law Dept “Safe Use Lie” 5/22/73
 - Law Department Friendly Fiber Lie 5/22/73
- 10. UCC Cancer Labeling Policy
 - “Carcinogen Labeling Policy” 12/4/81
 - Labeling Cancer Products
 - Corporate cancer labeling policy is not followed for asbestos.
- 11. Labeling Cancer Products – Duty
 - “Proper product labeling is essential for the safe use of hazardous chemical substances including carcinogens and products demonstrating potential to cause other chronic health hazards.”
 - “All government mandated carcinogen labeling requirements will be complied with and in the event that the Union Carbide Corporation labeling requirements is different, the affected operating component may meet either requirement at its option.”
- 12. Labeling Cancer Products
 - Labeling Cancer Products Elements of Proper Warning
 - “Category – Known human carcinogen.
 - Warning statements – Human Cancer Agent
 - Signal word: If cancer is the major risk WARNING is the appropriate signal word.”
- 13. Reasons to Develop “Dustless” Asbestos – 7/24/75
 - The most fundamental question when assessing the need for a dustless asbestos is the possible health hazard to users of our product
 - Dry, opened asbestos has the potential to become airborne every time it is handled or disturbed.
 - Health risks to users of our products is not well defined and will not be defined in the foreseeable future

- Provides a strong defense against future product liability suits.
 - Provides a strong psychological counter to militant union activities against handling asbestos.
 - Provides a defensible position that OSHA monitoring and medical examination requirements do not apply.
 - This is especially true if the "action level" concept is implemented.
 - "Dustless" = not distinguishable from background.
 - Elevated levels can be obtained from any asbestos material if sufficient energy is applied.
 - Wetting is not a satisfactory solution
 - Spills and damaged packages would dry out in a fairly short period and become about like unwetted asbestos.
 - Borel discussed in context of "inherently dangerous" – incapable of being made safe.
 - Customers should be able to meet a 1 f/cc TWA action level with modest precautions.
 - Discusses Super Visbestos – used in well drilling muds. JM is only competitor and has come out with a wetted asbestos. Many of the bigger users have taken the position that the monitoring requirements cannot be met and have quit using asbestos on their rigs.
 - 1/000071
 - UCC_01_CuII\!KnowIBorelUserUCC000071-000075.pdf
14. AIA Defend and Attack Swetonic to Wall St. J 6/15/72
- 6 page letter complaining about Wall St. J article that is negative about asbestos
 - 1/000002
 - 1_CuII\AIA_Attack_DefendUCC000002-UCC000007.pdf
15. AIA Defend, Attack and Conspire Swetonic, to members 1/26/73
- Attached NYTimes Article of 1/17/73
 - Attaches the AIA response to the NYTimes.
 - "The letter has been reviewed and approved by members of the executive committee and has received legal and medical clearance as well
 - A cornucopia of innuendo, misinformation, and unwarranted suppositions, all designed to portray the asbestos industry in the United States as an irresponsible villain.
 - 1/000012
 - . UCC_01_CuII\AIA_Consp_PRUCC000011-000030.pdf

16. AIA – JM – UCC direct connection – Conspiracy
6/10/74
- On AIA Stationary
 - Ed Fenner, Chairman Standards and Technical Committee to Harry B. Rhodes, Area Manager, Marketing and Technology, UCC,
 - Thanks Rhodes for his suggests many of which have been incorporated into the final draft of our comments to OSHA
 - "I AGREED so completely with the suggestions made in your May 24 letter that I have taken the liberty of copying the letter and including it along with suggestions as to how me might implement your recommendations in the attached material."
 - 1/000095
 - UCC_01_CulI\AIA_ConxuccUCC000095-000111.pdf
17. AIA Brochure CONSPIRACY ADMISSIONS (No Date (early 1970s)
- Formed in December 1970.
 - Headquarters at 22 East 40th St., New York, New York (JM World Headquarters)
 - The INDUSTRY lacked a single, constantly available source . . . to provide information.
 - To provide INDUSTRY-WIDE information on asbestos and health . .
 - To EXCHANGE INFORMATION on methods and techniques of asbestos dust control.
 - To publicize the unique benefits and importance of asbestos to protecting human life and property
 - Keep THE INDUSTRY fully aware of all new developments whether medical, governmental or technical, concerning asbestos health.
 - "Maintains a close working relationship with other ASBESTOS INDUSTRY groups, including the Asbestos Textile Institute, Asbestos Cement Products Association, Friction Materials Standards Institute, the British Asbestos Information Committee and Asbestos Research Council and similar groups in France, the Benelux countries, and Scandanavia.
 - Members listed, currently viable members include CAPCO, Certain-teed, Union Carbide.
 - 1/000008
 - UCC_01_CulI\AIA_Formation_UCC000008-000010.pdf
18. AIA, Mereness, to Time Mag 2/01/74

- For many years, the industry has recognized the potential serious health hazards of excessive asbestos inhalation . .
 - Letter to time magazine arguing that "death from dust" article about Tyler plant is not representative of the industry.
 - 1/000001
 - UCC_01_Cull\AIA_KnowIUCC 000001.pdf
19. Asbestos Action plan 2/12/76
- Deposit is so large that it has not been necessary to make an accurate assessment of its size.
 - The essence of building a successful asbestos business has been the development of custom markets for this special type of fiber.
 - We have build a small but highly profitable market . .
 - UCC_01_Cull\ExpandAsbBus1976UCC000031-000048.pdf
 - 1/000031
20. Ultra fine fiber exposures 8/24/78 Rhodes memo
- Lists tests done at the plants of several different customers. (p. 9)
 - Ultra- fine material has always been present, at least sporadically, and has largely escaped detection in the past.
 - Union Carbide has provided an asbestos fiber counting service to customers since 1973.
 - "These products resulted in several 20 – 40 fibers/cc counts in customer's plants.
 - RG 244 asbestos
 - 1/000052
 - UCC_01_Cull\KnowExpUsersUCC000052-000063.pdf
21. Safe Use Lie
- Meyer Talk to Plastics Society 5/14/74
 - "Asbestos is vital to the nation's safety and economy; and, with proper control, it can be used safely and in compliance with government regulations.
 - Many of the articles on asbestos by the press have been emotionally oriented or distorted and in some cases stories have been sensationalized, based on obvious misrepresentation of facts.
 - Plastics industry is the largest single user of asbestos fiber.
 - Largest uses are VAT and phenolic molding compounds.
 - Claims that at least 90% of the products containing asbestos, the products are "solidly locked into the product

thereby presenting little danger of dust generation during normal use and handling of the product.

- 1/000085

22. Asbestos Toxicology Lies, 9/9/66

- Attaches newspaper and magazine articles re: asbestos. Chemical Week. London Sunday Times.
- "There is no doubt that this kind of publicity will persist, and it is important that its inapplicability to our products and our applications not be missed by our customers and prospects.
- "Dr. Dernehl has stated clearly that "while asbestos dust in excess of the Threshold Limit Value is potentially harmful, as are many other dusts encountered in industry, it is as readily controlled as other dusts and it can be used safely with appropriate precautions."
- AIA referenced in connection with the question, "what is industry doing?"
- Air samples have been collected and analyzed on a regular basis by the asbestos industry for years.
- "Take the positive approach."
- 1/000076

23. UCC correspondence with the FDC re: use of asbestos in paper for certain food contact use. FDA says, it is inert, okay!

24. Asbestos Markets Status Reports, 12/22/59

- + West Coast Markets – about 25 customers constitute the core of the sizable users on the West Coast.
 - List of Users by Geographic area.
 - 2/000196
- Preliminary look at UC's 1980 Asbestos Business,, JTC 3/25/74
- "We have been very successful in the last two years in increasing our share of the market for redi-mix variety of tape joint compounds. However, this area is under increasing pressure from the likes of Dr. Selikoff primarily because of the dust generated during the sanding of tape joints."
- 1/000050

25. Principles of Protection, What UCC Says is "serious"

5/1/63, memo by L. A. Bliss, president.

- Where any hazards are found, steps should be taken immediately for eliminating them in accordance with our established practices.

- Where hazards are found, they have been eliminated or they have been reduced insofar as practical to a minimum, and that procedures exist to keep them in that state
 - Five fatal accidents corporate wide "points up for use the seriousness of our problem."
 - 2/ 000156
26. "Major Hazards" 10/74
- Breathing asbestos dust.
 - GJ
 - 2/000154
27. Response - Keep Exposures High, 1/4/77
- Discusses recent NIOSH statement that .1 f/cc is feasible and where it cannot be attained asbestos should be phased out.
 - It had been hoped that some compromise between .5 and 2 could be achieved. The NIOSH position makes this more difficult
 - The industry position, supported by their medical consultants, is that the current 2 f/cc is an appropriate exposure level..
 - The INDUSTRY is making a well organized presentation of their view . . .
 - The most critical impact of a very low standard would be on our customers who manufacture asbestos-containing products and most particularly on the great diversity of ultimate users of these products. A standard of .1 fiber/cc could force many of them to turn to alternative products.
 - Compare to #69, supra, where Meyers argues that asbestos is essential to the continuation of Western Civilization. It turns out that it is not necessary at all, because of "alternative products."
 - 2/000112
28. "Occupational Disease Sends Shock Waves Throughout Industry, 5/75.
- Journal Article from "Occupational Medicine" - Ethics
 - "After all the arguments about economic feasibility and interpretation of data are in, after all the fine legal distinctions have been made, one inescapable fact remains: we're talking here about the lives and well-being of American workers."
 - 3/000558
29. Continental Insurance Company Inspections. 11/21/85
- Continental has taken over the work comp insurance

- Continental cannot be reasonably be limited from any part of our plants.
 - If inspectors ask about product liability claim information refer the inspector to headquarters.
 - 3/000281
30. 1973 Asbestosis Survey, 10/15/73
- Once we have the requested information about insulators' exposure levels we will meet with Dr. Sexton to figure out what to do next.
 - 3/000404
31. Cancer and asbestos, 12/14/67
- "... I am enclosing several abstracts taken from current literature which ascribe carcinogenic properties to inhaled asbestos particles.
 - Attached asbtracts from the Industrial Hygiene Digest
 - Demy & Adler, Cuthbert, Kogan, Keane, Li ben, Anon., O'Donnell, Hinson, Hardy.
 - 3/000447
32. Asbestos International Association Medical Advisory Panel
- Includes Hilton Lewinsohn, UCC Asst Med Dir.
 - 000761
33. Worker Health Risk from Asbestos, 8/3/84
- Kevin Browne to Neville Stack on Cape Industries PLC letter head.
 - Series of letters critiques various asbestos disease publications
 - 3/000808
34. Assessment of Risks Posed by Exposure to Low Levels of Asbestos in the General Environment, 6/81
- Marvin Schneiderman PhD paper prepared for a German institute.
 - Notes lower risk in the mining and milling process, "perhaps indicating a lower biological activity of asbestos at early stages in processing."
 - "There is considerable empirical and theoretical evidence to support the assumption of linear, nonthreshold relationships between dose and response, for both lung cancer and mesothelioma."
 - 3/000559
35. Asbestos International Association Medical Advisory Panel
- 4/000761

36. Asb Int's Assoc Corr 1984
- Kevin Browne, Neville Stack
 - 4/000808
37. AIA Lobbying, 8/12/82
- From the desk of John Meyers
 - "The AIA/NA "spent" about \$50,000 with K & E on this and arranged for a lot of presentations. The full proceedings are available – let me know if you want them.
 - Kirkland & Ellis presentation to the Royal Commission on Matter of Health and Safety Arising from the Use of Asbestos in Ontario, 8/6/82 (001319)
 - Contains a nice summary of the Canadian Chrysotile/AIA theory of the asbestos world (all disease is a result of heavy exposures in the past that no longer occur; low level exposure of today are without detectable risk.
 - 5/001318
38. AIA Meets With DOL - Lobbies Government to silence critics, 4/1/81
- On AIA letterhead, Dougherty, President to Thorne Auchter, Assistant Secretary for OSHA.
 - Thanks Auchter for "meeting with us."
 - Dougherty decries as being "adversarial" Dr. Robbins' (NIOSH) statement that
 - "The asbestos industry has been grievously injured by these many government attacks"
 - There should be a national public health policy in favor of eradicating and removing asbestos fiber from the human environment . . . (That) is certainly my position as the head of NIOSH and something I am advocating at this point within government policymaking."
 - "Much of the current plight of the asbestos industry could be alleviated if the new Administration refrains from the prior adversarial attitude of the government and instead works cooperatively with industry and other interested parties to reject pending NIOSH recommendations and withdraw the outstanding OSHA proposal. . . Ensure co-ordinated efforts among all agencies to end unsubstantiated attacks on asbestos. "
 - 001104
39. AIA position – Public Awareness Program is Just a Scare Tactic, 4/1/81
- "Numerous government agencies have engaged in . . . Activities that have severely harmed the asbestos industry

... For example, the Department of Health, Education and Welfare's 1978-79 public awareness program to frighten the public about the supposed hazards of asbestos."

- 5/000109

40. No Safe Level

- "The cliché, "there is no known safe level of exposure to asbestos" which is basically correct has been extended to the very controversial concept that such a level does not exist."
- Reviews Asbestos School Hazard Detection and Control Act of 1979.
- Is laudatory of the J/M position paper opposing ASHRA.
- To Tom Finnigan from Harrison Rhodes.
- 5/001198

41. Asbestos Marketing Plan for 1969

- Which grade of Calidria is used in which product.
- Launch an aggressive sales campaign to obtain minimum sales of SG 100 products in vinyl asbestos floor tile.
- Expand sales in the oil well drilling and tape joint compound markets.
- Biggest Floor tile customers – American Biltrite, GAF/Ruberoid, Kentile, Uvalde
- Main Joint Tape accounts – Kaiser Gypsum, Kelly Moore, National Gypsum, US Gypsum, Western Chemical. (JTC also known as "Trade Paint Sales")
- Main Polyester Premix customers – Harrison Radiator, Ford Motor Company, Glastic, Inc., Woodall, Industries
- Polyesters – PPG Industries, Koppers, RCI, Diamond Shamrock, American Cyanamid, Glidden Company, Marco, Cargill, Inc.
- J. L. Myers is the guy in charge
- 5/001626

42. Plan to sell Calidria in 1969

- Memo of 10/1/68
- "UCC is planning to dispose of its calidria asbestos assets by mid-1969.
- 5/001268

43. Plan to sell Calidria, Considerations 2/17/71

- + Bud Pufahl, Market Area Manager of Pulp and Paper; Jim Wilkinson, Market Area Manager Calendering, Flooring and Records; Wayne Carick, who is our Asbestos Technology Manager; John Riddle, who is our Production Manager at

King City; Norm Setter, our product Manager, Walt Young, our Marketing Manager.

- Montello, Inc., was set up as a distributor of asbestos products to the oil well drilling industry
 - Harrisons & Crosfield was set up as the West Coast sales agent for Resin Grade group. This was to get effective coverage of the many small accounts on the West Coast which we cannot afford to contact.
 - We adpted the trade name "Calidria" in order to more effectively identify our line of asbestos products.
 - Generally discusses the various markets for Calidria and projections etc.
 - 5/001244
44. "The Asbestos Market in the Flooring Industry."
8/20/69
45. Marketing, Boise Cascade inquiry. 7/27/73
- Asbestos from Coalinga has been used in flooring since 1962 when JM converted their Western plants and introduced it to the market.
 - At this time the UCC floor tile customers are American Biltrite, Kentile, and Uvalde.
 - Re: price cutting: "If we move to cut prices as we did in 1965, we can expect consternation and a move to follow. To reduce repercussions, we should try to make obvious to competitors the nature and limits of our intent."
 - Good conspiracy language.
46. U.S. Navy Asbestos Regs. 7/1/74
- We no longer have "approval" from FDA to use asbestos in paper which is in contact with food.
 - Calidria RG-144 is used in some epoxy marine maintenance coatings. RG-244 is beginning to find a place in zinc-rich primers. Large RG-244 sales to Avco are for an intumescent bomb coating for one of the armed services.
 - At that time, it may be appropriate for the AIA/NA and/or UCC to suggest some softening of this "substitute" provision. No action is recommended at the present time. Consp.
 - H. Rhodes.
 - 5/001205
47. USAF Policy and Marketing, 9/23/81
- USAF policy: "when as asbestos-containing material is clearly superior in performance and cost, and the health

and safety hazards are minimal, then the selection of the asbestos-containing material is warranted.”

- “This sounds like it was written specifically for our RG applications, and I think you should make sure that the sales personnel, distributors (foreign and domestic), “reluctant” customers, etc, are aware of the policy and the quoted sentence, which would even apply to drilling mud and almost all of our applications. Go back to General Motors, Ford, RCI, Interplastic, etc.
- 5/001210

48. Asbestos in schools. 2/23/79

- John L. Myers - Concerned about HR-1524.
- To my knowledge there is no data which indicate that the asbestos fibers in floor or ceiling tile can be released in amounts that would be harmful, regardless of exposure time.
- Provides a list of UCC domestic shipments from 1963 to 1978.
- 5/001203

49. Dresser Industries Sales Call. 1/25/79

- Dresser is determined to proceed with the silane-asbestos with or without Union Carbide.
- Dresser also wanted to know prices on the silane Y-9187, as they plan to start a toxicity study with or without UCC, and stated that some part of UCC was recommended as a testing facility. Could this be Mellon or an industry joint effort?
- Agreement between UCC and Dresser is attached.
- Copies of some of the UCC/Dresser memos, etc are copied to “D. F. Braun.”
- 6/001668

50. Market for asbestos in paper, 9/25/69

- 6.5 million pounds, \$360 million
- Maximum potential is 10 – 12 million pounds per year.
- Boise Cascade has purchased 1.5 million pounds thru August 1969 for use as a TiO2 extender and retention aid.
- Conwed bought 1.4 million pounds for starch retention in acoustic ceiling tile.
- 6/001653

51. Histogram of fibril diameter Thin Fibers

- Virtually all Coalinga fibers are narrower than Canadian 7R fibers.
- 7/001926

52. Lab Program – Asbestos. 2/28/67
 - Lists all the lab programs, R & D mainly, for asbestos, including existing uses and efforts to invent new uses for asbestos, such as “air pollution control.”
 - The R & D work contains no mention of health or industrial hygiene research.
 - 7/001853
 - UCC_07_CulI\R&D_NoHealthUCC001853-001870.pdf
53. Effect of filler in Polyethylene, Bakelite Company
 - A division of Union Carbide and Carbon Corp, 30 E. 42nd St NY
 - 6/001752
54. Discussion of fibrous resins, made of Bakelite and also, “Fiber resin-Asbestos Papers and Laminates. The formula uses asbestos from 98% to 50% of the formula.
 - 7/001763
55. Asbestos Handbook
 - No health mention in this handbook describing the benefits of and uses for UCC asbestos fiber.
 - 7/001764
56. Gasket Removal Exposures, 5/7/87
 - Per our phone conversation on May 4, 1987, regarding the removal of asbestos gaskets, it has come to my attention that personal exposures have been measured at or in excess of the 0.1 fibers/cc action level. The PEL is 0.2. Fibers.
 - In order to assure adequate protection . . . It is required that glove bags be used when removing asbestos containing gaskets that require abrasive actions which would produce airborne concentrations of asbestos.
 - 8/002234
 - UCC_08_CulI\GasketKnowUCC002234.pdf
57. Asbestos Handling Procedures, 11/16/83
 - Currently there is considerable interest in the subject as more and more asbestosis cases are being diagnosed in our workforce.
 - Mandatory Precautions and Procedures to be Followed When Handling and Working with Materials Containing Asbestos
 - Check list is provided
 - 8/003320
 - UCC_08_CulI\PrincProtListUCC003313-003336.pdf
58. Protection against breathing Asbestos Dust

- Rules and procedures for handling in place asbestos materials.
 - 8/002557
 - UCC_08_CulI\PrinProt_UCC002557-002566.pdf
59. Disposing of removed asbestos, 1986
- "I have discussed this with Greg, he was informed by Mr. Spurlock that he could drop it in the river and let the flood water wash it away."
 - 8/002586
 - UCC_08_CulI\RespDisposalUCC002586-002587.pdf
60. Health Lies.
- "Health and Safety Consideration for All Crafts persons In Handling Material that Contains Asbestos"
 - "(with the intent of covering every craftsperson who might come in contact with asbestos)"
 - "Normally Asbestos is not a Major Health Hazard – Under most conditions, asbestos is not normally in fiber form small enough to be airborne in a person's breathing zone and small enough to pass through the nasal filtering system of hair and mucous that filter out all but the very finest fibers. However, it is there small fibers longer than 5 microns entering the lungs that are considered to be the culprits that cause asbestosis."
 - Cancer not mentioned as a risk in this document intended for workers.
 - 8/002590
 - UCC_08_CulI\RespNoCa UCC002590-002591.pdf
61. EPA Information Gather Orders, TSCA. 2/13/80
- "The AIA/NA decided at its Executive Committee meeting on 2/12/80, that it would make no substantive response to this proposal. This is based on the fact that the Chemical Manufacturers Association and others are responding in detail and we cannot identify any issues that are unique to asbestos. . . . In view of the AIA/NA position, I plan no action.
 - 9/003449
 - UCC_09_CulI\AIA_ConspUCC003449-003450.pdf
62. JM-UCC Working Relationship Re: Asbestos, 6/27/80
- Myers to Reis, JM
 - "Enclosed is the copy of your text on which I have made a few comments."
 - + Braun Truan still appeals to UCC:

- "I have always been impressed by the fact that, as I understand it, the Quebec asbestos miners have a lower incidence of lung cancer than the general population in Montreal."
 - "I think the "Asbestos Issue" idea is a good one and commend J-M for the work already expended on it. I am sure we will use your more general presentation when available."
 - 9/003696
63. UCC-JM Working Relationship Re: Asbestos, 7/21/78
- Rhodes to Fenner.
 - "Dear Ed: As you requested the following items are enclosed for your information:
 - 1. Draft of letter to our employees at the King City Asbestos plant.
 - 2. Briefing package for our field representatives.
 - We are not planning a general mailing to our customers but plan to respond to questions when they arise. I would be interested in receiving any comments you may have. . . . In the very unlikely event J-M would quote or reference UCC directly we would like your prior review."
 - UCC Plant Manager and Division Medical Director Letter to King City Employees.
 - "When the King City Plant was built in 1963, there was an awareness of the need to control exposure to asbestos dust."
 - Is very critical of the HEW activities to alert exposed people - argues that it is a scare tactic.
 - Drywall Business (Key), 12/1/75
 - Letter by Myers about article in the 11/75 issue of GDCI "Drywall"
 - "It is hoped that this, and a concluding article in the next issue, will help salvage most of our business in this application."
 - Issue contains article by Rhodes minimizing asbestos and silicosis danger to drywall workers.
 - Georgia Pacific and USG advertisement. GP ad touts asbestos free "Speed Set."
 - 9/003764
 - UCC_09_CulI\DrywallKeyUCC003764-003775.pdf
64. KNOWLEDGE, COMPASSIONKey 5/12/75
- Klotzbach to Thurber, re: responses to interrogatories
 - Discusses "Roderman et al. v Union Carbide Corp et al

- "Jim Bright first examined asbestos claims in 1957, and we acquired our claims by the end of 1959. We began process development work in 1959. Product development came later, probably late 1959. The attached history should probably be of interest to the lawyers."
 - "I can't understand how we are involved in this. The incubation period, or whatever they call the time between exposure and cancerous disease, for mesothelioma is 20 to 40 years. Anyone conking out now couldn't relate to us because we didn't ship product until late 1963 or early 1964, and our lawyers should have a cakewalk with the time element."
 - "WE HAVE BEEN AWARE OF THE HAZARDOUS POTENTIALS OF ASBESTOS CONSISTENT WITH THE STATE OF MEDICAL AND TOXICOLOGICAL KNOWLEDGE AT ANY PARTICULAR TIME AND ARE ALSO AWARE OF THE DEGREE OF UNCERTAINTY, EVEN AT THE PRESENT TIME, IN DEFINING WHAT CONSTITUTES A BIOLOGICAL HAZARD."
 - Some interesting example of the corporate mind at work, playing games when responding to discovery.
 - 9/004145
 - UCC_09_CulI\KNOWL_KEY!!!!_UCC004145-004148.pdf
65. Labeling – Asbestos International Association, 1/28/82
- Enclosed is a copy of our schedule "summary of main features of warning labels" which incorporate all amendments notified up to 15 January 1982.
 - Canada uses the AIA logo but under the column wording is stated, "none."
 - Neither the words "cancer" or "lung disease" appear in any of the labels.
 - 9/003712
66. Art Langer to EPA, 12/7/84, on Mt. Sinai Letterhead, re: auto brakes
- Langer criticizes the petition of the Natural Resources Defense Council.
 - "... It is true that the three major varieties of asbestos used in the United States induce both types of malignant tumors (meso and lung cancer) in experimental animals, industrial manipulation may alter outcome."
 - "The number of deaths attributable to asbestos brake pad maintenance amounts to some 500 per year over the next

several decades. This value may be lower or even greater than given. We simply do not know."

- "I agree with the petitioners that there are many instances where brake maintenance and repair subjects workers to asbestos fiber exposure which increases their neoplastic risk. There is no question that this occurs and that the risk is measurable."

- 9/004203

- UCC_09_CulI\LangerBrakesUCC004203-004209.pdf

67. Principles of protection and Corporate Ethics Statement, 1982

- By John L. Meyers, Product and Production Manager, Asbestos, 12/31/81
- "People are unquestionably our most important asset – their safety and health is our greatest responsibility. Accident-prevention is a prime management function as is the accountability of the line organization."
- "Fundamental Principles."
- "Supervisors who blame all accidents on "carelessness" of their crew are no better off than the fellow who tries to start a car by kicking the tires."

- 9/003718

- UCC_09_CulI\PrincProtEthicsKeyUCC003718-003728.pdf

68. Asbestos Stratigic Planning, 5/4/79

- Key External Assumptions
- Volume Growth – 3% per year for short fiber, 8% per year for visc.cont. agents.
- Government
- Prior 3rd party liability does not exceed \$_____ during the plan.
- Future 3rd party liability is minimal.
- No widespread bans or mandatory substitutions.
- OSHA TLV no more restrictive than 1.0 f/cc TWA.
- Other regulations (EOA, MSHA, etc) not substantially more stringent than now.
- No significant impact due to "retroactive" legislation.

- 9/003815

69. NPCA (National Paint and Coatings Assn). Monthly meeting report, 4/25/75

- Attended by Rhodes.
- "Our old acquaintance, Fran Gaugush of Sherwin Williams chaired the meeting.

- The proposed amendments (to the Marks Bill) "were written to fit our particular needs and data before we became aware of the possible interest of talc users in the coatings industry."
 - "Discussed the Selikoff letter and the proposed response with Murry and Gaugush briefly.
 - "It was most interesting to observe an operation similar to the AIA/NA technical committee in operation."
 - Vinyl chloride labeling discussed.
70. American Biltrite 9/3/75
- Agreement by which Amer Biltrite agrees to buy a minimum of 2700 tons of asbestos during the life of the agreement, 10/1/75 – 12/31/76.
 - 9/003536
71. Names of UCC Customers and UCC employees who work with the customers, 11/8/76
- Developmental programs and plant assistance.
 - Technical Service –
 - Names of customers for technical service, and the description of the job done.
 - Includes: Jim Walters, Shell, Avco, Celotex, Mobile, W. R Grace, GAF, Murco Drywall.
 - Dust Count Services
 - Numerous customers listed, including JM World Headquarters.
 - Names of companies making Calidria Sample Requests.
 - 9/004028
72. Distributor Agreements, Calidria Asbestos. 9/9/76
- Apperson Chemicals
 - Actyvex Corporation.
 - New York distributors
 - 9/004514
73. Well Drilling Exposures, 4/4/77
- To Jim Reese, Johns Manville, from Rhodes
 - "Since our conversation yesterday, I have been looking into the fiber count data in the drilling operation.
 - Talks about "dumping" bags of asbestos at drilling sites, and dust counts obtained during the "dumping."
 - 9/004139
74. Minutes of the meeting to develop work practices for the use of asbestos in the drilling industry, 1/25/82
- Meeting at Hilton in Tulsa, Oklahoma

- Present are: B J Pigg (AIA), Campbell (Montello, UCC distributor), Myers (UCC), Shell (Phillips), Kuhn (Johns Manville), Hopkins (Noble Drilling), Woodruff (Phillips), Johnson (Montello), Ammann (lawyer).
 - A draft is agreed upon to be put in booklet form for distribution.
 - Union Carbide High Purity Asbestos A Unique Fibrous Softening Agent and Retention Aid for Tissue and Towels
 - Brochure
75. Chrysotile Asbestos, Group 7 (shorts) Market Analysis, 4/74
- Confidential for internal use only, 46 pages.
 - Conclusions
 - Floor tile – currently the leading consuming product, will remain dominant to 1980
 - Drilling muds – application will grow at a health rate – mostly after 1975. This appears to be the best opportunity for UCC
 - Wall board tape joint muds – should continue to grow, pacing the increase in housing starts and, to some extent, commercial and industrial building. It will probably be necessary to introduce precautionary work practices, especially in the sanding operation.
 - "The "White House" phoned the Bureau of Mines (in my presence) to inquire if the U.S. could become self sufficient in asbestos. . . .Therefore, the coming shortage may be world-wide."
 - Paper use of asbestos appears to require a concentrated effort in the areas off both market research and development.
 - List of major asbestos manufacturing firms.
 - Joint Tape Compounds – estimates current use of 9000 tons per year.
 - According to the Gypsum Wallboard Association and our own internal information, there is an alleged hazard in the use of asbestos in this application due to sanding of the semi-finished job. This "dusting" is considered unacceptable by the trade in view of OSHA attitudes. Warning labels may be required."
 - 9/004053
76. AIA Agreements and activities – legislation – 1983
- At a meeting of the AIA/NA Executive Committee yesterday, it was agreed that a letter should be sent to

Labor Sec'y Donovan and OSHA Head Thorne Auchter outlining reasons why the Association considers that the issuance of an emergency temporary standard on asbestos would not be in the best interests of all parties concerned. . . . Donovan was briefed on the asbestos issue on August 29 and, according to his office, is expected to reconsider the matter next week. 9/2/83

- 10/004543
- 77. Chemical and Physical Characterization of Amosite, Chrysotile, Crocidolite, and Nonfibrous Tremolite for Oral Ingestion Studies by the National Institute of Environmental Health Sciences, Campbell, Huggins and Wylie, Bureau of Mines,
 - 004846
- 78. Household exposure, 10/4/82
 - Homan, Phd, to Sicard
 - Encloses Selikoff article, "Household Risks with Inorganic Fibers."
 - 10/0044559
- 79. Chemical treatment of asbestos to reduce toxicity. Importance of Animal Tests 6/17/82
 - Discusses treating asbestos by coating it with other silicate minerals to reduce the cytotoxicity of asbestos
 - Discusses Highlights of 6/11/82 meeting at Niagara Falls.
 - The theory of hemolytic activity by silicate mineral is generally accepted by the scientific community as a potential factor in the development of asbestos related disease.
 - Animal tests would require 3 to 5 years and cost \$2.5 million dollars . . . These tests are considered of major import by UCC.
 - 10/04489
 - UCC_10_Cull\KnowlTesting UCC004480-004481.pdf
- 80. Customers – Kentile, 2/27/78
 - Agreement. Kentile to buy a minimum of 765,000 pounds per month.
 - 10/004531
- 81. Customers – Kentile, 9/3/75
 - Agreement with Kentile , minimum of 1350 tons during agreement.
 - Discusses price increase for Calidria asbesotos
- 82. Customers – Conwed, 1974
 - 10/004547

83. Customers – Chrysler, 5/26/72
 - Agreement between UCC and Conwed (Ceiling Tile)
 - 10/004538
84. Thurber to Myers, enclosing copies of agreements with:
 - American Biltrite
 - American Biltrite, Canada
 - The Flintkote Company
 - Winburn Tile Company.
 - 10/004551
85. Customers, various, 10/17/75
86. Customers, W.R. Grace, 12/1/75
 - Discusses price increase of asbestos to WR Grace
 - 004521
87. Customers. W. R. Grace, 2/5/76
 - Thurber to Fornier
 - Attaches Sales agreements with Montello, W. R. Grace, Daubert Chemical Co, and Grace Industrial Chemicals, Inc.
 - 10/004253
88. Customers, W. R. Grace, 1/15/75
 - Re: Agreement of 8/11/72 and a modification.
 - Dust Control Services, 1/10/83
 - Asbestos dust problem when bags are unloaded they tear on the side of the rail car at Michael-Walters production facility during the manufacture of "Stoppit", a stopping wall sealant.
 - 11/004953
89. 1964 NYAS; Dust control at mine and mill, 10/21/64
 - From "Industrial Medicine and Toxicology department, report by Paul W. McDaniel, Industrial Hygiene Engineer
 - The onsite dust counting procedures are not good because the microscope is not properly adjusted.
 - In view of our experience to date in mill operations, I recommend that the practice of wearing respirators in the presence of even small amounts of visible dust be continued. This is necessary because of the very low concentrations allowed for a safe work environment and because we are dealing with a material in which many of the particles are exceptionally small.
 - Recently (October 19-21), I attended a conference on asbestos sponsored by the New York Academy of Sciences. . . . The conference covered much of the experience obtained to date in handling asbestos. I was impressed by the

growing concern for hazards of handling this material, but even more so by the increasing consideration given to the role of very small particles (less than 1 micron in length and diameter). In view of the tone of the discussions, I believe the care that we are exercising in our operations is definitely justified.

- 10/004970

90. Dust counting, 7/17/63

- Dust counts at the R & D facility. Several "high" (above 5mppcf) counts.
- Particle size
- Diameters - .5 - 1.2 microns
- Length - 0.9 to 40 microns, most in the range of 0.9 to 10 microns.
- 10/004955

91. Initial Survey of mine/mill site, 9/10/63

- Neither mill or mine in full operation.
- Riding in pick up with windows open on road from mine - 4.7 and 6.0 mppcf.
- In view of the toxicity of asbestos and the low permissible air concentration, it was recommended that a program for routine periodic appraisal of the work environment be established and that necessary equipment be obtained.
- Results of Dust Determinations at King City, 3/10/64
- Some counts above 5 mppcf
- Respirators only worn in areas of visible dust.
- 11/004956

92. "Ingredients for Brake Linings (Friction Products), 1974

- A useful description of the materials used and useful in manufacturing brake linings, the brake lining manufacturing process, and the qualities of the materials and what makes the suitable or unsuitable for use in brake linings.
- 12/004976
- UCC_12_Cull\BrakesUCC004976-004995.pdf

93. KNOWLEDGE - "Safety Standards", May-June, 1972

- OSHA Publication
- Mailing label is to Union Carbide. "William F. Long, Chemicals and Plastics, Sistrunk, WV."
- Cover story: "Target Health Hazards: Asbestos: Airborne Danger."

- "30 years ago world production was approximately 50,000 tons annually; today it has skyrocketed to 3 million tons. The effects of exposures occurring in the 1970s probably will not be known until the end of the century; but the high mortality of today suggests what may be expected in the future."
 - "Many studies have uncovered cases of the disease (asbestosis) in which the exposure was relatively light and did not continue over an extended period of time."
 - Mesothelioma: "Researchers are linking it to asbestos exposure, however slight."
 - "Since the recognition of asbestosis 72 years ago, the disease has been widely studied the world over, from the mines of South Africa to the mills of Quebec. Today experts believe that asbestosis is one of the most debilitating of the pneumoconioses – lung diseases caused by dust inhalation"
 - "Brake mechanics must also cope with significant levels of airborne asbestos."
 - "Our ability to combat the disastrous effects of asbestos on the human system is still negligible."
 - 12/005001
 - UCC_12_Cull\KnowDOLSafetyUCC005001-005036.pdf
94. "Asbestos Related Diseases", 8/8/83
- Thomas Lincoln, M.D. to Medical Directors and Contract physicians.
 - Encloses an article by D. Davies from the 7/16/83 issue of the BMJ.
 - "The fact that only a small percentage of pleural plaques (15% reported by Hourihane) are detectable during a lifetime by usual chest radiographs gives one concern.
 - If our chest x-ray examinations are of poor quality and are poorly interpreted, we could be accused of exercising inadequate "reasonable" care in our detection efforts.
 - Hilton has been working with you to try to upgrade our chest x-ray examinations and interpretations.
 - Hilton is our resident expert on asbestosis and asbestos related diseases so if you have any questions or problems give him a call . . .
 - 12/005047
95. UCC Gets Legislative Exemption, 2/15/77
- Letter, Myers to Nate Lasher, UCC Torrance Coatings Plant, on Calidria letterhead.

- Regarding Standard Brand's use of CG-135P asbestos in paints.
 - "We were instrumental in getting the Presley Bill written and passed, but please note that the revised exemption expire, July 1, 1978. We will, at the appropriate time, attempt to get the 'coatings' exemption extended or permanently adopted.
 - We should obtain samples during paint spraying and during sanding of a finished panel or room. The 'environment' should simulate actual conditions as closely as possible.
 - 12/004972
 - UCC_12_CulI\RespLobbyUCC004972-004975.pdf
96. Asbestos product manufacturers
- A nineteen page list of companies who manufacture asbestos products
 - Floor tile
 - Ready prepared roofing
 - Brake linings
 - Sound Insulation
 - Filtration Equipment
 - Safety Clothing
 - Roof coatings
 - 13/005107
 - UCC_13_CulI\UsersNamesKeyUCC005107-005125.pdf
97. Asbestos Markets, 6/15/59
- Report of calls made on West Coast asbestos consumers to determine the size of the markets and the types of asbestos used.
 - 13/005332
98. Calidria 5 year Sales Summary, 1980 – 84.
- Lists numerous customer by fiber grade sold to that customer.
 - Familiar names include: Dresser, Proko, Eastman Kodak, Pfizer, GAF, Kentile, Azrock, Flintkote, Highland Stucco, and many other names.
 - 13/005172
 - UCC_13_CulI\UseCustomrsNamesUCC005172-005224.pdf
99. Calidria Asbestos Product Applications
- Lists the asbestos grade and the products in which it is used.
 - Lists Calidria share of each market.
 - 13/005305
100. Merewether, 1930

- HMSO Report with UCC Bates #
 - 14/005743
101. Calidria Monthly Sales Summary,
- 1979 – 81 sales summaries by month
 - 14/005464
102. Response to knowledge – SELL!, 6/18/76
- "It is very likely that the drilling mud business may be lost permanently at a very early date because of OSHA."
 - "We must make every effort to obtain additional volume business to keep the plant on a full production basis."
 - 14/005454
 - UCC_14_Cull\RespSell!\UCC005454-005456.pdf
103. Sales Highlights for 1980. "Unfounded fears of asbestos." 2/2/81
- "We have obtained continuing business from GAF . . . Because of the Atlas shutdown."
 - "Automaker policies on asbestos use and low auto production caused a significant loss of RG sales."
 - Drilling mud sales were strong all year and were 165% of budget at year end. . . . Our market share continued to drop due to the marketing efforts on Flosal, a wetted product from JM. We decided not to offer a wetted product . . ."
 - "The main threat to the asbestos industry was the continuing use of the media by the agencies to instill an unfounded fear of asbestos. We anticipate regulatory pressures for the next four years."
 - 14/005677
104. Sales, International and Domestic, 1/24/78
- "1977 was a good year and 1978 should be even better. The health Problems are ever present but have not approached the U.S. situation yet."
 - "SG-210 sales were adversely affected by the recent CPSC action regarding tape joint compounds . . ."
 - Midwest area – "Tape Joint Compounds – action by the CPSC on spackling compounds caused a complete collapse of HOP and SG-210 sales to these markets. In 1976 we shipped 615 tons to the tape joint market. In 1977 this figure dropped to 341 tons and 1978 will almost certainly be zero."
 - "Major bright spot – Automotive – Sales to the automobile companies and their suppliers jumped from 535 tons in 1976 to 671 tons in 1977."

- "Hughes Chemical – Hughes was some very large potential RG-244 uses. We must convince them that it can be used safely by them and their customers."
- 14/005532
- 105. Public Relations vs. OSHA, 4/16/84
 - PR agency to Lewinsohn, asking for assistance in refuting OSHA rule making.
 - Keep TLV high.
 - 14/005744
- 106. Analysis of the Asbestos Products Industry, 8/72
 - An Economic Investigation
 - By, Morton Research Corporation
 - 14/005226
- 107. Tape Joint Compounds Brochure by UC, 1971
 - Touts Calidria asbestos for ready mix and dry mix jtc.
 - 14/005940
 - UCC_14_CulI\UseJointDryUCC005938-005967.pdf
- 108. Tape Joint Compounds. Brochure. 10/68
 - Touts calidria asbestos for jtc
 - A section on "toxicological properties" asserts that exposures within the TLV carry no danger. "Control of asbestos dust exposure is therefore necessary."
 - "Employees should wear respirators where dusting occurs in finishing products such as sanding taped joints."
 - 14/005968
 - UCC_14_CulI\UseKnowDryTLVKeyUCC005968-005973.pdf
- 109. Calidria Pelletized SG-210 for Ready Mix Tape Joint Compounds, 2/8/74
 - Over the past several years, Calidria asbestos has become widely established as the preferred form of asbestos for the manufacture of ready mix tape joint compounds.
 - 14/005910
- 110. "Asbestos Containing Material Removal and Disposal 8/16/85
 - 6 page abatement procedure
 - 15/005998
- 111. "Reassessing Our Position on Asbestos Gaskets and Packing., 7/3/86
 - UCC's position until now has been to use and keep using asbestos gaskets and packing.
 - Valve Manufacturers Association of American is once again sponsoring a seminar . . .The subject is "Asbestos Substitute Gasket and Packing Materials."

- Most companies are moving cautiously, watching the market, implementing test programs for new compressed "non-asbestos" products, trying to position themselves to make the smart move at the right time.
 - We should move with all deliberate speed to eliminate any further use of asbestos.
 - 15/006004
112. Task Group Meeting 3/17/87, Phaseout Use of Asbestos-Containing Materials in Work Place.
- The heart of the asbestos usage phaseout program is the requirement that no asbestos containing products be purchased after 1/1/89.
 - 15/005974
113. Peele – x-ray diffraction analysis of Kaylo, Thermobestos. 4/4/62
- Kaylo – 5% by weight of alpha quartz
 - Thermobestos – 2.5% by weight of alpha quartz
 - 15/00611
114. Protection against breathing asbestos. 10/16/78
- Maintenance procedure to minimize asbestos exposure. Mainly implementation of OSHA rules.
 - 16/006152
115. Concealment - Asbestos Sampling Values Insulation Fabrication Shop, 1/24/73
- There are many high fiber counts, up to 61.5 f/cc. A count of 48.3 f/cc was obtained for worker "filling carton with sawed blocks.
 - "Exposure values have not been reported to the employees nor to shop supervision."
 - 16/006152
116. Sayers Memo Asbestos Disease Union Carbide UK –
- Asbestos as a Health Hazard in the UK.
 - Asbestos Institute to UCC, 6/19/86, transmitting Sayers paper along with others
 - The AI card catalogue card for Sayers paper, "Union Carbide UK Ltd 1968, Confidential – not circulated."
 - 16/006386
 - UCC_16_Cull\SayersConfKeyUCC006286-006288.pdf
117. UL Withdraws Classification Spray on materials
- UL gives notice that it is withdrawing Classification for all spray applied materials that contain more than 1% asbestos.
 - 16/006267

118. Duty to publish –Studies to be Reported
 - "Any study of any effect of a chemical substance on health or the environment or on both
 - 17/006744
119. House hold exposure, clothing contamination 2/26/86
 - Analysis of lint from washing machine where UCC insulators clothes are laundered contains asbestos.
 - Continuing washing insulators clothes. "This service provides the vital function of preventing a man from possibly contaminating his family by carrying asbestos home on his clothing.
 - In addition, laundry bags containing these clothes should continue to be labeled as asbestos contaminated so as to provide adequate warning to the employees of [the laundry].
 - 17/007230
120. Occupational Exposure to Talc Containing Asbestos – NIOSH report
 - 17/007300
121. Principles of protection – insulators, 2/6/87
 - List of procedures for handling asbestos materials
 - Includes posting of "cancer hazard" sign.
 - 17/70306
 - UCC_17_CulI\KnowPrinProMedUCC007036-007056.pdf
122. Principles of protection – 1976
 - No cancer hazard warning.
 - Suggests that disease risk only exists with "high exposure."
 - Argues that the bodies "natural defense" system will keep exposed workers from getting sick.
 - 17/6860
 - UCC_17_CulI\KnowRespUCC006860-006871.pdf
123. Labeling of Asbestos Materials, 2/24/87
 - Manual and instructions
 - Cancer and lung disease hazard.
 - 17/6324
 - UCC_17_CulI\RespDutyLabelUCC006324-006327.pdf
124. UCC Internal Exposure Standards List, 8/1/85
 - Lists exposure standard followed by UCC
 - Asbestos – "2 fibers/cc TWA, 10 fibers/cc greater than 5 microns long (OSHA)"
 - 17/006521
125. Asbestos insulation program – cost breakdown. 1987

- Provides a pie chart giving % cost of the various aspects of the 1987 Asbestos Insulation program. "Safety" is 4.0% of the cost.
 - 17/006619
 - UCC_17_Cull\RespSafety%KeyUCC006619-006620.pdf
126. Working with asbestos
- Cassette/Slide program
 - Minimizes risk
 - 17/006872
127. AIA/NA – Cost of Suppression and Manipulation.
3/28/80
- . . . On this basis the AIA/NA hired . . . Kirkland and Ellis as special counsel to coordinate and guide OUR actions with the Federal regulatory agencies. K&E has wide experience in this area and is the American Petroleum Institute's counsel in the OSHA benzene case. AIA/NA membership has tripled their annual dues from \$300,000 to about \$1,000,000 to cover the added costs. The AIA/NA is also optimistic that the Canadian mining companies generally are not members, will contribute \$350,000 to the effort."
 - 19/008088
 - UCC_18_Cull\AIA_Costs_Key_UCC008065-008113.pdf
128. Employer Duty - Obligations of Employer under OSHA
- 18/007513
129. Packaging permits asbestos leaks and exposure,
7/6/76
- We are getting more customer complaints about our packaging.
 - Dust on the external surfaces of bags, dust between the paper bag and shrink wrap, and dust released from pallets when shrink film is removed.
 - Competitive products do not have this problem.
 - We need to move the product from our plant to the place where the bag is opened for use without ANY visible leakage or discharge of fiber.
 - 18/008065
130. Trouble in Japan 8/2/78
- Tomoe Engineering, UCC's Japan distributor, reports loss of a customer due to health considerations and the difficulty meeting regulatory standards.
 - "For the future we sincerely believe that a wet type
 - , no dust asbestos will have to be developed."
 - 18/007423

131. Friction, FMSI, Lewinsohn, 6/22/77
- Test of speech given by Lewinsohn to the FMSI
 - Has AIA/NA stamp on the cover.
 - 18/7845
132. Literature available for mailing on the safe use of asbestos. 8/29/77
- List of items that UCC will or can send to customers about "safe use" of asbestos.
 - A number of AIA publications or listed as well as other publications defending asbestos.
 - George Wright's 1972 Goldberg hearing testimony is listed as is Corbett McDonald's.
 - 18/007899
133. Medical Knowledge; Mumbling Richard, Red George, TJC, 9/29/75
- Myers reports on his attendance at the 18th International Congress on Occupational Health, Brighton England.
 - Israel report on meso cases with non-occupational exposures.
 - "Overall the mesothelioma situation for occupational exposure continues to look discouraging."
 - John Marsh (RM) mentioned to me that there are a substantial number of new cases reported that could alter the rate of incidence considerably.
 - "The TBA paper updating their mortality studies that followed was almost unbelievable. It was read by Dr. R. Doll who mumbled so fast that nobody understood a word he said."
 - "Dr. Fischbein expanded on the short fiber question to the extent that Dr. George Wright got red and climbed all over him after the paper."
 - The proposed 2 fiber standard "these criteria do not consider mesothelioma."
 - Selikoff and Fischbein gave the TJC paper – "well received."
 - "There is a growing feeling that short, intense exposures which overwhelm the lung clearing mechanisms may be enough to cause serious harm."
 - 18/007456
 - UCC_18_CulI\KnowMedKeyUCC007456-007464.pdf
134. NICA OSHA Commentary, 4/16/75
- "They seem to have missed many of the subtleties."
 - 18/007513

135. OSHA Inspections of UCC Customers. AIA 11/13/74
- Customers complaining to UCC about getting busted for OSHA inspections.
 - "Possible Action on OSHS "Overenforcement" Question.
 - "The AIA/NA route seems to have more potential clout if it can be moved forward rapidly enough."
 - 18/007465
136. AIA; Legal; Mt Sinai Conf, 3/30/79
- Memo to AIA/NA Legal Research Committee from Carey Gross at Cadwalader Wickersham & Taft.
 - Lawyer's notes of Mt. Sinai Conference he attended 11/78. Reports that he also has a tape recording of the conference.
 - 18/008153
137. Classes of possible plaintiffs
- Low Risk to UCC since asbestos is "encapsulated" in most customer products.
 - Possible exception is tape joint compounds. Calidria used in this application for approx. 10 yrs."
 - Dissatisfaction with low workers' compensation awards may lead to litigation against asbestos suppliers.
 - 18/008145
138. Money for lives – third party liability.
- Analysis of UCC Exposure
 - + 1963-77
 - Expect 2 – 3 settlements per year @60,000 each
 - With 20 year incubation period, claims would begin in 1983.
 - + Post 1977
 - Assume claims drop to \$40,000 per year total.
 - + Risk Factor
 - Figure liability 50% higher than above estimates.
 - + Estimate of UCC exposure
 - Continued operation cases - \$4MM
 - Abandonment case - \$3.5 MM.
 - + Recommended Strategy: Constant capacity
 - Highest earnings quality
 - Limited capital investment
 - Low Risk (potential third party liability largely related to pre-'77 exposure
 - 18/008147
 - UCC_18_CulI\RespMoneyLivesKeyUCC008114-008150.pdf
139. Warnings to UCC Customers.
- No warning on UCC package from late 1965 to June 1968

- "Weak" warning label used on UCC packaging beginning in June, 1968.
 - 1968 – same year that JM claims to have labeled fiber from Canadian mine.
 - OSHA Warning label prescribed in June, 1972. Not an absolute bar to liability, but has not been tested in courts.
 - Massive government education campaign in 1978 a further basis for claiming public has been adequately warned."
 - 18/008146
 - UCC_18_Cul\RespWarningKey -UCC008114-008150-2.pdf
140. Response to Asbestos Danger – Sell More Asbestos, 4/30/73
- 0/732"RG-244 is CHRYSOTILE asbestos and can be used safely without endangering the health of workers. . . . We say that RG-244 is not a significant hazard."
 - "I am sure that most of the objections you receive are based on newspaper articles. Most of these are not written objectively and tend to sensationalize and unfairly extrapolate data and studies."
 - References Brodeur, 1968.
 - Encloses helpful info –
 - 18/007426
141. Bag Labelling, no hurry. 11/3/76
- "We did not destroy old bags in 1972 but made the change as new bags were ordered."
 - 18/007885
142. International Customers, Australia, CSR, 1/25/77
- Problems unloading Calidria shipment for CSR in Australia.
 - 18/008096
143. Industrial Hygiene Knowledge, 7/19/51
- "Particulate matter from Foamglas Insulation."
 - "The laboratory has sampled and analyzed the air for particulate matter in the vicinity of men installing Foamglas insulation . . ."
 - Midget Impinger used.
 - 3.1 mppcf is the highest count reported
 - 19/008354
144. Brake Dust Exposure, 4/12/83
- "Airborne Chemical Measurements – asbestos dust."
 - "Relining Vehicle Brakes"
 - Two measurements reported – 3.9 f/cc and 2.1 f/cc > 5m.
 - "Use of compress air has been discontinued while performing this work to reduce exposure to airborne

asbestos fibers. Nevertheless, a measurable quantity of respirable fibers was detected on the above date."

- 19/008371
- UCC_19_Cull\KnoBrakeKeyUCC008371.pdf

145. Knowledge Cancer, 03/14/84

- "Business Confidential"
- Chrysotile Asbestos
- "The Main Hazards"
- "Asbestos is carcinogenic and/or co-carcinogenic for humans.""
- "Chronic inhalation of high levels of asbestos particles can produce asbestosis, a disabling fibrosis of the lungs which gradually reduces lung capacity and efficiency and can also cause pleural plaque, a thickening of the lung lining. Cancer can result from excessive inhalation of asbestos particulate, which may require decades to develop."
- 19/008271

146. Knowledge of Disease in UCC Workers, 12/8/82

- "I mentioned in our . . . Meeting . . . That a number of asbestosis illnesses had been recorded at South Charleston since we started such recording at the beginning of 1980. We continue to diagnose and record new cases on a monthly basis, so it appears that asbestosis represents an area of major interest . . ."
- "I also mentioned that of the asbestosis cases we have recorded the majority were not members of the insulator craft, and represented a broad cross section of other maintenance field crafts."
- 19/008372
- UCC_19_Cull\KnowDiseaseKeyUCC008372-008439.pdf

147. Health, No Safe Level, protection, all crafts, 6/28/85

- "Asbestos Exposure Effects, Potential of Non-Insulator Crafts"
- "I get a feeling of apprehension because I question if any level of inhalation exposure is safe in absence of respiratory protection."
- "... The OSHA permissible limit is 2.0 f/cc for an 8 hour day. This may seem like a small amount of asbestos which is conventionally determined using a microscope, but in my opinion represents a potentially hazardous condition."
- "I urge you to consider taking action necessary for strict enforcement of mandatory use of respiratory protection by all employees who use or handle any asbestos containing

- materials, e.g., gaskete fabrication/removal/disposal, brake lining replacement or even inspections, insulation removal/disturbance related to a wide variety of job tasks performed by various craft groups, etc. Such action would virtually prevent occurrence of any inhalation exposure.”
 - 19/008287
 - UCC_19_CulI\KnowTLVkey_UCC008287-008298.pdf
- 148. Knowledge that x-rays are inadequate to detect most asbestos related changes, 8/8/83
 - “The fact that only a small percentage of pleural plaques (15%) reported by Hourihane) are detectable during a lifetime by usual chest radiographs gives one concern.”
 - Thomas A Lincoln, Corporate Medical Director.
 - 19/008440
- 149. Strategic planning for asbestos – the “action plan” – sell. Acceptable loss = human health. 2/25/80
 - “The asbestos business has been operated to maximize earnings and cash flow. Aggressive marketing and product development programs have been maintained. Capital investment has been limited to dust control improvements and other minor requirements.”
 - Contains the “third party liability” analysis – acceptable costs = human health.
 - 19/008114
 - UCC_19_CulI\Plan1980Key_UCC008114-008150-2.pdf
- 150. Response – conceal diagnosis, 11/12/82
 - “Most recently we have refused a request from the Union for the “specifics” of asbestosis cases that have been recorded . . . ”
 - 19/008443
- 151. Response – lies – claim Calidria is harmless. 12/31/74
 - “The asbestos used for slates, pipes, and insulation are still long fiber called “blue asbestos” (crocidolite) causing cancer. Whereas, our California and Canadian asbestos are short flexible fiber (Chrysotile) proven to be harmless to human body.”
 - 19/008541
- 152. Georgia Pacific does not want shrink wrapped bags. 1/12/77
 - “all products should be bag shrink-wrapped except as follows: . . . HPO Only Georgia Pacific – requires pallet wrap.”

- 19/008065
- 153. The UCC "weapon in reserve:" Silica. TJC. 7/16/75.
 - "TJC Asbestos-Health Problem."
 - "CRITICAL OBJECTIVE – to establish and maintain a program to minimize and, if possible, prevent inroads into our market position in tape joint compounds resulting from overreaction to asbestos health hazard publicity and from OSHA compliance problems."
 - "The 1975 Action Plan for the above noted project requested in your letter of May 12, 1975, is attached. In essence, our approach is to use the silica problem to convince the drywall industry that asbestos is only the tip of the iceberg. They are going to have to recognize that OSHA is here to stay and some changes are going to be required in their traditional ways of installing and finishing drywall that will almost certainly add to the cost."
 - At this point in time we know of no asbestos-free mud that gives comparable performance.
 - 20/008607
 - UCC_20_CulI\DrywallHealthKeyUCC008607-008610.pdf
- 154. Uses the Asbestos International Association "a" logo.
 - Labeling. 10/29/84
 - Says, "cancer hazard."
 - Refers to smoking and cancer.
 - 20/008766
 - UCC_20_CulI\DutyLabelCancerUCC008766-008767.pdf
- 155. Labeling. Cigs and Asbestos. 10/21/82
 - "It has been suggested that a new asbestos label might warn that the cancer risk associated with exposure to asbestos is increased by cigarette smoking."
 - 20/008611
- 156. Labeling – W. R. Grace – 10/5/81
 - "Per our telecon 10/5/81 attached is copy of bag label we use for W. R. Grace bags. Other bags have the warning only in English and Japanese."
 - 20/008613
- 157. Brakes. 8/25/76
 - Re: "General Motors – Brake linings."
 - Myers offers work work with Delco-Morain "to help provide a solution to their problem."
 - 20/008591
- 158. Brakes. 7/8/76

- "Asbestos Exposure Associated with Automotive Brake Systems."
 - OSHA dust counting results are : 0.4f/cc; 0.2 f/cc; 1.9 f/cc.
 - 21/008857
159. Invisible dust. 4/6/76
- Air sampling performed while employees are "preparing sample dishes in the Analytical Laboratory."
 - Results: 4.9 f/cc, 47.6 f/cc; 7.7 f/cc
 - "Airborne dust was not visible in either instance."
 - 21/008858
160. Response – Sell. 7/31/73
- "The need for increased production of highly profitable RG-244 is obvious."
 - 21/009307
161. AIA conspiracy. 4/19/78
- Response to DOT rule making.
 - "I am very much involved in the drafting of an asbestos industry response by the AIA/NA."
 - "Our feeling is that if the AIA/NA response is satisfactory to UCC interests, there is little to be gained by a separate response."
 - 21/009181
162. MSDS, 9/1/72
- "Effects of overexposure – "prolonged over exposure may result in lung damage."
 - No mention of cancer.
 - 22/009557
163. Warehouse locations
- 22/009538
164. Knowledge of health effects – animal testing – Mellon Institute. Response – "confidential" – 11/29/82
- Responds to inquiry about toxicological studies reportable under TSCA.
 - Refers to
 - A 1966 report by the Mellon Institute on our California Asbestos
 - A 1971 report by the Mellon Institute on RG-244 Asbestos
 - Several summaries comparing the results of sputum cytology testing of employees at our King City mill to a non-mining population.
 - A deposition presented by Dr. Hyde in connection with a third party liability case in South Carolina where UCC was

- a defendant. (Duane F. Hyde, M.D. was the physician for the King City Asbestos mill)
 - The Mellon Institute studies are presently defined as confidential. Since they are more than 10 years old, however, they do not appear to be reportable.
 - 23/010094
 - UCC_23_Cull\AnimalToxKey UCC010094-010106.pdf
165. Fiber Counting- Canadian vs. California
- Tests done during the mixing and spraying of ceiling texture paint. Counting by OSHA optical and TEM methods.
 - "There is clearly no difference between these tyhpes of asbestos for airborne concentrations of asbestos fibers longer than 5 microns."
 - For fibers shorter than 5 microns: "the results are considered to be good evidence that the California asbestos does not have greater tendency than the Canadian asbestos to yield finer fibers when dry mixed or sprayed."
 - 23/010072
166. GE Mesos, 6/1/82
- Lewinsohn to J. Wister Keigs, M.D., Yale University School of Medicine.
 - "I have attempted to make a start on the proposal to be submitted to the General Electric Corp for them to consider assisting in the further investigation of the six former employees identified as having died of malignant mesothelioma."
 - 23/010441
167. Knowledge, Newspaper article, 11/22/74
- "Yale probe of cancer eyes asbestos ceilings."
 - 23/010036
168. Spraying in California, 1/14/74
- Discusses exemptions for rules about spraying.
 - "The information contained in this letter basically represents the position of the member companies in the AIA/NA and, therefore, when this matter is formally submitted to the California legislature it might possibly be under the aegis of AIA. . . .You may wish to keep Mr. P. J. Gartly of Johns Manville's San Francisco office apprised on this matter. He is quite familiar with the background on initial legislation.
 - "P.S. You may also wish to get in touch with Wilson Harvey, General Manager, Flintkote, Los Angeles. He was instrumental in getting the original exemption. . . "

- 23/010045
- 169. FDA, asbestos in paper and filters. Response.
Conspiracy. 11/15/73
 - "they are continuing to treat asbestos as an extremely toxic substance."
 - "The talc industry and at least JM are actively fighting this regulation. . . Possibly we could "me too" some of the arguments already presented if this would be helpful."
 - "In the interim it is suggested that you contact the AIA and see what their plans are."
 - 23/010090
- 170. Response, oppose regulation, California, Conspiracy.
7/15/74
 - "I would request that the California Manufacturers Association express our opposition to this bill as is appropriate in their activities for the following reasons:"
 - 23/010049
- 171. Types of UCC asbestos. 3/2/78
 - 23/010089
 - UCC_23_CulI\UCCAsbBrandsUCC010088-010089.pdf
- 172. Response, AIA, Knowledge of Conspiracy. 8/3/73
 - John Marsh, President, to William S. Sneath, President, Union Carbide.
 - "Over the past 2 and _ years the Asbestos Information Association/North America, of which your company is a member, has played a major role in defending the asbestos industry from unwarranted and irresponsible attacks by government, labor, the press, certain segments of the medical profession, and by various environmental and consumer activist groups."
 - "Attached for your information is a copy of a presentation made by Matthew Swetonic, Executive Secretary of the AIA/NA to the Asbestos Textile Institute in June.
 - "You may wish to obtain additional copies for distribution to others within your company."
 - Attaches copy of Swetonic speech.
 - 24/010490
 - UCC_24_CulI\AIAKeySwetonicUCC010490-010518.pdf
- 173. Peele Info, 1962
 - 24/0110583
- 174. Asbestos thickening agent A 14 and A 28, 1/27/72
 - Degussa terminates distributorship for UCC asbestos.

- "The main reason for our decision is our doubt regarding possible secondary health hazards."
 - Asbestosis and cancer.
 - 25/O10641
175. Response – threaten litigation for calling a carcinogen a carcinogen. 1/26/72
- We have become aware of numerous oral and written statements made by representatives of your company which discredit certain products of our parent house in New York, notably the thickening agent A 28
 - We have found it necessary to consult our attorneys . . .
 - Such statements, as well as the manner of presenting them, are in flagrant contradiction to the rules of good faith and are of a nature to create false impressions among those in the business.
 - . . . We have no alternative unless you give us, without delay, specific written assurance that your company and its representatives will cease making all statements, direct or implied, of a nature detrimental to us.
 - 25/O10609
176. Response – keep selling carcinogen,
- We noted with pleasure your order of A 28, our thickening agent.
 - Unfortunately, it has been found out that A 28 is noxious and probably subject to cancer. Subsequently, our company decided to stop selling this product.
 - Some quantities will be, however, available before end of this year. . . .We would be grateful if you could let us have your orders immediately.
 - 25/O10607
177. Toxicology of asbestos – irresponsible statement. W R Grace. 1/5/72
- The new RG-244 and RG-144 distributor agreement with W. R. Grace was executed on January 4, 1972 and is effective as of January 1, 1972.
 - For your information, the termination with Degussa is not going smoothly in that they are making very irresponsible statements to customers concerning the toxicology of asbestos.
 - Sales picture, "health hysteria." 5/4/78
 - Sales in 1978 are 140% of those in 1977, entirely due to export.

- Sales volume may not grow much above the 1,200 tons per year level first achieved in 1976 due to regulations and related health hysteria..
 - 25/010685
178. "The Asbestos Forum." 6/18/79
- A meeting of the Asbestos Forum was held on 5/22/79. Union Carbide was invited but did not attend.
 - Basically JM has decided that the Fenwick Bill is not going anywhere and has shifted emphasis to an as yet undefined approach to improve state worker's compensation plans specifically as the cover asbestos related disease.
 - The scope and intent of the "Forum" is well and succinctly described in pages 1 – 4 of the Manning, Selvage, and Lee proposal.
 - Basically JM and the other companies heavily involved in third party liability suits are working to shift as much of the burden as possible to the government and to the other members of the industry who have not yet been involved in the mass of law suits..
 - The emergence of the "Forum" raises an interesting question as to its relationship with the AIA/NA.
 - 26/011023
179. Editing Medical Literature. 3/8/85
- Lewinsohn to Raymond Murphy, M.D.
 - "Standardization of Criteria for the Diagnosis of Non-malignant Diseases Related to Asbestos."
 - "I have made some minor corrections/changes to the enclosed document, as indicated in red ink."
 - 26/010761
180. Knowledge of hazard, TLV, insurance inspection, 5/11/59
- Aetna, Special Hazards Survey, prepared for Union Carbide Corporation, Linde Company, Speedway City, Indiana. May 11, 1959.
 - Air sampling is done at several operations involving asbestos.
 - "The MAC which has been adopted by the annual meeting of the ACGIH for dust containing any amount of asbestos is 5 million particles dust, 10 microns or less in size, per cubic foot of air."
 - 28/011845
 - UCC_28_Cull\AetnaSurveyUCC011845-011850.pdf

181. AIA, Conspiracy, Asbestos Filters, Names, Lobbying, 11/27/72
- Describes meeting with federal government officials
 - Copies of the minutes and description of the meeting sent to a number of others, including Hill & Knowlton (U.K.), Turner Bros, Turner & Newall, Fireman's Fund, Hans Weill, George Wright, and QAMA.
 - "The use of asbestos filter pads and media is extremely widespread."
 - Dr. Berneking stated that the FDA considers any exposure to asbestos to be hazardous, no matter what the level."
 - 28/011788
182. UCC Heirarchy Charts, "Director of Technology".
- 28/011665
 - 28/011665
183. OSHA, March 3, 1972; AIA; misrepresentation.
- Exhibits to be placed on the record of the hearings with regard to Amendment of . . . By James W. Rawlings, UCC.
 - Blind copies to . . .M. M. Swetonic.
 - "Once again, I state our strong conviction that the imposition of special regulations, alarmist labels and general waste disposal regulations to products containing firmly bound asbestos fibers will have severe adverse economic impact on our business without furthering the objectives on which the exposure standards are based."
 - An attached list of products which UCC wants excluded inclutes "Tape Joint Muds" including Redi Mix and Dry.
 - 28/011838
184. Stanton Paper, Knowledge – 1/30/73,
- AIA letter to members re: publicity surrounding Stanton paper, and other news items about asbestos.
 - 28/011759
185. Listing of asbestos substitutes, 12/17/1986
- Memo from the Alternative Materials Institute.
 - 30/0012748
186. Tape Joint Compound, use of Calidria in Dry Or Ready Mix. 7/19/71
- UCC "Technical Service Report"
 - Discusses the benefits of Calidria for Tape Joint Compound and provides suggested formulas.
 - 31/012802
 - UCC_31_CulI\UseDryWallUCC012799-012807.pdf
187. Floor tile, asbestos and asbestos substitutes.

- 31/012762
- 188. Weill and AIA, 5/21/81
 - Letter to John Marsh at Raybestos
 - Weill says he has reviewed the document on the diagnosis of asbestosis circulated to the Executive Committee of AIA and he thinks it is "quite good."
 - 31/012854
- 189. Good list of names of customers, 1/9/80
 - 32/012955
 - UCC_32_Cull\1CustomersKeyUCC012955-013025.pdf
- 190. Misrepresentations about asbestos health and safety, 8/29/77
 - UCC memo by John Myers, Marketing Manager
 - Touts the "customer education" UCC claims to have done and be doing.
 - "Asbestos can be used safely in essentially all of its many applications."
 - Provides a list of "information available from UCC on the health hazards of asbestos and how to use it safely." Mostly AIA crap and similar misinformation.
 - 32/012855
- 191. Myers Affidavit, Calidria never used in heat insulation materials. 4/27/82
 - Appears to have been submitted in connection with litigation.
 - 32/0013026
- 192. Asbestos as a health hazard in the United Kingdom, 1967
 - By I. C. Sayers.
 - This is the key UCC health knowledge document
 - 32/012915
 - UCC_32_Cull\SayersKeyUCC012915-012933.pdf
- 193. Asbestos and Cigarettes, 12/3/73
 - UCC memo by John Welsh, M.D.
 - Welsh doesn't like the statement in "What every employee should know about asbestos" that non-smoking asbestos workers have the same lung cancer incidence as people who do not smoke and do not work with asbestos.
 - Dr. Welsh distrusts the statement because the statement re: smoking and lung cancer is based on Selikoff's work, and Dr. Welsh doesn't trust Selikoff's work!
 - Plus, Welsh says that there are other problems unrelated to smoking such as asbestosis and mesothelioma and

- employees reading the statement about smoking may ignore other asbestos related problems.
- 33/013053
- 194. High dust counts in warehouse during loading of supervisbestos (drilling mud ingredient), 7/8/76
 - Three Wyoming warehouses, during the loading of 20 – 30 bags of supervisbestos onto a truck.
 - Counts from 0.7 to 1.7 fibers/cc for shrink wrapped bags and 2.5 fibers/cc for some older product which had not been shrink wrapped.
 - Montello reports that there are generally small but noticeable amounts of fiber on the bags, on the floor of the rail car, and in any area where the bags have been handled.
 - 33/013074
- 195. Misrepresentations, MSDS, 9/1/72
 - Product, "chrysotile asbestos."
 - "Hazardous ingredients – not applicable."
 - "Health Hazard Data" – nothing said about ANY adverse health effects.
 - "Effects of over exposure – prolonged over exposure may result in lung damage."
 - 33/013135
 - UCC_33_Cull\Resp_MSDS_LieUCC013086-013143.pdf
- 196. Tape Joint Compounds – knowledge of danger. 8/27/75
 - New York Times Article
 - "Asbestos Warning Given for Spackle."
 - Union Carbide stamp appears at side of article.
 - 33/013153
- 197. Users – Flintkote
 - Knowledge – disease
 - George Wright, M.D., statement at Goldberg hearings. 3/16/72
 - 33/013086
 - 1/25/74. Inquiry about getting Flintkote business especially for floor tile. Flintkote uses about 20,000 tons per year in its floor tile. 34/013335
 - 1/28/74. Myers memo summarizing conversations with Art Hooker of Flintkote Company. 34/013331.
 - Users – Kentile
 - 1/28/74. Myers memo. Summarizes conversation with Don Miller of Kentile floors in Brooklyn. Currently uses Calidria, Carey and Atlas. 34/013332
 - 34/013333

198. Cancer

- Slide show, the first page of which says, "CANCER!"
- Attacks conventional wisdom about carcinogens, e.g., "no safe level." etc.
- Evaluates scenarios for future regulations. OSHA, EPA, CPSC, etc.
- Quite optimistic about prospects for "reasonable regulation" with the new administration (Reagan).
- 34/013336
- UCC_34_Cull\KnowlCancer!UCC013336-013364.pdf

199. AIA Members

- 35/013365

200. Knowledge of disease

- ILO booklet on abstracts of literature re: asbestos disease.
- 36/013746

201. Response, Knowledge, Conspiracy 12/3/80

- UCC Business Confidential
- "Asbestos is a known human carcinogen."
- UCC's asbestos business is especially susceptible to the mandatory substitution approach being considered by EPA and CPSC. Without regard for higher cost and lower performance, non-asbestos substitutes are available for many of our current applications.
- "We will continue an active role in the AIA/NA because are often not the same as other asbestos suppliers and users."
- "Our allies on this issue include the National Association of Manufacturers, the American Mining Congress, and the Asbestos Information Association/NA, all of whom have been involved with the regulatory aspects of asbestos."
- "UCC Actions Taken – Active in participating in the meetings with the National Association of Manufacturers and the AIA. UCC has been supportive of comments submitted by the AIA in response to an ANPRM issued by EPA in October, 1979."
- Adverse publicity related to proposed rulemaking and litigation proceedings is doing more harm to the asbestos industry than promulgated regulations."
- 37/013813
- UCC_37_Cull\AIA_Cancer_UCC013813-013823.pdf

202. Response, AIA, Conspiracy 3/4/74

- UCC is concerned (as is AIA, JM, etc) that OSHA will rule that the results of required medical exams be confidential

and that the employer only get a statement from the doctor that the employee can or cannot work.

- CPSC – "Some missionary work by Bob Mereness before the activist petitions to ban asbestos containing consumer goods start to come in may be very useful." [Meaning it is OK for industry to be activist by citizens ought to just sit on their hands].
- 37/014394

203. Response, Conspiracy, Weill. 3/15/76

- "To: Participants in Asbestos Industry Response to the Proposed Asbestos Regulations."
- "Subject: Task Force Status Report – Forwarding of comments by Hans Weill, M.D., on proposed revision to OSHA Asbestos Standard."
- "a number of non-member companies and associations have contributed to the extraordinary expense of consultant fees and task force administrative costs. We are appreciative of the splendid cooperation of participants in the Association's efforts to assist the Department of Labor in the development of a practicable standard for the protection of asbestos workers."
- 37/014340

204. Denver Drywall Asbestos Problem, 11/30/76

- Discusses an exposure situation at the JM headquarters construction.
- Denver Drywall was sold an asbestos containing mud by Drywall Supply. The mud is from a manufacturer (not identified) that uses UCC asbestos.
- OSHA citations were negotiated down.
- Denver Drywall tries to avoid asbestos containing mud and is "annoyed" at Drywall Supply for misleading it.
- Mr. Mitchell is the president of Denver Drywall, is one of the largest drywall contractors in the Rocky Mountain area and is quite influential in the national affairs of the contractors' association.
- 37/013866

205. Fiber type, amosite and crocidolite are also friendly fibers. 7/30/78

- Asbestos International Association, Sir Neville Stack, to ACGIH.
- Argues that the ACGIH proposal to lower the TLV for amosite and crocidolite is not justified.

- Attaches analysis by Richard Gaze. Gaze argues that mixed fiber exposures are more dangerous than exposure to crocidolite or amosite alone."
 - Also looks at crocidolite using areas in Europe which according to Gaze show no excess mesotheliomas.
 - Other usual arguments about past conditions that no longer exist, wet processes not releasing any dust, etc.
 - 37/014578
206. Asbestos International Association. 8/80
- 30 Page description of the structure, functioning and influence of the Asbestos International Association.
 - 37/014586
 - UCC_37_Cull\InternationalUCC014586-014615.pdf
207. IOEH McGill. 3/74
- Report of activities.
 - 37/014388
 - UCC_37_Cull\IOEH_McGillUCC014388-014393.pdf
208. Response. Drywall. Contractors. Manufacturers. Rhodes. Keep using asbestos. 10/16/75
- Subject: Visit to GDCI Semiannual Meeting 10/2/75, Omaha.
 - Rhodes gives a one hour talk on OSHA.
 - Only one contractor said he'd been monitored for asbestos dust during sanding and he had not been cited.
 - USG, NG, Flintkote, Beadex, Gypsum Association are all represented. "I think they were a little surprised to see UCC as the feature speaker at the OSHA discussion."
 - Manufacturers talked about their efforts to remove asbestos from their muds."
 - Mr. Campbell (president of Beadex) "has a chemist who is an anti-asbestos crusader. He requested information to counter this. Told him we would send some and a copy of the GDCI article as soon as possible."
 - 37/014133
209. AIA; Knowledge, TLV not tell whole story; Selikoff. 5/29/74
- Forwards various pieces of info to members
 - Selikoff letter to Mereness.
 - Addresses fiber type differences and says Selikoff is unaware of any studies that address that point.
 - Fiber size is addressed – short fibers probably as toxic as longer fibers. References Huth, whose animal experiments shows as many mesotheliomas with fibers less than 3

microns as caused by fibers over 5 microns. "These results have not been controverted."

- "I have seen asbestos-associated disease following occupational exposure for one or two days thirty years before. However, this was not MINIMAL exposure, since it occurred in as asbestos factory with few controls and with what we now consider very heavy exposure. Rather, it is better catagorized as exposure of limited duration."
- "Thoroughly agree that peak exposures may be of considerable importance, and that time weighted averages may not at all tell the whole story."
- 37/014398

210. Label Asbestos Warnings – not good for business,
5/30/75

- "We cannot predict with certainty what effect the use of the proposed label will have on our business, but the general feeling here is that it is likely to vary somewhere between serious and fatal."
- "where substitutes are readily available, appear to be particularly vulnerable."
- "The suggestions made by the law department undoubtedly maximize protection against possible future liability suits. On the other hand, cancer is a very emotional word and there is a strong possibility that people will react to it far beyond the real danger involved. This is particularly true when it appears on a label where the actual extent of the risk is not explained."
- "The recommendations in the Chamberlain memo place the people in the asbestos business in the ambivalent position of being charged with the responsibility of maximizing the use of asbestos (in applications where it can be used in compliance with OSHA regulations) and simultaneously being obliged to inform the potential customer that he should really use something else because asbestos "can cause cancer."
- Discusses the parallel UCC problem with vinyl chloride.
- 37/014127
- UCC_37_CulI\LabelNoCancerUCC014127-014129.pdf

211. The AIA/NA position = the UCC position. Conspiracy,
5/30/75

- "What is Union Carbide's basic position on the asbestos and health issue. In lieu of any specific definition of our own,

we have been relying on the AIA/NA information which, as I understand it, can be summarized as follows:

- The 2 fiber/cc limit is safe for chrysotile.
- Increased incidence of lung cancer require both asbestos exposure sufficient to cause asbestosis and smoking. The effects of these are synergistic, however.
- Mesothelioma has only been clearly associated with crocidolite inhalation. There is a real doubt that it can be caused by inhalation of chrysotile fiber.
- 37/014127

212. Calidria – what it looks like

- Touts quality of Calidria asbestos.
- With photos comparing Calidria to Canadian asbestos.
- 37/014778

213. Response – Principles of Protection, too strict
4/14/76

- UCC not happy about State of Oregon regulations that appear stricter than OSHA.
- "respirators are required wherever asbestos dust is released, regardless of how low the level."
- "Insofar as practical wet methods are to be used to prevent all emissions, not just those over the allowable limits."
- "Caution labels are required in all cases, even for products with bound asbestos, if ANY concentration of airborne fibers will be released not just where concentrations over the allowable limits may occur in any reasonably foreseeable use."
- 37/014135

214. Response – UCC Testimony Opposing OSHA, 5/18/79

- Testimony of Jackson Browning, Corporate Director Health, Safety and Environmental Affairs, Union Carbide Corporation, on behalf of the American Industrial Health Council.
- Before the Senate Governmental Affairs Committee.
- AIHC 120 member companies. Established 10/77.
- 37/014172

215. Response – Customers _Sell asbestos, intimidate customers. OSHA, 6/22/72

- Provides suggestions for basic format for responding to customer inquiries about the new OSHA regs.
- "If the customer is persistent and threatens to eliminate asbestos – a certain amount of aggressiveness may be effective. Words and catch phrases such as "premature",

"Irrational", or "avoiding the inevitable" will sometimes turn the table."

- "The main objective is to keep the customer on the defensive, make him justify HIS position."
- 37/01384

216. Misrepresentations re: health problems

- Presentation
- "asbestosis and "bronchogenic carcinoma, the two most common asbestos-related diseases, have occurred ONLY in workers with massive, long-term exposures to asbestos dust.
- Argues importance of McDonald Quebec miner studies.
- Asbestos containing products that do not require a warning include: . . . Floor tile, ready mix joint cements, flooring, etc.
- Argues that it would be imprudent to use asbestos substitutes.
- 37/014318
- UCC_37_Cull\RespLies UCC014318-014323.pdf

217. Misrepresentations – Medical Department Says the Law Department has got it wrong. 5/22/73

- K.S. Lane, M.D., assistant medical director to Robert Fusaro, law department.
- Many of the statements made in 37/014318 are in direct conflict with NIOSH statements.
- "We seem to differ in our interpretation of the literature as presented. Going thru the seven page study, "the safe use of calidria RG-244" and comparing it with the NIOSH criteria document for asbestos, paragraph by paragraph, we find these variations in interpretations.
- Specifically criticized is the law department statement that asbestosis and lung cancer are only associated with heavy long term exposure.
- Example – "In Section 3 of 'The Safe Use of Calidria' there is discussion of the meaning of the phrase 'exposed to asbestos,' and the advice is given to follow the NIOSH recommendation that 'exposed to asbestos' means 'average exposures above one fiber per cc or peak exposures above 5 fibers/cc.' THIS HAS NO VALIDITY. . . ."There is no minimum number of fibers designated below which it is not required to follow all the stipulated procedures if such an exposure occurs, and we feel we are obligated to give this information to customers."

- 37/014310
- UCC_37_Cull\RespLiesKeyUCC014310-014317.pdf
- 218. Discussion of legislative and regulatory impacts on UCC asbestos business. Circa. 1975
 - 37/014161
- 219. Response – shut down until bad PR blows over. 6/13/74
 - "The Niagara Gazette strikes again."
 - "So I have shut down the asbestos pilot plant temporarily until I can monitor (all our equipment is in King City) probably next week."
 - "The pilot plant has been shut down for some time and hasn't been monitored in years, if ever."
 - 37/013840
- 220. Response – Pay customers fines, 2/12/75
 - "In general he sees nothing wrong with offering to pay "first time" fines for customers after we have determined that airborne concentrations do not exceed 1 fiber/cc."
 - 37/013846
- 221. Swetonic to Riddle, plant manager at King City, re: IIHRP
 - JM to UCC, 7/3/69
 - 37/014517
- 222. Tobacco, 11/23/77
 - UCC paying attention to JM proposal to get tobacco companies to pay a share of asbestos harm.
 - 37/013814
- 223. Use – drilling mud, 9/10/81
 - Drilling Specialties Company to DOL.
 - Asbestos used in drilling muds since early 1960s.
 - "Yet, the continued use of asbestos in this important application is jeopardized by a single, overly-broad asbestos standard."
 - Advocates a "work practice" program as the way to control exposures.
 - 37/013843
- 224. Uses – exterior coating
 - 37/015023
- 225. Tape Joint Compound Exposures, 2/1/78
 - Attaches list of JTC manufacturers to whom UCC has sold fiber. Some manufacturers could have bought asbestos from our distributors without our knowledge and therefore would be on the list.

- "If you are trying to determine the number of persons who may be exposed to asbestos containing TJC and similar products, I imagine it would be in the millions."
 - Harry is meeting with a large group of insurance carrier representatives in Los Angeles on 2/2/78. He will issue a report describing the current case and other details.
 - 37/013861
 - UCC_37_Cull\UseJointTapeCustUCC013861-013863.pdf
226. Use, mineral wool board, decorative coatings.
11/8/79
- "Substantial amounts of our asbestos have, however, been used as a minor ingredient in certain types of mineral wool board used in ceilings and in sprayed, non-friable, decorative coatings
 - Rhodes
 - 37/015044
227. Use, Drilling mud
- Journal article about asbestos for drilling mud. 11/28/68
 - 37/014974
228. Use, Calidria asbestos for paper coatings.
- UCC document touting the use of Calidria as an ingredient in paper products.
 - Example - "reduced ink mottle and better smoothness are often achieved with Calidria High Purity Asbestos.
 - 37/014768
229. Use, Paper
- Journal article, "effects of chrysotile asbestos additions to cellulosic paper."
 - Robert Woolery
 - 37/014838
230. Use, Paper
- Journal article, "how high purity asbestos is used for pitch control in papermaking
 - Woolery
 - 37/014843
231. Use, roof coating
- UCC document. "Suggested exterior white insulating roof coating."
 - 37/015024
232. Use, roof coating
- "Suggested primer sealer for masonry and weathered roofing."
 - 37/015025

233. Use, roof coating
- "suggested weather barrier roof coating and lagging compound"
 - 37/015027
234. Use, Rubber
- "Two grades of Calidria Asbestos for Rubber
 - Low cost filler and reinforcer
 - Good abrasion resistance.
 - 37/014776
235. "Suggested dark green acrylic tennis court topcoat"
- Use, Tennis courts
 - 37/015022
236. AIA, Weiss, Wendell, 10/26/77
- The letter where Weiss critiques Enterline's paper for AIA
 - 37/014289
237. Knowledge, historic UCC use, litigation vs. UCC,, 9/30/82
- "Calidria Asbestos Potential Liability – Chemicals and Plastics Operations/Bound Brook, New Jersey.
 - "Basically the Chemicals and Plastics Division manufactured asbestos containing phenolic resins at Bound Brook from the 1940's through the early 1970s.
 - These molding compounds in themselves are quite dusty, so during the early part of this period this was a quite dusty operation by present standards. The contribution of the asbestos to the general dustiness has not been well defined."
 - Meso comp case has been filed.
 - Rhodes
 - 38/015313
 - UCC_38_Cull\Know1940sKeyUCC0153313-015315.pdf
238. Medical, slide show re: disease, examinations, etc.
- 38/015266
239. Response oppose medical exams
- UCC doesn't like the idea of having to provide medical exams, or its customers having to provide medical exams
 - 38/015327
240. Drilling mud, exposures, 9/24/74
- Shell Oil, various locations near Traverse City, MI.
 - Dust noted on the stored bags of asbestos.
 - When the bag was put down the man's shirt was covered with white dust."

- "Everytime the man moved or touched his shirt he certainly was releasing asbestos fiber in the air near his breathing zone. It can be safely assumed that this white dust is asbestos, since our products are the only material presently in the warehouse."
 - "At the drilling sites – to make a long story short the handling of our products by the "roughnecks" (honest, that's what the laborers are called) is nothing short of atrocious. Bag opening on two of the three rigs was accomplished by punching the bags with a chisel until the weight of the pellets on the inside of the bag causes the bag to break the rest of the way and in 10 seconds 50 lbs are sitting in the hopper. Bag disposal is non-existent unless a stiff wind begins blowing them about."
 - 38/015299
 - UCC_38_Cull\UseDrillingSelikoffUCC015299-015300.pdf
241. UCC Gasket use, 3/16/87
- "the West Virginia locations spend about \$312M/yr on gaskets, gasket materials and packing. Packing only accounts for 5 or 10% of the total. Anticipated expenditures for the next 2 years are \$800M/yr."
 - 39/015879
242. Knowledge, Asbestos Toxicology, UK, 1967
- "As you know we have been trying to keep close to the asbestos toxicology work in the U.K. Fred Mumpton at Niagra Falls arranged for some work to be carried out on a sample and gave us a report on this. Ian Sayers took the report to the laboratory group in the U.K. which is coordinating the work."
 - There continues to be a great amount of concern about this subject and we are going to have to learn to live with the problem in the U.K. So far there has been no indication of it being passed on to the continent.
 - I this report Ian passes on the request for permission to publish our data and I would like your comments on this.
 - Thomas J. Hall to Mr. F. Dexter.
 - 39/015631
 - UCC_39_Cull\KnowAsbToxicKeyUCC015631-015640.pdf
243. Knowledge, Toxicity of Calidria Asbestos. 3/21/70
- "Because of the rather unique structure characteristics of Calidria Asbestos, there was concern that it might be unusually fibrogenic and perhaps cause an acute asbestosis

- Describes animal tests. "The results of this test showed Calidria Asbestos to be slightly more fibrogenic than long fibre asbestos but the difference was not so great as to suggest an unusual degree of hazard. From this I conclude that the same precautions to avoid breathing asbestos dust must be observed whether the dust be from Calidria Asbestos or from a standard long fibre form."
 - "Some people believe there is an association between exposure to asbestos dust and the development of lung cancer and mesothelioma. There is no information regarding Calidria Asbestos in this respect as yet. It would be prudent to assume that Calidria Asbestos will behave like other asbestos in this regard."
 - Dernehl, M.D.
 - 39/015633
244. Response to knowledge of toxicity, 2/8/66
- "Our position should remain that in United States experience there has been no increased incidence of lung cancer when the threshold limit has not be exceeded."
 - [Cf, Selikoff, Cooper, etc., describing high lung cancer incidence at levels below the TLV]
 - 39/015634
245. Knowledge Asbestos Toxicology – more Expendable Americans, more lies. 6/7/67
- Durnehl – "I have reviewed the report, Asbestos As A Health Hazard In the United Kingdom, . . .Sayers. . . And in general I find that it is reasonably accurate."
 - "I do not attach very much importance the data on the incidence of asbestosis and death from asbestosis and cancer because these are merely tabulations of events and do not take into consideration the numbers of people who were subjected to the possibility of the event occurring."
 - Discusses IHF animal tests. "In the injection study the Coalinga refined fiber produced the most severe reaction in the belly cavity . . . " In the lung the Coalinga fiber was of intermediate toxicity.
 - "The only conclusion that can be drawn from this crude test is that it is possible that our Coalinga product may be more hazardous to use than long fiber asbestos . . ."
 - The TLV Lie - "There is no evidence of asbestosis occurring among people who have worked in an environment where the concentration was kept within the Threshold Limit

Value. It is probably that the 5 mppcf will not be acceptable for the prevention of mesothelioma."

- 39/015637

246. Response – Lies to Customers, 5/9/69

- Encloses a copy of the Durnehl toxicology report which "explains some of the facts concerning handling of asbestos."
- Riddle, plant manager to Tobin, plant manager of Stedfast Rubber Co., Inc., responding to an inquiry about health hazards of Calidria RG 144
- Blames all health problems on crocidolite, suggests that chrysotile is not carcinogenic.
- Says that UCC requires use of dust masks where TLV is exceeded.
- 39/015639

247. AIA, Manipulate Regs, Conspiracy, 8/12/76

- Minutes of AIA Ad Hoc Committee on Construction. Chaired by Rhodes.
- Those present, Certain Teed, Nicolet, Union Carbide, National Roofing Contractors Association, GAF, NICA, Celotex, JM, WR Grace, AIA/NA – BJ Pigg).
- AIA will "sponsor a technical feasibility and economic impact study of the regulation of asbestos exposure in the Construction industry."
- "Variability of exposure level that are caused by any given product that arise from changes in weather, season, job scheduling, work practices, etc. The determination of average or representative exposure for even the same man doing the same job is likely to vary widely between locations."
- Some missionary work is probably needed in this area, anyway, to make the contractors aware that asbestos is only the first point of attack.
- "Now is the time to establish the way to provide the worker with a realistic and reasonable level of protection without effectively prohibiting the use of important materials by massive over regulation."
- 40/018194
- ..\UCC_40+55_Cull\AIA ConspUCC018194-018207.pdf

248. Response, AIA, Conspiracy, "Specific Action."
12/15/72

- New Jersey has backed off from a complete ban on spraying. The spraying of roof-coatings, paints and similar materials of interest to Union Carbide is still permitted.
 - Union Carbide, acting in the name of AIA/NA made an important contribution towards this workable regulation.
 - 40+/018254
249. Response, AIA, Conspiracy, Regulation. 7/25/77
- "At the December 14 meeting of AIA, progress and news were reported, some concern expressed and specific action on the part of member companies was requested."
 - The "PR firm are preparing an information file to be ready early January, 1973. This file will be sent to appropriate editors and others.
 - Articles primarily concerned with "Asbestos can be used safely" will be written for publication.
 - They also hope to place and help speakers at meetings and other forums, e.g., John Myers at Plastics meeting, Ed Fenner, Ike Weaver, etc.
 - The suggestion was made and accepted that slide presentations be set up and speeches prepared for possible use by local managers at Rotary, etc.
 - Recruiting support and members for AIA.
 - George Wright will publish a report regarding Non Hazard of ingested asbestos.
 - 40+/024914
 - ..\UCC_40+55_Cull\AIA_UCC024914-024940.pdf
250. Use, Paper Industry, 3/31/77
- Myers, "If Swan quotes me it will relate to the period when we supplied asbestos to the paper industry, 1969-1974, and that asbestos has been replaced by talc and other materials."
 - 40+/024927
251. Rhodes- "Here's a copy of the latest paper out of Mt. Sinai re: the biological effects of short fibers. It is suggested that it may be desirable to pass it on to Hans Weill for his comments."
- Resp/Consp/AIA/Weill, 7/13/76
 - Attached Selikoff draft debunks Dreesen, "the considerations used to justify the standard were extremely limited."
 - 40+/025660
252. AIA, regulations, carcinogen, exempt. 12/23/76
- Rhodes to Calif Mfg Assn on AIA letterhead.

- In view of the potential serious penalties for even small violations of the carcinogen type standards it seems very worthwhile to try for the exemption. This aspect will be pursued further with the members of the asbestos advisory committee."
- 018261
- 253. Recommended Work Practices, Fabrication and Use of Asbestos Paper Products.
 - AIA booklet
 - 022915
- 254. Recommended Work Practices, Molding and Fabrication of Asbestos Containing Plastic Products
 - AIA booklet
 - 02297
- 255. Response, labeling, warnings, alarmist 2/11/72
 - "Warning signs. The warning signs proposed seem excessively alarmist and the wording and sign specifications are too detailed."
 - 016094
- 256. Becklake article, State of the Art
 - 016013
- 257. Customers, Biltrite, Airborne fiber counts
 - UCC's fiber counting for American Biltrite
 - 015971
- 258. Brakes
 - Current intelligence bulletin 5, 8/8/75
 - Asbestos exposure during servicing of motor vehicle brake and clutch assemblies. NIOSH
 - 019756
- 259. Response Asbestos Toxicology Report, 1966
 - Durnehl's work Whitewashes the risk.
 - 023214
- 260. Response asbestos toxicology, 3/24/66
 - Concern re: new articles on asbestos hazard.
 - "You have copies of Dr. Durnehl's "asbestos toxicology report" additional copies are enclosed. Use these, and call particular attention to Dr. Durnehl's statements in regard to "Threshold Limit Value" for asbestos.
 - No work yet conducted or published presents, nor professes to present, incontrovertible proof of a relationship between cancer and asbestos.
 - 023211
- 261. Cigs/Asbestos/Cancer 9/9/70

- Durnehl.
 - "Dr. Lane and I have discussed the question of using asbestos in rice paper for cigarettes and cigarette filters, and we view this with a very considerable amount of concern.
 - While it is possible that asbestos in a cigarette filter could be bonded with other materials so that none could escape into the air stream drawn through the cigarette, there would always be the possibility of some escaping and being drawn into the lungs where it might lead to the development of cancer to the lung."
 - As far as the question of asbestos in the cigarette paper is concerned we think it should be pointed out that the ash from such a cigarette would contribute to the atmospheric contamination of a room with asbestos dust.
 - This proposed use in cigarette papers brings this hazard even closer to people, and we do not believe it is an appropriate use for asbestos."
 - 023606
262. Mineralogy of the Coalina Asbestos Fiber
- Mumpton and Thompson
 - 023352
263. Response Knowledge
- Invite Clark Cooper to do an inspection of King City plant and to talk to the MDs at the King City hospital.
 - 022774
264. Users, Calidria Asbestos – visit to Australia
- CSR and Escon Chemicals are the two big Australian buyers of Calidria
 - 025438
265. Knowledge, customers, fiber counting. 9/21/83
- List of UCC customers for whom UCC has done fiber counting
 - 025466
266. List of Calidria asbestos distributors, US and Canada.
- 025571
267. Knowledge, Doll-Peto "Effects of Health on Exposure to Asbestos, 4/25/85
- Asb Int'l Assn – if you want a copy of the report published yesterday just ask.
 - Several press releases giving the industry spin on Doll Peto.
 - 017495

268. Use, Silica, Silane asbestos, drilling mud, Dresser, 3/2/79
- Discusses Dresser's silane coated asbestos. A drilling mud additive.
 - Dresser believes that its product is not "asbestos" because it has been leached and coated.
 - 001696
269. Use, knowledge, principles prot., Drilling Mud. 1/25/82
- "Minutes of the meeting to develop work practices for the use of asbestos in the drilling industry held January 25, 1982.
 - Attendees: Pigg, Montello, UCC, Phillips Petroleum; JM, Noble Drilling Corp, the anti-trust lawyer to make sure that nothing bad is said.
 - 023476
270. Use, Drilling mud, 10/26/68
- Reprint of journal article
 - "Preshearing, pelletizing improves asbestos fibers for drilling mud"
 - 023596
271. Use, Drilling mud, dust, 10/23/74
- Rhodes distributes a "competitive market analysis" paper to others within UCC.
 - He notes that much of the work done is obsolete because of the introduction of "a new, dustless Flosal" (JM product).
 - Supervisbestos was introduced to the drilling industry through Montello in 1969 as a new premium-performance, premium price mud additive. By 1971 it was a well established product with sales of 1671, 1170, 1344 tons in 1971, 1972, and 1973, respectively.
 - Discusses competitive products.
 - 023481
272. Knowledge, Exposure, Drilling Mud, 7/8/76
- High dust levels in warehouse where Super Visbestos is handled.
 - 0.7 to 1.7 f/cc for shrink wrapped bags.
 - 2.5 f/cc for product that is not shrink wrapped.
 - These levels are consistent with reports that we have been receiving from Montello, there are generally small but noticeable amounts of fiber on the bags, on the floor of the rail car, and in any area where the bags have been handled.

- 023852
- 273. Draft of of Murphy report, current state of knowledge.
6/4/84
 - Handwritten editing on the paper
 - 023736
- 274. Editing Murphy paper, 4/22/83
 - Lewinsohn to Murphy.
 - "I have read the manuscript for the Asbestos Criteria document which you sent me for comment. You will notice that I made some minor word changes and added a few comments in red ink."
 - Lewinsohn's suggestions are self serving and inconsistent with the facts. For example, Lewinsohn makes the argument that serious asbestosis, "the full blown syndrome", is on the way out. In fact, deaths from asbestosis (at least as recorded) have been increasing, not decreasing.
 - 023673
- 275. Use, asbestos in the flooring industry, 8/20/69
 - Memo on the "asbestos market in the flooring industry.
 - Looks at who uses it and how much is used.
 - 024910
- 276. Use, Gaskets, Substitutes, Grafoil
 - Brochure on Grafoil gaskets, a non-asbestos gasket to which UCC eventually switched
 - 016284
- 277. Knowledge, Gasket Exposure. 8/25/87
 - Gasket material tested was RM 680, Garlock HH-460, or Garlock HH-P-46C
 - Cutting gaskets
 - Dates of testing from 1972 – 1981
 - Results from 1.65 - .05 f/cc
 - 016515
- 278. Gasket exposures, Handling gaskets 6/21/83
 - Dust measurements during handling gaskets, removing them from boxes and putting the gaskets into bins.
 - "It is our observation that while unpacking and placing gaskets in the bin the probability of exposure is minute; however, it is believed that once the gaskets are stored in the bin some dust will become loose due to friction and may build up over a period of time. We recommend that the gasket storage bin be cleaned once every month. The

- person cleaning the bin should wear a dust respirator. The method of cleaning the bin should be wet."
- 024427
279. Gasket exposure, cutting. 9/28/87
- Exposures below .1 fibers/cc
 - 024841
280. Gasket & Packing exposure, 1987
- "Packing very friable after sitting on shelf for a period of time, binders dry out. Fairly low exposure due to storage area.
 - 022284
281. Gasket exposure, cutting. 10/23/81
- The workers did not wear respiratory protective device while working with the gasket material. It is emphasized that all workers wear a disposable 3M #8710 dust respirator which is approved by NIOSH for protection from asbestos exposure.
 - Levels up to .4 f/cc
 - 016679
282. Gasket exposure, cutting, 8/21/87
- Range of measured exposures, 1.65 - .05
 - 022307
283. Report on VIth International Conference on Pneumoconiosis, Caracas, 11/30/78
- By Alex Cross
 - Attaches full list of participants
 - Refers to "the asbestos industry" as being well represented.
 - Refers "to the direct and indirect industry spokesman."
 - In discussing the AIA message of strict dust control and work practices, refers to "many instances of failure to adopt recommended measures."
 - 023050
284. Thermal Insulation and Accessories Manual, 10/62
- Design and construction Union Carbide Chemicals Company, Division of Union Carbide Corp, Technical Center, South Charleston, W.Va.
 - Good booklet on all aspects of insulation materials, specs, etc.
 - No mention of health hazards or dust control
 - 022067

285. Request for admission and production of documents, Garry v. UCC, Arkansas Fed Ct., 22 pages. Ed Moody, plaintiffs lawyer
- Attaches Sayer's UK paper.
 - 025260
286. Use, Recipe for making some kind of asbestos containing plastic product
- Jennat Corporation, a subsidiary of UCC.
 - 025336
287. Response, work practices, 5/24/74
- Rhodes to Fenner JM
 - Rhodes doesn't like broad based mandatory work practices for a diverse industry.
 - 0238898
288. Response, JM – UCC Connection. 12/19/79
- Hurley, Industrial Hygienist, UCC letterhead memo
 - "Information Program on Asbestos"
 - "A 20 minute slide presentation . . . On the toxicity of asbestos and the safe handling of materials containing asbestos is available for showing to interested groups. The Tech Center Industrial Hygiene group revised a Johns Manville presentation to meet Carbide needs."
 - 016786
289. Calidria Asbestos SG-130 and SG-210 for Tape Joint Compounds.
- Brochure
 - Misstates the TLV as "the asbestos dust particle count is kept at or below 5 million particles per cubic foot of air."
 - 025520
290. Knowledge, Customers, Kentile, Dust counts, 3/3/72
- Dust counts ranging from 21 f/cc to .75 f/cc
 - 015982
291. Knowledge, Customers, Kentile, Dust counts, 11/21/72
- Compares UCC and Kentile counts of same samples.
 - Out of 10 counts the UCC count is lower than the Kentile count in all but two samples
 - Kentile counts range from 6.0 (UCC count is 2.09) to .66 (UCC count 1.22)
 - 015968
292. Users, General Electric, asbestos danger. 6/24/71

- "The intent of the meeting as understood by the conferees was to discuss safety problems incident to the handling of asbestos in the manufacture of phenolic resins.
 - There apparently is a wide ranging discussion of asbestos issues including industrial hygiene measures for control and medical/health effects.
 - Re: handling of empty bags: "Union Carbide practices at Bound Brook are particularly dangerous in that the empty bags are thrown rather indiscriminately on the floor after emptying, then conveyed by a four wheel truck to a loading dock where they are turned over to a private scavenger, possibly without warning of the hazard. The ultimate disposal practice is not known."
 - 022312
293. Knowledge, Kaiser Permanente, Richmond, Calif, 8/1/76
- Asbestos and Neoplasia, by Estelle Baer, M.D., Chief of Occupational Medicine, Kaiser Permanente Medical Care Center.
Mainly discusses Selikoff insulator data. Also household and bystander risk.
 - 015984
294. Response, ban, EPA, 9/5/86
- "The proposed EPA rule would ban completely, five asbestos products that have effective substitutes. These products are: roofing felts, flooring felts, vinyl-asbestos floor tile, asbestos clothing, and asbestos cement and fittings. Other asbestos would be phased out over 10 years.
 - 019669
295. "Enemies in the Dust: Asbestos" 1975
- Journal article
 - "Fibers in the air are believed to be a factor in the death of more than 2,000 workers each year."
 - 016059
 - 016050
296. Knowledge, NOVA, 2/1/83
- Four handwritten pages that appear to have been made by someone listening to the UK NOVA program on asbestos.
 - "Two million fibers could fit on the end of a needle, and this could be a deadly dose."
 - Under UK asbestos exposure standards a person can breath 2 million fibers in an hour.

- 016248
- 297. Use, response, alternatives, 1987
 - 022295
 - National Petroleum Refiners Association.
 - Presentation, "Alternatives to Asbestos" by M S. Crowley, Senior Research Associate, Amoco Corporation, Naperville, Illinois. 2/10/87
- 298. Label Warning Cancer, 1986
 - UCC Letterhead. "Standard Practice"
 - "Label specification"
 - Danger – contains asbestos fibers:
 - Avoid Creating Dust:
 - Cancer and Lung Disease Hazard.
 - 019681
- 299. Knowledge, medical, 1974
 - "Chemical Carcinogens, Charles Searle, Editor
 - Epidemiological and Experimental Evidence for Carcinogenicity of Industrial Inhalants.
 - Double plus (++) for asbestos, lung and mesothelium.
 - Knowledge, worker exposure 12/27/82
 - Orley Edge Affidavit about exposures and UCC facility in Texas, and other facilities, where he and the plaintiff sandblasted tanks, etc., including tanks that had residual asbestos on them.
 - 018102
- 300. Label, Warning, Cancer, 2/17/83
 - 017908
 - "Warning, Cancer Hazard"
- 301. Memo re: "Carcinogen Labeling Policy". The memo is directed to Thurber of the Metals division with a copy to Myers at King City.
 - Principles of Protection, Duty, "Carcinogen Labeling Policy" KEY 12/4/81
 - Attaches UCC safety manual. Contains good discussion of UCC's duties and obligations regarding safety matters.
 - There are a number of important statements in this document. A key statement is that products that are "known human carcinogens" shall contain the "warning" statement, "Human Cancer Hazard."
 - This was never contained on the UCC asbestos label.
 - The signal word if cancer is the major risk is "WARNING."
 - This was never contained on the UCC asbestos label.

- "Government mandated carcinogen labeling requirements will be complied with and in the event that the UCC labeling requirements is [sic] different the affected operating component may meet either requirement at its option."
- Discusses labeling requirements for distributors of UCC products and UCC's obligations to make sure the labeling requirements are followed.
- 023947
- ..\UCC_40+55_Cull\LabellingKEYUCC023947-023958.pdf

302. Labeling, 2/25/83

- Myers memo
- "I think this is a good time to initiate use of the international "a" logo on all bags. Canadian companies have used it for several years, and we use it on our Sylodex products which go to Europe. The EEC has not adopted the "a" symbol officially, but it is generally accepted."
- "I firmly believe that the first line item is true of short fiber chrysotile - others may not."
- "I would like to discuss our proposed label idea with some AIA/NA member companies at our next meeting on 3/8/83."
- 017904
- ..\UCC_40+55_Cull\LabelsUCC017904-017906.pdf

303. Labeling 1/22/87

- Myers to Brown, law department
- Copies of labels claimed to have been used on Calidria.
- 1968 - 1972
- 1972 - 1985
- 025530
- ..\UCC_40+55_Cull\LabelsUCC025530-025532.pdf

304. Lewinsohn to Murphy, 1/12/78

- Commenting on Letter to Reuben Cherniak from Franzlau and Lilis.
- Re: peer reviewers' comments on Murphy's "The Diagnosis of Non Malignant Diseases Related to Asbestos."
- "It is my opinion that the health hazards of asbestos are probably the best known of all the occupational lung disorders. . . ."
- "It is important that patients be made aware of abnormalities as soon as they are detected so that they can be kept under more intensive surveillance and guard against factors likely to aggravate their condition."
- 023609

305. Lewinsohn Testimony , House of Rep, 5/1/79
- Good state of the art admissions.
 - Good diagnosis and causation admissions.
 - 017868
 - ..\UCC_40+55_Cull\LewinUCC017868-017876.pdf
306. Mesothelioma Knowledge, 3/4/68
- Riddle to McDaniel, Medical Dept.
 - Encloses a newspaper article discussing mesothlioma
 - 024992
307. Mesothelioma knowledge, 1/19/68
- McDaniel (IH) to Riddle, King City
 - Claims weak association between chrysotile and meso; that meso is associated with crocidolite.
 - 5mppcf is satisfactory for chrysotile.
 - "In our own operations with chrysotile, I feel that we should try to control the dust to levels as far below the 5mppcf as reasonably possible."
 - 023540
308. Mining milling grading asbestos fiber
- Book chapter
 - 021481
309. High Fiber Levels at Mine and Mill, 2/18/72
- Survey by the US Bureau of Mines
 - Acknowledge that the asbestos TLV is for total dust.
 - Bagger operator exposed at 8 times the TLV. The palletizer operator is exposed at 6 times the TLV and a one hour exposure at 12 times the TLV
 - Foreman's TWA was 7.6 f/cc – presumed to be the general mill atmosphere.
 - The roll mill concentration is 8.0 f/cc
 - "The high concentration of 17 f/cc . . . Indicates the need for better dust control measures at this "wet" operation.
 - The foreman's OFFICE sample results yielded an arithmetic average of 7.5 fibers/ml with a high concentration of 11 f/cc. The dust concentrations are provisionally attributed to the ambient air dust load and the dust from the worker's clothing during the time they occupied the office."
 - "The use of respirators in the work area shall not be considered as a substitute for engineering controls and their continued use over prolonged periods shall not be permitted
 - 023915
 - ..\UCC_40+55_Cull\Mine_SurveyUCC023915-023934.pdf

310. Minimize the danger, 8/3/78

- Thomas Lincoln, M.D. to UCC physicians.
- "A major governmental information campaign on the hazards of asbestos is underway. It will undoubtedly cause considerable anxiety among workers who have or think they may have been exposed to asbestos."
- "I believe the popularly projected occurrence of asbestos related disease is grossly exaggerated and probably irresponsible."
- 022778

311. Moral Issues, Calidria., 12/67

- "... On the basis of present evidence, we are not entitled under any circumstance to state that our material is not a health hazard. What is more, if it is believed that a potential customer would use our material "dangerously", and that he is unaware of the toxicity question, then it must surely be our duty to caution him and point out means whereby he can hold the asbestos air float concentration to a minimum."
- "There seems little doubt that the toxic effects of our Coalinga product are still largely unknown. ... Exoneration of chrysotile has not been made. ... Concern over asbestosis is still increasing, and ... Chrysotile is definitely implicated along with the other types of asbestos."
- 024987
- ..\UnionCarbide\UCC_Box_53\UCC024973-024991.pdf

312. Response, letter to customers, 11/23/81

- Dear Calidria Asbestos Customer.
- Encloses recent MSDS
- Also encloses current OSHA Standard on asbestos and copies of two AIA pamphlets.
- MSDS refers only to serious bodily harm.
- 025533

313. Response, Lewinsohn, Murphy. 4/5/83

- Lewinsohn to Murphy
- Dear Dr. Murphy: Thank you for inviting me to join the Committee on the Standardization of Criteria for Asbestos Related Diseases formed by the Environmental Health Section of the American College of Chest Physicians. I would be both willing and delighted to serve on the Committee.
- 023775

314. Users, USG, Tape Joint Compounds, NG, WRG 7/19/73
- We were recently asked by National Gypsum to supply SG-210 to their affiliate in Norway.
 - I suggested that he try HPO . . . It was available in Europe thru WR Grace.
 - HPO could have domestic application in highest quality gypsum compounds.
 - 025629
315. NIOSH, Occupational Exposure to Asbestos,
- "Material Received 10/19/77, R & D 770 Library."
 - 019431
316. Fundamentals of Industrial Hygiene, National Safety Council
- 022488
317. List of sales offices
- 023310
318. Use, Asbestos T-135 Opacifying Agent,
- Application bulletin
 - A highly efficient opacifying agent now in mill use.
 - Useful in offset, envelope, map, book, glassine, pouch and saturating papers.
 - 023350
319. Use, status of program – asbestos in Latex Paint.
- A good point at which to begin discussions with paint manufacturers and, in fact, has already been well received at Ameritone.
 - We should proceed with our market introduction, with or without CID marketing support.
 - 023036
320. Use, "sanitary tissue of the internal type." 1/12/66
- "You will recall that from time to time we have sent you extracts from publications which indicate concern felt in industry on the detrimental effect asbestos has on health."
 - We tried to obtain some information for Southalls Paper Mills, who wanted to use our asbestos in a sanitary tissue of the internal type. They were concerned about a possible danger to health."
 - 020758
321. Peele documents
- 016130
 - 016146
 - 016157, 1962
322. Knowledge, sick UCC workers, as of 10/7/82

- Current List of Pneumoconiosis Cases, within the construction department as of 10/7/82
 - List by craft, date of diagnosis
 - 024894
323. Response, fight against bad PR, 9/9/66
- Attaches "tear sheets" from recent publicity on the subject of "asbestos toxicology."
 - "There is no doubt this kind of publicity will persist, and it is important that its applicability to our products and our applications not be missed by our customers and prospects."
 - It is important that you continue to use Dr. Dernehl's "Asbestos Toxicology Report" . . .
 - 023078
324. Duty, "Safety and Health Program," 1984
- Fine sounding statement of the UCC philosophy of protecting their employees' health.
 - 025124
325. Use, Duty, Prin Prot, 9/23/76
- "The laboratory use of asbestos."
326. A list of inadequate precautions to protect people working with asbestos in the lab.
- 025559
327. Response, safety and health procedures. 6/1/85
- Handling, installing, removing and/or disposing of materials containing asbestos.
 - 019803
328. Detection of Chrysotile Asbestos in Airborne Dust from Thermosetting Resin Grinding. 1976
- 025650
329. Response, test of dust masks, 11/13/87
- Attached youi will find details of a study conducted by duPont to evaluate performance of various types of respirators against asbestos fibers. As you will note, the 3M8710 and 9910 provide sufficient protection against asbestos exposure.
 - 016697
330. Response, lobby, craft regulations 7/14/77
- "for the past several years we have spent an increasing amount of time and money to keep abreast of and, as necessary, influence legislation involving asbestos. Dr. Rhodes has handled and coordinated most of these efforts with customers, other asbestos companies, State

legislators, various state departments, etc. Some of the work has been for the Asbestos Information Association, for which Harry is chairman of the technical subcommittee, but most of it has been as representatives of Union Carbide "

- 016371

- ..\UCC_40+55_Cull\RespCancUCC016362-016380.pdf

331. Response, promote use, resist regulation, tape joint compounds Key 11/22/77

- Rhodes submits article to Society of Plastics Engineers for publication

- Discussion of dust exposure measurements during joint tape application activities.

- Argues that asbestos in drywall poses no danger to consumers who are mixing and sanding.

- Rhodes data was previously published in Drywall industry trade magazine only. "Peer reviewed?"

- Does not cite the Gypsum Association study.

- UCC results are much lower than those obtained by, e.g., Rohl, et al.

- ..\UnionCarbide\UCC_Box_44\UCC018212-018253.pdf

332. Asbestos Toxicology, hope and lies. Key. 1/12/65

- ..\UCC_40+55_Cull\ResponsUCC020782-020807.pdf

- Good collection of UCC asbestos toxicology documents.

333. Response, not much, 3/4/76

- Medical Dept to King City

- Personal and confidential

- "I was disappointed to note that the amount of asbestos dust in the plant seems about the same as it had been on previous visits, and I noted that asbestos dust is still being tracked into the office area. Also, from what you told me, it appears that the employees are not taking advantage of the showers and change of clothes which have been provided for them. All of this adds up to a considerable concern on my part for the health of the employees at King City."

- 020747

334. Response, fight bad publicity. Lie. 3/22/66

- Use Durnehl's "Asbestos Toxicology Report" to fight bad publicity

- "No work yet conducted or published presents, nor professes to present, incontrovertible proof of a relationship between cancer and asbestos."

- "Control of asbestos dust exposure is necessary, as is control of exposure to any of a variety of dusty operations."
 - ..\UCC_40+55_CulI\ResponUCC020770-020776.pdf
335. User Inquiry Re: Calidria Dangers
- Steadfast Rubber Company 2/2/69
 - Response is to send Durnehl Asbestos Toxicology Report; refers to Walsh Healey; says that UCC requires respirators where TLV is exceeded.
 - 020808
336. Response, OSHA Presentation, 1/21/76
- By John L. Meyers, Marketing Manager, Calidria Asbestos.
 - Objects to lowering TLV and to new employer obligations.
 - 70% of asbestos used in U.S. "ends up in construction."
 - 015994
 - ..\UCC_40+55_CulI\RespOSHAUCC015994-016002.pdf
337. Response, OSHA Presentation, 3/16/72
- By James W. Rawlings, Vice President, Mining and Metals Division.
 - Among other complaints, Rawlings says,
 - "a Threshold Limit Value of 2 fibers per milliliter cannot be achieved in our operations by any presently known combination of engineering installations."
 - 016086
338. Compare with UCC 1/000071, 7/24/75
- "Customers should be able to meet a 1 f/cc TWA action level with modest precautions."
 - UCC_01_CulI\!KnowIBoreIUserUCC000071-000075.pdf
339. J. A. Riddle, "Enclosed is my synopsis of the Industrial Hygiene Aspects of Asbestos for your use in the long range plan."
- "For most people [customers] the questions are satisfactorily answered, for the moment at least, by the "asbestos toxicology" sheet. In the event of additional adverse publicity, an expansion of the asbestos toxicology sheet may be needed."
 - "It will be necessary to maintain liasion with other organizations conducting research and statistical studies in this field. If it can b arranged, publication of reports which put the data in better perspective should be encouraged."
 - 020767
 - ..\UCC_40+55_CulI\RespoSynUCC020767-020769.pdf

340. Response, knowledge, minimize danger, get good pubs
7/26/68
- Response, Lukewarm Toxicology Report, Pub Rel. 1/12/65
 - Several versions of the asbestos toxicology report are attached.
 - "Recently several reports were given at technical meetings and summaries of them carried by the national wire services concerning possible carcinogenic properties of asbestos. Some of you may have received questions from your customers on this subject."
 - "In order to counteract any serious problems or worries before they get out of hand, we have Dr. C. U. Dernehl, Director of Toxicology, Union Carbide Corporation, to formulate a statement for us. A copy of his statement is enclosed."
 - "In essence the report states that good housekeeping – such as would be required in any dust-producing operation – should be sufficient to prevent any problems with asbestosis.
 - Memo suggests that publications saying that asbestos causes cancer are flawed.
 - 020713
341. Names, "General Occupational Health Committee,
2/25/63
- 017385
342. Safe use lies, literature to be given to customers re:
safe use. 2/12/74
- 022793
343. Knowledge, dust measurements, customers, litigation,
2/9/84
- By John L. Myers.
 - Attaches a list of all UCC asbestos customers where dust counts have been conducted.
 - "Per our prior discussion, I think the information contained in the reports could be of value for our litigation; but it must be in useable form."
 - 023935
 - ..\UCC_40+55_Cull\Sales_Dust_UCC023935-023946.pdf
344. Response, use, develop new markets, regs, 1/13/1977
- 025315
 - "The major barrier to acceptance of this product in the market place appears to be the asbestos toxicology

question, rather than the technical performance of the material.

- "Since the short fiber asbestos cannot be used in many conventional markets, historically Union Carbide has devoted substantial resources to developing new applications for short fiber asbestos."
- "The major element of uncertainty will continue to be government regulation."
- Calidria sales have grown, \$2.4M in 1971 to \$5.4M in 1977.
- "Asbestos 5-year plan (1978-82)

345. Use, sales, litigation 9/29/80

- "Enclosed is a copy of a summary of our asbestos business for 1980 and 1981 which I recently prepared for George Adams."
- 1981 should be another record sales year. The 1981 Sales budget calls for 32,000 tons.
- "Domestic sales have been held up by the floor tile and drilling mud industries while the sagging auto industry has adversely affected sales of Resin Grade products."
- "Our share of the drilling mud business has declined to about 35-40% in the last few years when J-M introduced a water-wetted product, but sales are currently about 190% of budget because the number of rigs operating is at an all time high. Montello, our distributor for this application, is investigating the possibility of having an oil-wetted product made by a third party. We are also evaluating the use of mini pellets with regard to down hole performance and reduction in dust generation."
- "Export sales were 124% of budget . . . Japan accounts for over 50% of our export. Australian floor tile customer has discontinued use of asbestos. . . . Sales to Grace in Europe are going well . . . Sales to Taiwan, Canada and Brazil are also well ahead of budget. [International]
- "We have made a concentrated effort to develop export markets because of the more negative effect in the U.S. of asbestos and health adverse publicity and regulatory activity."
- "The asbestos health issue has obviously had a major impact on the asbestos industry. . . Customers and markets are being lost due to adverse publicity than to problems with regulatory compliance."

- Another major source of adverse publicity has developed during the past year or so from media coverage of asbestos litigation proceedings, court decisions, and settlements."
 - "As of today (9/18/80) we have been named in 276 liability suits and have been dismissed in 180 of them. Of the pending 96 suits, there are only 5 or 6 which may involve plaintiff exposure to our asbestos.
 - "The basic philosophy of the strategic plan for asbestos is to continue what we have been doing (same production/same markets) . . ."
 - 025344
 - ..\UCC_40+55_Cull\SalesUCC025344-025348.pdf
346. Sales, Use, Tape Joint Customers, 9/7/73
- SG-210 sales. Memo by G L Dickson.
 - Proko (Dallas), National Gyp (Baltimore), National Gyp (Westwego, LA), Welco (Dallas), Texas Texture (Carrollton), Roach Paint (Dallas), Georgia Pacific (Acme TX), Miscellaneous customers
 - 0254427
347. Sales, Use, Floor Tile, 10/1/75
- Lists the floor tile customers
 - American Biltrite, Flintkote, Uvalde, Kentile, GAF, Winburn, Tomoe.
 - October Shipping Schedule
 - 025434
348. Sales, Use, Customers
- 025435
349. Sales, Use, Customers, 11/26/75
- Weekly production schedules, R. E. Byrne, Jr.
 - Lists: Uvalde, GAF, Kentile, Amer Biltrite, W R Grace, Montello, Celotex, National Gyp, U.S. Gyp, Welco, Valvoline, Technical Products, Rogers, DAP.
 - Valvoline, H & C, Welco, Tech Prods, Georgia Pacific, Tex Text, RCI, Proko, Kelly Moore, Harwick, Monarch, Dewitt, Allied Mfg, Daubert, Roach, Borden, Celanese, TEC, Roach Paint, WRG, Winburn, GAF, West. Chem., Major Paint, Valvoline, Am Bilt, Uvalde, Kentile, Flintkote, Murco, Proko, Vimasco, H. B. Fuller, RPM,
 - 025454
350. Sales, Use, Customers, 4/5/78
- Gordon L. Dickson
 - Other customers, Armstrong, Mortell, Gardner-Martin, A. T. Callas, PTI.

- 025508
- 351. Knowledge, Asbestos as A Health Hazard in the United Kingdom. 12/5/67
 - I. C. Sayers
 - ..\UCC_40+55_Cull\SayersKeyUCC024973-024991.pdf
 - 024973
- 352. Knowledge, cancer, etc., 5/8/70
 - Transcript of radio program, furnished by the American Chemical Society News Service.
 - Contains interview with Selikoff.
 - "The American Chemical Society presents, "MEN...AND...MOLECULES...the story of chemical research."
 - "The first case of a man dying of cancer of the lungs, who also had asbestosis, was only reported in 1935. Numerous reports since then have confirmed this original report."
 - 024960
 - ..\UCC_40+55_Cull\SelikoffTraUCC024960-024968.pdf
- 353. Knowledge, Selikoff, "Lung Cancer and Mesothelioma During Prospective Surveillance of 1349 Asbestos Insulation Workers, 1963-1974.
 - 016003
- 354. Knowledge, disease, 1981 et seq
 - Compilation of "Record of Occupational Injuries and Illness."
 - "Pneumoconiosis" is listed rather than "asbestosis." A handy way to hide the true risk from asbestos.
 - 017125
 - "Up until 1980 the New York Legal Department has recommended that Corporation employees with medical evidence of asbestosis not be entered on the OSHA Log 200 because these employees were not ill and did not require treatment even though they had medical evidence of asbestosis. Suddenly in late 1979, they recommended that any employee of the Corporation showing evidence of asbestosis be entered on the OSHA 200 Log 200. As an attachment to this letter I am listing names of those active employees who obviously have pneumoconiosis with asbestosis or in several sandblasters, silicosis. I suggest that these names be entered on the OSHA Log 200 as recommended by the New York Legal Dept."
 - Signed by R. J. Sexton, M.D., Plant Medical Director.
 - 017165
- 355. Knowledge, concealment, OSHA, 5/31/84

- "Business Confidential."
 - OSHA tells UCC that "pneumoconiosis" is not sufficiently specific and the diagnosis that appears in the employee's medical record is the one that has to be used on the OSHA 200 and 201 reports. A list of "new" asbestosis diagnosis is then created.
 - 16996
356. Talc and Silica, 10/16/74
- The key points of concern to us are: amorphous silica is not included in the NIOSH criteria document;
 - "Exemption of Talc from Asbestos Regulation." Discusses cleavage fragment vs naturally formed fiber argument.
 - 016454
357. "Specification for Thermal Insulation Material and Application."
- UCC booklet, South Charleston, W Va.
 - 021841
358. Asbestos Toxicology Report, 5/8/69
- 023480
359. Asbestos toxicology, 6/13/67
- References Sayers' report.
 - The most publicity and interest as been in England.
 - A shipment of UCC asbestos was in bad shape, with many broken bags and much dust.
 - 023087
360. Knowledge, tremolite in chrysotile, 11/22/84
- Looking for a good way to test commercial chrysotile for tremolite content.
 - "Some manufacturing companies were already beginning to frame a policy of restricting imports of chrysotile to those areas where the tremolite content was known to be minimal. It was felt that the International Asbestos Industry should be made aware of this development."
 - "The presence of tremolite in chrysotile should be regarded as ubiquitous, even to very small quantities . . ."
 - "Tremolite is the most intransigent of all asbestos fibres and this distinction is a matter of biological significance in relation to chrysotile."
 - 017480
 - ..\UCC_40+55_Cull\TremoChrysoUCC017480-017488.pdf
361. User inquiry, response, Amchem, 7/18/75
- Rhodes

- Attached is a draft of a response to an asbestos health inquiry from Amchem Products, Inc.
- 016362
- 362. James Henry Rapp depo, Texas City
 - User, depo of UCC co-worker, work conditions 6/22/82
 - 017919
- 363. Users, Oregon, Harrisons and Crosfield, 10/23/79
 - Shipments to distributor Harrison Crosfield in Portland
 - 016175
- 364. Users, various, 11/26/75
 - 025454
- 365. Response, misrepresentations, 3/30/72
 - Myers letter sent to customers about asbestos health hazards.
 - "With regard to the toxicity of asbestos, it is important to note that asbestosis and statistical excess occurrences of bronchogenic carcinoma have been recorded only in connection with massive long term exposures to asbestos dust."
 - "Attached are copies of the weekly production schedules and shipping schedules for major customers by product for the month."
 - "TLVs have also been established for other "air contaminants" such as styrene, mica, talc, and coal dust.
 - 016169
- 366. Use, viscosity control and pigmentation.
 - 023301
- 367. Uses, thickener and thixotrope
 - 023274
- 368. Users, brochure 4/21/69
 - "The discovery company"
 - Extender, thickener, reinforcer, opacifier
 - "An unlimited source of new ideas for utilizing asbestos."
 - 016401
 - 016387
- 369. Uses, Product Info, Brochure.
 - "A three-minute story on Union Carbide Asbestos."
 - "These fibrils are so tiny that if all the fibrils in 1 gram of asbestos were put end to end, they would circle the earth at the equator 40 times. The large surface area provided by these fibrils helps the asbestos improve retention and pitch control."
 - ..\UCC_40+55_CuII\UsesUCC016387.pdf

370. Uses by UCC fiber grade
- Floor tile, oil well drilling, elastomers, adhesives and sealants, reinforced plastics, filled phenolics, tape joint compounds, ceiling tile, paper.
 - 025546
 - ..\UCC_40+55_CulI\UsesUsersUCC025546-025558.pdf
371. Users, Uvalde, dust counts. 12/28/72
- 5.0, 18.2, 20.3 mppcf
 - 015965