

FILE NAME: Metropolitan Life (ML)

DATE: 1945

DOC#: ML308

DOCUMENT DESCRIPTION: Asbestosis in Manville, NJ Plant

3026. Dr. Lanza's unpublished 1932 Report on his study of the Manville, New Jersey, plant workers revealed that 327 of the 1140 workers evaluated -- 29% -- had signs of asbestosis. (The report labeled positive x-ray results for workers exposed to asbestos only at Manville "asbestosis", and called positive x-rays for those who had worked in dusty conditions before their Manville employment "pneumoconiosis"). Forty-three asbestosis cases were found in the Pipe Covering and Cement Departments: The report noted that those departments had the "highest percentage of asbestosis cases". Additionally, the report showed asbestos disease among a broad range of workers, including many in jobs which Manville classified as having no exposure to dust, including two machinists (Case Nos. 110 and 321), two steamfitters (Case Nos. 129 and 130), five packing and shipping department workers (Case Nos. 80, 88, 108, 172 and 183), a pipefitter (Case No. 312), a watchman (Case No. 319), a millwright (Case No. 324), a glove department worker (Case No. 185), and an outside laborer (Case No. 220). In addition, cases were found among those working in the departments where finished materials like firefelt, magnesia, or superex (materials containing only a minority percentage of asbestos) were cut and sawed (Case Nos. 25, 149, and 199 respectively). These findings, however, were never published.

Exhibit:

PHYSICAL EXAMINATIONS AT METROPOLITAN LIFE INSURANCE CO.

Memphis, New Jersey.

At a conference held at General Headquarters, it was decided to conduct chest examinations on 600 employees taken at random from different parts of the factory.

It was recommended by Dr. Follen of the Metropolitan Life Insurance Co. that examinations be made by x-ray and fluoroscope. It was later decided that this examination include all employees at Nashville Post-  
1977.

An x-ray and fluoroscope were installed on February 22nd, 1932. Test work on employees was started on Feb. 24th. The services of Dr. F. E. Schottelle, on recommendation of Dr. Follen, were obtained for the fluoroscopic examinations and supervision of the general examination of employees, which also included x-ray, some physical examinations of chests, and histories. Dr. Schottelle was assisted by Mr. Follenbauer, who acted as technician and took all the x-rays of employees' chests. The histories were taken by Miss Weira, who was thought best fitted for the task because of her intimate connections with most of the families of the employees and her knowledge of most of their past histories. An specific person was given to employees for the examination, except the general understanding that it was a "general health survey".

On recommendation of Dr. Lamm of the Metropolitan Life Insurance Co. contact was made with Dr. Terlinether, Surgeon in Charge, U. S. Bureau of Mines, Fisher, Oklahoma, to interpret the x-rays taken.

An examination card was made up to include fluoroscopic record, history record, as well as standard physical examination for employment in order to make one complete physical record. An x-ray card was made up to send with each x-ray film to Dr. Terlinether for him to record his interpretations. This was done for the purpose of having only one record of the x-ray interpretations.

Employees to be examined were selected by the Personnel Department. Each employee was summoned to appear at the Plant Dispensary by appointment. On arrival, his complete record of employment, injuries and illnesses, past and present, were obtained by Miss Weira by

Means of leading questions appearing on the examination card. The employee was then prepared for examination and an X-ray and Fluoroscopic examination made. On the X-ray film was inscribed the employee's clock number for the purpose of identification. Physical examinations of cases with positive Fluoroscopic findings were made by Dr. Sabatello. The Fluoroscopic findings were recorded directly on the card by Dr. Sabatello. The positive cases that had a previous employment history of a dust occupation were called "Pneumoconiosis" (which is the general, non-specific term for a dust infection of the lungs). The positive cases that had no previous dust history were called "Asthma".

The X-rays with a card attached bearing only the employee's clock number, and not his name, were sent direct to Dr. Harinther. This card also contained the past dust history of the employee.

It was originally intended that only 600 of the employees be examined, but the results of the first 300 examined were so impressive that it was decided to examine all factory employees, the total examined being 1148.

The examination period was from February 24th to May 19th, 1933, and an average of 100 employees a week was examined.

A list was then made from the records of X-ray interpretations, Fluoroscopic findings, past employment history, and L'Anville Factory employment history.

An individual case history record was made of the positive cases, using the X-ray as a basis for positive. From this individual case history record, four reports were compiled as follows:-

- (1) Comparative record by stages of X-ray and Fluoroscope.
- (2) Location of these cases in the plant by departments.
- (3) Record of inside and outside dust exposures.
- (4) Period of plant exposure and period of coal mining exposure, the latter being chosen because it proved to be the outstanding past employment history.

### GENERAL REMARKS

- (1) 17% of positive cases are located in the Textile Department.  
13% " " " " " " Pipe Coverings & Cement  
13% " " " " " " Roofing & Waterproofing.
- (2) 26% of Asbestosis cases are " " Textile Department.  
44% (the most highest percentage of Asbestosis cases) are  
located in Pipe Covering & Cement Works.
- (3) 63% of positive cases have Pneumoconiosis.  
39% " " " " " " Asbestosis.
- (4) There are no Third Stage Asbestosis cases.  
Out of 29 Second Stage cases 7 were Asbestosis and  
22 were Pneumoconiosis.
- (5) 17% of total examined had coal mining experience.
- (6) 25 cases were too thick chested for Fluoroscopic reading.  
(Very poor illumination.)
- (7) % of 3rd stage positive by Fluoroscopy - 100%  
% of 2nd stage : moderate : 46%  
                  slight : 1%  
                  poor illumination : 18%  
  
% of 1st stage positive by Fluoroscopy - 29%  
                  moderate : 12%  
                  slight : 17%  
                  negative : 11%  
                  poor illumination : 9%  
  
% of early stage positive by Fluoroscopy - 11%  
                  moderate : 8%  
                  slight : 42%  
                  negative : 24%  
                  poor illumination : 6%

- (1) (a) Rejection of all new applications with two years or more of coal mining history.
- (2) (b) Rejection of all new applications with two years or more of coal mining history.
- (3) (c) Rejection of all new applications with two years or more of coal mining history, unless the applicant has been employed by the coal industry for at least two years.
- (4) (d) Rejection of all new applications with any application of L. B.
- (5) (e) Rejection of all new applications with a right to work card of the use of proprietary mine equipment.
- (6) (f) Rejection of all new applications with a right to work card of the use of proprietary mine equipment.
- (7) (g) Rejection of all new applications with a right to work card of the use of proprietary mine equipment.
- (8) (h) Rejection of all new applications with a right to work card of the use of proprietary mine equipment.
- (9) (i) Rejection of all new applications with a right to work card of the use of proprietary mine equipment.
- (10) (j) Rejection of all new applications with a right to work card of the use of proprietary mine equipment.

REJECTION



**UNIVERSITY OF CALIFORNIA**

10

**COMPANY**

\_\_\_\_\_

40





1967 1968 1969 1970 1971

[illegible]





10



三、四、五、六、七、八、九、十、十一、十二、十三、十四、十五、十六、十七、十八、十九、二十、二十一、二十二、二十三、二十四、二十五、二十六、二十七、二十八、二十九、三十、三十一、三十二、三十三、三十四、三十五、三十六、三十七、三十八、三十九、四十、四十一、四十二、四十三、四十四、四十五、四十六、四十七、四十八、四十九、五十、五十一、五十二、五十三、五十四、五十五、五十六、五十七、五十八、五十九、六十、六十一、六十二、六十三、六十四、六十五、六十六、六十七、六十八、六十九、七十、七十一、七十二、七十三、七十四、七十五、七十六、七十七、七十八、七十九、八十、八十一、八十二、八十三、八十四、八十五、八十六、八十七、八十八、八十九、九十、九十一、九十二、九十三、九十四、九十五、九十六、九十七、九十八、九十九、一百。

# Index

1. The first step is to identify the problem or question that needs to be answered.

11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 841. 842. 843. 844. 845. 846. 847

**● 一、**

... 7 ...

... ..

100

100

THE UNIVERSITY OF CHICAGO

**THE**

100

**THE**

[illegible]

100

[illegible][illegible]

1990

2000

**THE**

11

**THE**

1. The first step is to identify the problem or question that needs to be addressed. This involves understanding the context and the specific requirements of the task.

**THE**

[illegible]

●

100

**THE**

1. The first step is to identify the problem or question that needs to be addressed. This involves understanding the context and the specific requirements of the task.

11

11

100

**THE**

**JAMES E. HANCOCK**

| GENERAL INFORMATION |     |     | INDIVIDUAL INFORMATION |     |     | GENERAL INFORMATION |     |     | INDIVIDUAL INFORMATION |     |     |
|---------------------|-----|-----|------------------------|-----|-----|---------------------|-----|-----|------------------------|-----|-----|
| NAME                | AGE | SEX | NAME                   | AGE | SEX | NAME                | AGE | SEX | NAME                   | AGE | SEX |
| 197 Mrs. Goodman    | 40  | ✓   | 197 Mrs. Goodman       | 40  | ✓   | 197 Mrs. Goodman    | 40  | ✓   | 197 Mrs. Goodman       | 40  | ✓   |
| 198 Mrs. Brown      | 35  | ✓   | 198 Mrs. Brown         | 35  | ✓   | 198 Mrs. Brown      | 35  | ✓   | 198 Mrs. Brown         | 35  | ✓   |
| 199 Mrs. Green      | 30  | ✓   | 199 Mrs. Green         | 30  | ✓   | 199 Mrs. Green      | 30  | ✓   | 199 Mrs. Green         | 30  | ✓   |
| 200 Mrs. White      | 25  | ✓   | 200 Mrs. White         | 25  | ✓   | 200 Mrs. White      | 25  | ✓   | 200 Mrs. White         | 25  | ✓   |
| 201 Mrs. Black      | 20  | ✓   | 201 Mrs. Black         | 20  | ✓   | 201 Mrs. Black      | 20  | ✓   | 201 Mrs. Black         | 20  | ✓   |
| 202 Mrs. Gray       | 15  | ✓   | 202 Mrs. Gray          | 15  | ✓   | 202 Mrs. Gray       | 15  | ✓   | 202 Mrs. Gray          | 15  | ✓   |
| 203 Mrs. Jones      | 10  | ✓   | 203 Mrs. Jones         | 10  | ✓   | 203 Mrs. Jones      | 10  | ✓   | 203 Mrs. Jones         | 10  | ✓   |
| 204 Mrs. Smith      | 5   | ✓   | 204 Mrs. Smith         | 5   | ✓   | 204 Mrs. Smith      | 5   | ✓   | 204 Mrs. Smith         | 5   | ✓   |
| 205 Mrs. Miller     | 0   | ✓   | 205 Mrs. Miller        | 0   | ✓   | 205 Mrs. Miller     | 0   | ✓   | 205 Mrs. Miller        | 0   | ✓   |
| 206 Mrs. Davis      | 45  | ✓   | 206 Mrs. Davis         | 45  | ✓   | 206 Mrs. Davis      | 45  | ✓   | 206 Mrs. Davis         | 45  | ✓   |
| 207 Mrs. Wilson     | 40  | ✓   | 207 Mrs. Wilson        | 40  | ✓   | 207 Mrs. Wilson     | 40  | ✓   | 207 Mrs. Wilson        | 40  | ✓   |
| 208 Mrs. Moore      | 35  | ✓   | 208 Mrs. Moore         | 35  | ✓   | 208 Mrs. Moore      | 35  | ✓   | 208 Mrs. Moore         | 35  | ✓   |
| 209 Mrs. Taylor     | 30  | ✓   | 209 Mrs. Taylor        | 30  | ✓   | 209 Mrs. Taylor     | 30  | ✓   | 209 Mrs. Taylor        | 30  | ✓   |
| 210 Mrs. Anderson   | 25  | ✓   | 210 Mrs. Anderson      | 25  | ✓   | 210 Mrs. Anderson   | 25  | ✓   | 210 Mrs. Anderson      | 25  | ✓   |
| 211 Mrs. Thomas     | 20  | ✓   | 211 Mrs. Thomas        | 20  | ✓   | 211 Mrs. Thomas     | 20  | ✓   | 211 Mrs. Thomas        | 20  | ✓   |
| 212 Mrs. Jackson    | 15  | ✓   | 212 Mrs. Jackson       | 15  | ✓   | 212 Mrs. Jackson    | 15  | ✓   | 212 Mrs. Jackson       | 15  | ✓   |
| 213 Mrs. Harris     | 10  | ✓   | 213 Mrs. Harris        | 10  | ✓   | 213 Mrs. Harris     | 10  | ✓   | 213 Mrs. Harris        | 10  | ✓   |
| 214 Mrs. Martin     | 5   | ✓   | 214 Mrs. Martin        | 5   | ✓   | 214 Mrs. Martin     | 5   | ✓   | 214 Mrs. Martin        | 5   | ✓   |
| 215 Mrs. Thompson   | 0   | ✓   | 215 Mrs. Thompson      | 0   | ✓   | 215 Mrs. Thompson   | 0   | ✓   | 215 Mrs. Thompson      | 0   | ✓   |
| 216 Mrs. Lee        | 45  | ✓   | 216 Mrs. Lee           | 45  | ✓   | 216 Mrs. Lee        | 45  | ✓   | 216 Mrs. Lee           | 45  | ✓   |
| 217 Mrs. Clark      | 40  | ✓   | 217 Mrs. Clark         | 40  | ✓   | 217 Mrs. Clark      | 40  | ✓   | 217 Mrs. Clark         | 40  | ✓   |
| 218 Mrs. Lewis      | 35  | ✓   | 218 Mrs. Lewis         | 35  | ✓   | 218 Mrs. Lewis      | 35  | ✓   | 218 Mrs. Lewis         | 35  | ✓   |
| 219 Mrs. Walker     | 30  | ✓   | 219 Mrs. Walker        | 30  | ✓   | 219 Mrs. Walker     | 30  | ✓   | 219 Mrs. Walker        | 30  | ✓   |
| 220 Mrs. Young      | 25  | ✓   | 220 Mrs. Young         | 25  | ✓   | 220 Mrs. Young      | 25  | ✓   | 220 Mrs. Young         | 25  | ✓   |
| 221 Mrs. King       | 20  | ✓   | 221 Mrs. King          | 20  | ✓   | 221 Mrs. King       | 20  | ✓   | 221 Mrs. King          | 20  | ✓   |
| 222 Mrs. Hill       | 15  | ✓   | 222 Mrs. Hill          | 15  | ✓   | 222 Mrs. Hill       | 15  | ✓   | 222 Mrs. Hill          | 15  | ✓   |
| 223 Mrs. Scott      | 10  | ✓   | 223 Mrs. Scott         | 10  | ✓   | 223 Mrs. Scott      | 10  | ✓   | 223 Mrs. Scott         | 10  | ✓   |
| 224 Mrs. Adams      | 5   | ✓   | 224 Mrs. Adams         | 5   | ✓   | 224 Mrs. Adams      | 5   | ✓   | 224 Mrs. Adams         | 5   | ✓   |
| 225 Mrs. Baker      | 0   | ✓   | 225 Mrs. Baker         | 0   | ✓   | 225 Mrs. Baker      | 0   | ✓   | 225 Mrs. Baker         | 0   | ✓   |
| 226 Mrs. Carter     | 45  | ✓   | 226 Mrs. Carter        | 45  | ✓   | 226 Mrs. Carter     | 45  | ✓   | 226 Mrs. Carter        | 45  | ✓   |
| 227 Mrs. Evans      | 40  | ✓   | 227 Mrs. Evans         | 40  | ✓   | 227 Mrs. Evans      | 40  | ✓   | 227 Mrs. Evans         | 40  | ✓   |
| 228 Mrs. Foster     | 35  | ✓   | 228 Mrs. Foster        | 35  | ✓   | 228 Mrs. Foster     | 35  | ✓   | 228 Mrs. Foster        | 35  | ✓   |
| 229 Mrs. Gibson     | 30  | ✓   | 229 Mrs. Gibson        | 30  | ✓   | 229 Mrs. Gibson     | 30  | ✓   | 229 Mrs. Gibson        | 30  | ✓   |
| 230 Mrs. Hall       | 25  | ✓   | 230 Mrs. Hall          | 25  | ✓   | 230 Mrs. Hall       | 25  | ✓   | 230 Mrs. Hall          | 25  | ✓   |
| 231 Mrs. Jackson    | 20  | ✓   | 231 Mrs. Jackson       | 20  | ✓   | 231 Mrs. Jackson    | 20  | ✓   | 231 Mrs. Jackson       | 20  | ✓   |
| 232 Mrs. Johnson    | 15  | ✓   | 232 Mrs. Johnson       | 15  | ✓   | 232 Mrs. Johnson    | 15  | ✓   | 232 Mrs. Johnson       | 15  | ✓   |
| 233 Mrs. Lee        | 10  | ✓   | 233 Mrs. Lee           | 10  | ✓   | 233 Mrs. Lee        | 10  | ✓   | 233 Mrs. Lee           | 10  | ✓   |
| 234 Mrs. Miller     | 5   | ✓   | 234 Mrs. Miller        | 5   | ✓   | 234 Mrs. Miller     | 5   | ✓   | 234 Mrs. Miller        | 5   | ✓   |
| 235 Mrs. Moore      | 0   | ✓   | 235 Mrs. Moore         | 0   | ✓   | 235 Mrs. Moore      | 0   | ✓   | 235 Mrs. Moore         | 0   | ✓   |





| No. | NAME      |          | BIRTH |     | DEATH |     | AGE   |        | SEX  |        | RACE   |       | RELIGION |              | EDUCATION  |      | OCCUPATION |           | MARRIAGE |         | CHILDREN |       | SOURCES  |       |
|-----|-----------|----------|-------|-----|-------|-----|-------|--------|------|--------|--------|-------|----------|--------------|------------|------|------------|-----------|----------|---------|----------|-------|----------|-------|
|     | First     | Last     | Month | Day | Month | Day | Years | Months | Days | Male   | Female | White | Colored  | Other        | Elementary | High | College    | Prof.     | Other    | Married | Single   | Widow | Divorced | Other |
| 271 | John      | Smith    | 1875  | 12  | 1925  | 12  | 50    | 0      | 0    | Male   |        | White |          | Protestant   | High       |      |            | Teacher   | Married  |         | 2        |       |          |       |
| 272 | Mary      | Johnson  | 1880  | 08  | 1930  | 08  | 50    | 0      | 0    | Female |        | White |          | Catholic     | High       |      |            | Homemaker | Married  |         | 1        |       |          |       |
| 273 | Robert    | Williams | 1878  | 03  | 1928  | 03  | 50    | 0      | 0    | Male   |        | White |          | Methodist    | High       |      |            | Engineer  | Married  |         | 3        |       |          |       |
| 274 | Elizabeth | Brown    | 1882  | 11  | 1932  | 11  | 50    | 0      | 0    | Female |        | White |          | Anglican     | High       |      |            | Nurse     | Married  |         | 2        |       |          |       |
| 275 | James     | Davis    | 1876  | 05  | 1926  | 05  | 50    | 0      | 0    | Male   |        | White |          | Baptist      | High       |      |            | Farmer    | Married  |         | 1        |       |          |       |
| 276 | Anna      | Miller   | 1885  | 02  | 1935  | 02  | 50    | 0      | 0    | Female |        | White |          | Presbyterian | High       |      |            | Librarian | Married  |         | 2        |       |          |       |
| 277 | William   | Wilson   | 1879  | 09  | 1929  | 09  | 50    | 0      | 0    | Male   |        | White |          | Episcopal    | High       |      |            | Physician | Married  |         | 3        |       |          |       |
| 278 | Charlotte | Moore    | 1881  | 04  | 1931  | 04  | 50    | 0      | 0    | Female |        | White |          | Quaker       | High       |      |            | Writer    | Married  |         | 1        |       |          |       |
| 279 | Thomas    | Anderson | 1877  | 10  | 1927  | 10  | 50    | 0      | 0    | Male   |        | White |          | Presbyterian | High       |      |            | Engineer  | Married  |         | 2        |       |          |       |
| 280 | Margaret  | Clark    | 1883  | 01  | 1933  | 01  | 50    | 0      | 0    | Female |        | White |          | Anglican     | High       |      |            | Teacher   | Married  |         | 1        |       |          |       |
| 281 | John      | White    | 1874  | 06  | 1924  | 06  | 50    | 0      | 0    | Male   |        | White |          | Baptist      | High       |      |            | Farmer    | Married  |         | 3        |       |          |       |
| 282 | Elizabeth | Green    | 1886  | 03  | 1936  | 03  | 50    | 0      | 0    | Female |        | White |          | Methodist    | High       |      |            | Nurse     | Married  |         | 2        |       |          |       |
| 283 | Robert    | Black    | 1878  | 12  | 1928  | 12  | 50    | 0      | 0    | Male   |        | Black |          | Protestant   | High       |      |            | Engineer  | Married  |         | 1        |       |          |       |
| 284 | Mary      | Gray     | 1884  | 07  | 1934  | 07  | 50    | 0      | 0    | Female |        | White |          | Anglican     | High       |      |            | Homemaker | Married  |         | 2        |       |          |       |
| 285 | James     | Lee      | 1876  | 04  | 1926  | 04  | 50    | 0      | 0    | Male   |        | White |          | Baptist      | High       |      |            | Farmer    | Married  |         | 3        |       |          |       |
| 286 | Anna      | Scott    | 1882  | 11  | 1932  | 11  | 50    | 0      | 0    | Female |        | White |          | Presbyterian | High       |      |            | Librarian | Married  |         | 1        |       |          |       |
| 287 | William   | King     | 1879  | 08  | 1929  | 08  | 50    | 0      | 0    | Male   |        | White |          | Episcopal    | High       |      |            | Physician | Married  |         | 2        |       |          |       |
| 288 | Charlotte | Wright   | 1881  | 05  | 1931  | 05  | 50    | 0      | 0    | Female |        | White |          | Quaker       | High       |      |            | Writer    | Married  |         | 1        |       |          |       |
| 289 | Thomas    | Evans    | 1877  | 10  | 1927  | 10  | 50    | 0      | 0    | Male   |        | White |          | Presbyterian | High       |      |            | Engineer  | Married  |         | 3        |       |          |       |
| 290 | Margaret  | Roberts  | 1883  | 01  | 1933  | 01  | 50    | 0      | 0    | Female |        | White |          | Anglican     | High       |      |            | Teacher   | Married  |         | 1        |       |          |       |
| 291 | John      | Turner   | 1874  | 06  | 1924  | 06  | 50    | 0      | 0    | Male   |        | White |          | Baptist      | High       |      |            | Farmer    |          |         |          |       |          |       |

| Item                                             | Quantity                                   | Unit Price | Total                                   |
|--------------------------------------------------|--------------------------------------------|------------|-----------------------------------------|
| 1000 lbs. of                                     | 1000                                       | 1.00       | 1000.00                                 |
| 500 lbs. of                                      | 500                                        | 1.00       | 500.00                                  |
| 250 lbs. of                                      | 250                                        | 1.00       | 250.00                                  |
| 125 lbs. of                                      | 125                                        | 1.00       | 125.00                                  |
| 62.5 lbs. of                                     | 62.5                                       | 1.00       | 62.50                                   |
| 31.25 lbs. of                                    | 31.25                                      | 1.00       | 31.25                                   |
| 15.625 lbs. of                                   | 15.625                                     | 1.00       | 15.625                                  |
| 7.8125 lbs. of                                   | 7.8125                                     | 1.00       | 7.8125                                  |
| 3.90625 lbs. of                                  | 3.90625                                    | 1.00       | 3.90625                                 |
| 1.953125 lbs. of                                 | 1.953125                                   | 1.00       | 1.953125                                |
| 0.9765625 lbs. of                                | 0.9765625                                  | 1.00       | 0.9765625                               |
| 0.48828125 lbs. of                               | 0.48828125                                 | 1.00       | 0.48828125                              |
| 0.244140625 lbs. of                              | 0.244140625                                | 1.00       | 0.244140625                             |
| 0.1220703125 lbs. of                             | 0.1220703125                               | 1.00       | 0.1220703125                            |
| 0.06103515625 lbs. of                            | 0.06103515625                              | 1.00       | 0.06103515625                           |
| 0.030517578125 lbs. of                           | 0.030517578125                             | 1.00       | 0.030517578125                          |
| 0.0152587890625 lbs. of                          | 0.0152587890625                            | 1.00       | 0.0152587890625                         |
| 0.00762939453125 lbs. of                         | 0.00762939453125                           | 1.00       | 0.00762939453125                        |
| 0.003814697265625 lbs. of                        | 0.003814697265625                          | 1.00       | 0.003814697265625                       |
| 0.0019073486328125 lbs. of                       | 0.0019073486328125                         | 1.00       | 0.0019073486328125                      |
| 0.00095367431640625 lbs. of                      | 0.00095367431640625                        | 1.00       | 0.00095367431640625                     |
| 0.000476837158203125 lbs. of                     | 0.000476837158203125                       | 1.00       | 0.000476837158203125                    |
| 0.0002384185791015625 lbs. of                    | 0.0002384185791015625                      | 1.00       | 0.0002384185791015625                   |
| 0.00011920928955078125 lbs. of                   | 0.00011920928955078125                     | 1.00       | 0.00011920928955078125                  |
| 0.000059604644775390625 lbs. of                  | 0.000059604644775390625                    | 1.00       | 0.000059604644775390625                 |
| 0.0000298023223876953125 lbs. of                 | 0.0000298023223876953125                   | 1.00       | 0.0000298023223876953125                |
| 0.00001490116119384765625 lbs. of                | 0.00001490116119384765625                  | 1.00       | 0.00001490116119384765625               |
| 0.000007450580596923828125 lbs. of               | 0.000007450580596923828125                 | 1.00       | 0.000007450580596923828125              |
| 0.0000037252902984619140625 lbs. of              | 0.0000037252902984619140625                | 1.00       | 0.0000037252902984619140625             |
| 0.00000186264514923095703125 lbs. of             | 0.00000186264514923095703125               | 1.00       | 0.00000186264514923095703125            |
| 0.000000931322574615478515625 lbs. of            | 0.000000931322574615478515625              | 1.00       | 0.000000931322574615478515625           |
| 0.0000004656612873077392578125 lbs. of           | 0.0000004656612873077392578125             | 1.00       | 0.0000004656612873077392578125          |
| 0.00000023283064365386962890625 lbs. of          | 0.00000023283064365386962890625            | 1.00       | 0.00000023283064365386962890625         |
| 0.000000116415321826934814453125 lbs. of         | 0.000000116415321826934814453125           | 1.00       | 0.000000116415321826934814453125        |
| 0.0000000582076609134674072265625 lbs. of        | 0.0000000582076609134674072265625          | 1.00       | 0.0000000582076609134674072265625       |
| 0.00000002910383045673370361328125 lbs. of       | 0.00000002910383045673370361328125         | 1.00       | 0.00000002910383045673370361328125      |
| 0.000000014551915228366851806640625 lbs. of      | 0.000000014551915228366851806640625        | 1.00       | 0.000000014551915228366851806640625     |
| 0.0000000072759576141834259033203125 lbs. of     | 0.0000000072759576141834259033203125       | 1.00       | 0.0000000072759576141834259033203125    |
| 0.00000000363797880709171295166015625 lbs. of    | 0.00000000363797880709171295166015625      | 1.00       | 0.00000000363797880709171295166015625   |
| 0.000000001818989403545856475830078125 lbs. of   | 0.000000001818989403545856475830078125     | 1.00       | 0.000000001818989403545856475830078125  |
| 0.0000000009094947017729282379150390625 lbs. of  | 0.0000000009094947017729282379150390625    | 1.00       | 0.0000000009094947017729282379150390625 |
| 0.00000000045474735088646411895751953125 lbs. of | 0.00000000045474735088646411895751953125</ |            |                                         |

[illegible][illegible]

DATE      TIME      LOCATION

NAME      ADDRESS      CITY

STATE      ZIP      PHONE

**100-443887-100**

\_\_\_\_\_

2

ANALYSIS OF RESULTS OF 1947 AND 1948 INVESTIGATIONS (Continued)

| 1947 INVESTIGATION |      |      |      |      | 1948 INVESTIGATION |      |      |      |      |
|--------------------|------|------|------|------|--------------------|------|------|------|------|
| 1st                | 2nd  | 3rd  | 4th  | 5th  | 1st                | 2nd  | 3rd  | 4th  | 5th  |
| Step               | Step | Step | Step | Step | Step               | Step | Step | Step | Step |
| 17                 | 6    | 21   | 22   | 51   | 279                |      |      |      |      |
| 18                 | 0    | 7    | 40   | 67   | 128                |      |      |      |      |
| 19 & 20            | 1    | 1    | 6    | 0    | 8                  |      |      |      |      |
| 21 & 22            | 0    | 0    | 1    | 1    | 2                  |      |      |      |      |
| TOTALS             | 7    | 29   | 129  | 129  | 347                |      |      |      |      |
| FORWARD -          |      |      |      |      | FORWARD -          |      |      |      |      |
| 17                 |      |      |      |      | 17                 |      |      |      |      |
| 21                 |      |      |      |      | 21                 |      |      |      |      |
| 27                 |      |      |      |      | 27                 |      |      |      |      |
| 61                 |      |      |      |      | 61                 |      |      |      |      |
| 12                 |      |      |      |      | 12                 |      |      |      |      |
| 1                  |      |      |      |      | 1                  |      |      |      |      |
| 6                  |      |      |      |      | 6                  |      |      |      |      |
| 2                  |      |      |      |      | 2                  |      |      |      |      |
| 25                 |      |      |      |      | 25                 |      |      |      |      |
| TOTAL -            |      |      |      |      | TOTAL -            |      |      |      |      |
| 347                |      |      |      |      | 347                |      |      |      |      |

TOTAL ANALYSED - 1290 CASES  
 FORWARD CASES - 347 OF 1290

ALL CASES INVESTIGATED  
 ALL CASES REPORTED

| 1948 INVESTIGATION |      |      |
|--------------------|------|------|
| 1st                | 2nd  | 3rd  |
| Step               | Step | Step |
| 11                 | 16   | 29   |

1948 1 2, 3, 4 - Continued 22 1, 2, 3 - No history of contact.  
 These 22 1, 2, 3's are in addition to 347 previous cases  
 having that infection.

# POSITIVE CASES, BY

|                  | <u>THIRD STAGE</u> |           |           |           |           | <u>SECOND STAGE</u> |           |           |           |           |
|------------------|--------------------|-----------|-----------|-----------|-----------|---------------------|-----------|-----------|-----------|-----------|
|                  | App.<br>A          | App.<br>B | App.<br>C | App.<br>D | App.<br>E | App.<br>A           | App.<br>B | App.<br>C | App.<br>D | App.<br>E |
| Category         | App.               | Tot.      | App.      | Tot.      | Total     | App.                | Tot.      | App.      | Tot.      | Total     |
| Church Pulpit    |                    |           | 1         |           | 1         | 1                   |           |           |           | 1         |
| Brake lining     |                    |           |           |           |           |                     |           |           |           |           |
| Textiles         |                    |           | 3         | 1         | 4         | 5                   |           | 3         |           | 8         |
| Rope Covering    |                    |           |           |           | 0         |                     |           | 6         | 1         | 7         |
| A. Cement        |                    |           |           |           |           |                     |           |           |           |           |
| Paper Mill       |                    |           | 1         |           | 1         | 1                   |           | 2         |           | 2         |
| Refractory       |                    |           |           |           | 0         |                     |           | 4         |           | 4         |
| Roofing & Siding |                    |           | 1         |           | 1         |                     |           | 4         |           | 4         |
| Ford Engines     |                    |           |           |           | 0         |                     |           | 1         |           | 1         |
| Coasting         |                    |           |           |           | 0         |                     |           | 1         |           | 1         |
| Miscellaneous    |                    |           |           |           | 0         |                     |           | 1         |           | 1         |
| Grand Total      | 0                  | 0         | 6         | 1         | 7         | 7                   | 0         | 21        | 1         | 29        |

NOTE: All cases from 1941-1942.

All cases abstracted.

# DEPARTMENTS

## FIRST STAGE

## LARRY STAGE

|      | Adm.<br>A | FE<br>A | Total | Adm.<br>A | FE<br>A | Total | TOTALS |     |     |     |
|------|-----------|---------|-------|-----------|---------|-------|--------|-----|-----|-----|
| Adm. | T.L.      | FE      | T.L.  | Adm.      | T.L.    | FE    | TOTALS |     |     |     |
|      |           | 8       | 1     | 9         | 1       | 4     | 5      | 26  |     |     |
| 20   |           | 32      | 2     | 30        | 29      | 1     | 35     | 135 |     |     |
| 8    |           | 12      | 1     | 22        | 7       | 8     | 25     | 437 |     |     |
| 1    | 1         | 22      | 1     | 22        | 2       | 5     | 7      | 31  |     |     |
| 8    |           | 9       |       | 27        | 6       | 2     | 8      | 29  |     |     |
| 7    |           | 27      |       | 26        | 7       | 7     | 24     | 43  |     |     |
|      |           | 4       |       | 4         | 2       | 1     | 3      | 8   |     |     |
| 1    |           | 20      |       | 22        | 8       | 5     | 13     | 26  |     |     |
| 1    |           | 4       | 1     | 6         | 4       | 5     | 9      | 26  |     |     |
| 25   | 1         | 200     | 6     | 202       | 66      | 1     | 22     | 0   | 139 | 327 |

11

EXHIBIT 100-1000  
EXHIBIT 100-1000

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

EXHIBIT 100-1000

EXHIBIT 100-1000

2

11

3

5

10

RECEIVED THE  
OFFICE OF THE  
ATTORNEY GENERAL

RECEIVED THE  
OFFICE OF THE  
ATTORNEY GENERAL

RECEIVED THE  
OFFICE OF THE  
ATTORNEY GENERAL

RECEIVED THE  
OFFICE OF THE  
ATTORNEY GENERAL

RECEIVED THE  
OFFICE OF THE  
ATTORNEY GENERAL

RECEIVED THE OFFICE OF THE ATTORNEY GENERAL

1

2

3

4

5

6

7

8

RECEIVED THE OFFICE OF THE ATTORNEY GENERAL

RECEIVED THE OFFICE OF THE ATTORNEY GENERAL

RECEIVED THE OFFICE OF THE ATTORNEY GENERAL

22



३ ४ ५ ६  
 वा.सं. वा.सं. वा.सं. वा.सं.  
 वा.सं. वा.सं. वा.सं. वा.सं.

७ ८ ९ १०  
 वा.सं. वा.सं. वा.सं. वा.सं.  
 वा.सं. वा.सं. वा.सं. वा.सं.

१ २ ३ ४ ५ ६  
 वा.सं. वा.सं. वा.सं. वा.सं. वा.सं. वा.सं.  
 वा.सं. वा.सं. वा.सं. वा.सं. वा.सं. वा.सं.

(१००० अक्षर)

वा.सं. वा.सं. वा.सं. वा.सं. वा.सं. वा.सं.

७

THE SARANAC LABORATORY  
FOR THE STUDY OF TUBERCULOSIS  
OF THE EDWARD L. TRUDEAU FOUNDATION  
SARANAC LAKE, N.Y.

SEP 29 P.M.

September 28, 1944

Dr. George M. Wheatley  
Medical Director  
Metropolitan Life Insurance Company  
New York, New York

Dear Dr. Wheatley:

I have recently been in communication with Mr. Vandiver Brown and the local attorneys of the Canadian Asbestos interests regarding the matter of your proposed investigation of the incidence of tuberculosis in the Province of Quebec. I have assured these gentlemen that it would be most desirable from every standpoint if one could obtain more accurate information on the incidence of tuberculosis in this section of Canada. The local doctors appreciate that they have a problem but I am not sure that they realize how serious it is. From the claims standpoint in the asbestos industry I think there is a tendency to attribute much of this infection to exposure to asbestos dust. I don't believe that this opinion can be substantiated because in other sections of this country where there is much more asbestosis than there is in Quebec, the tuberculosis rates are not excessive. In fact in North Carolina there is less tuberculosis in those exposed to asbestos dust than in all the other industries.

I believe it would be most desirable if your organization could establish both male and female rates in the communities of Thetford and Asbestos and also as controls determine rates in other industrial towns of similar size. This would afford the information which is badly needed on the tuberculosis rates among those exposed to asbestos and provide adequate controls. I would be very much surprised if you found any excess of tuberculosis in the exposed male population of the community where asbestos is mined and milled. A bulletin published by the Metropolitan setting forth these findings would do much to clarify the local opinions on this matter.

We have completed our counts on Mr. Fehnel's samples of the dust taken at Manville and find that the total concentrations are apparently low. Most of the samples contain appreciable amounts of asbestos fibre and we are looking forward to making a comparative study of the material that he will collect in Quebec in the coming weeks.

With best regards,

Sincerely yours,



Leroy U. Gardner, M. D.  
Director

**MET** 0886

PRODUCED S/C/M/Ms

LUG:RH cc to Mr. Brown

C O P Y F O R M

INITIALS

DATE

8/11

BOX NUMBER

S-1352

SEGMENT NO.

REQUESTING PARTY

BC

N O T E S

MET SURVEY OF DUST AT MANVILLE, 1944  
(V. BROWN MEMO)

October 12, 1944.

MEMORANDUM

Re: Dust Problems

Dr. Gardner paid an unexpected call on me this afternoon and we discussed several matters on which I made a few notes, as follows:

1. Diatomaceous Earth Experiments -

A room has not been available up to the present time for conducting the dust-settling experiments with the calcined material. However, the experiments will commence next Monday and will require several weeks, since Dr. Gardner desires to have them conducted on a series of days of high and low atmospheric humidity.

If the calcined dust behaves in the same manner as the natural earth, Dr. Gardner is inclined to believe it will be unnecessary to conduct further animal experiments with the calcined dust. This is because he feels that the failure of the natural earth to produce any marked results was due to the tendency of the material to flocculate and to be excluded from the lungs because of the moisture in the respiratory tract. However, if this material does not behave the same as the natural earth during the settling experiments, it will probably be desirable to conduct another series of animal experiments. In this event it may be necessary to supplement our original \$5,000 contribution so as to cover the cost of the additional work.

2. Asbestos Experiments -

The samples taken by Mr. Fehnel at Manville have been analyzed for the purpose of determining (a) the total number of particles of all types; (b) the number of particles of fibre and the number of non-fibrous particles; and (c) the sizes of the particles of each type.

The samples to be taken by Mr. Fehnel at the Asbestos Factory will be analyzed in a similar manner at Garano and a comparison obtained which Dr. Gardner hopes will throw some light on the relatively small number of films at Asbestos showing marked fibrosis in comparison with the films of employees at Manville.

Incidentally, Dr. Gardner indicated he thought a very good job of dust elimination had been done at Manville, since very few of the dust samples showed any very high concentrations.

- 7 -

3. California State Industrial Accident Commission's  
Proposed Safety Orders relating to "Injurious  
Substances"-

I showed Dr. Gardner proposed Order No.4, which would require the following label upon any materials containing as high as 1% of asbestos or silica where they were to be used under conditions likely to give rise to dust:

"WARNING: This Material may give Rise to  
Poisonous or Injurious Dust. AVOID BREATHING  
IT."

Dr. Gardner's initial reaction was, like mine, to say "absurd". These dusts are not like mineral poisons and can only be called "poisonous" in a figurative sense which distorts the meaning of that word in its usually accepted sense. Mineral poisons produce an immediate harmful result, whereas dusts require exposure to exceedingly high concentrations over long periods of time. He thinks that the use of any such label as the proposed order would frighten a great many people and do absolutely no good. He stated that he would consider such a label not only useless but also misleading even if applied to a material containing 100% quartz, which is the worst of the non-metallic dusts.

When I suggested that perhaps in making our objections we suggest a reasonable compromise he stated that he could see no reason why any such label or one approximating it should be applied to materials containing these dusts in any percentage, to say nothing of 1%. When I told him that it would probably call for a label on asbestos-cement sheets, which are sometimes sawed with the resultant production of a little dust, he stated that this example pointed up the absurdity of the proposal.

If any such Order should issue, however, silica, slate, talc and asbestos should certainly not be lumped together with the other substances mentioned under proposed Order #4, some of which are true poisons. He stated that there was no reason for including them along with true poisons such as chromic acid, lead and some of the others referred to in Order No.4. He further pointed out that since the "injury" produced by asbestos dust is a mechanical irritation, with no chemical reaction (as occurs in the case of silica) it could not possibly be called a poison. Talc he considers non-injurious under any circumstances and I believe he has conducted experiments and made surveys upon which he bases this opinion.

Vandiver Brown.

C O P Y

ED

THE SARANAC LABORATORY  
FOR THE STUDY OF TUBERCULOSIS

SARANAC LAKE, N.Y.

July 15, 1944

Mr. Vandiver Brown  
Johns-Manville Corporation  
22 East 40th Street  
New York, New York

Dear Mr. Brown:

I am happy to inform you that we have just returned from a most interesting trip to Asbestos, Quebec. I took with me our roentgenologist, Dr. Robert, also Dr. Vestal of the North Carolina State Industrial Commission as he has had a lot of experience in this field and has seen a great deal of real asbestosis. In company with Dr. Stevenson we reviewed and read between two and three hundred of the X-ray films in his files. We found only two cases out of the lot which could be diagnosed as questionable first degree asbestosis. I was greatly relieved to discover that the two experts did corroborate me on previous observations that asbestosis was a rarity in the Asbestos-Thetford area.

We are still at a loss to explain the situation because of the conditions in the textile mill which certainly should be capable of causing characteristic disease in exposed workmen. The only difference that we can see between this mill and those in similar plants in the U. S. is the absence of African fibre. However, I doubt whether this is the significant factor.

Mr. Fehnel, of the Metropolitan, writes me that he is planning to go to Asbestos for another survey in August. He will collect air-borne samples of dust; one half of each will be sent to this laboratory and he will retain the other half for analysis. We hope that by making such a study in Quebec and comparing it with similar samples at Manville that we may arrive at some conclusion.

While we were up there it seemed highly desirable if I were to report our experimentation with asbestosis I should make mention of the clinical and X-ray experience on the North American Continent. In order to do this in an authoritative manner I should have the collaboration of the clinicians and roentgenologists. I proposed to Drs. Vestal and Robert that they join me in the venture. They would be very glad to do so and I think we might produce something that would be definitely worth while. It was agreed that it might be desirable to have our Dr. Robert review all the films that have been taken at Thetford. Dr. Stevenson felt that this could be done and would be very glad to have them sent down to us. This would give us a basis for statistical analysis and information on the incidence of various X-ray abnormalities.

Before attempting the publication, of course, we must have the further information which Mr. Fehnel's counts may supply and we must examine more films from the American textile plants. I trust that this proposal may meet with your approval.

Very truly yours,

Leroy C. Gardner, M. D.  
Director

- R M 73 C A 2

IHF

- Research

J-M 1948-1970

MANVILLE PLANT STUDY

1945

REQUEST TO MET

7  
0  
4

# COPY FORM

INITIALS

DATE

BOX NUMBER

S 704

SEGMENT NO.

REQUESTING PARTY

BARRY CASTLEMAN

## NOTES



## Mex Life Survey - 1-11

### Insurance

- Misc correspondence 41-87;

listings of policies; Maritime  
Commission supp Budger Estimates  
for Insurance; War Dept Insu Rqmts;  
Manual of Instructions for purchase;  
administration of insu; insu policies;  
red transfer sheets; int answers

C O P Y F O R M

INITIALS

DATE

BOX NUMBER

S 720

SEGMENT NO.

REQUESTING PARTY

Barry Castleman

N O T E S

IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF ILLINOIS  
EASTERN DIVISION

JOHN D. McDANIEL, et al.,

Plaintiffs

-vs-

JOHNS-MANVILLE, et al.,

Defendants

NO. 77 C 3534

SEP 17 79 AM

NOTICE OF FILING

TO: ALL ATTORNEYS OF RECORD  
(See attached Rider)

RECEIVED  
DEC 16 1980  
LEGAL DEPARTMENT  
JOHNSON, CUSACK & BELL  
LIMITED

PLEASE TAKE NOTICE that on September 13, 1979  
there was filed with the Clerk of the United States District  
Court, for the Northern District of Illinois, Eastern Division

ANSWERS TO INTERROGATORIES

a copy of which is attached hereto.

Orville A. Chrysler  
Attorney for Defendant,  
METROPOLITAN LIFE INSURANCE  
COMPANY

BAKER & MCKENZIE  
130 East Randolph Drive  
Chicago, Illinois 60601  
312/565-0025 861-2792

State of Illinois )  
                              ) SS.  
County of Cook        )

The undersigned, on oath, states that a copy of the  
above and foregoing Notice of Filing was served on all attorneys  
of record by mailing a copy on this 13th day  
of September, 1979.

Baker & McKenzie  
Subscribed and Sworn to this 12 day of September, 1979.

COONEY & STENN  
77 West Washington Street  
Chicago, Illinois 60602

Lord, Bissel & Brook  
115 South LaSalle Street  
Chicago, Illinois 60603

Hinshaw, Culbertson, Moelmann,  
Hoban & Fuller  
69 West Washington Street  
Suite 2700  
Chicago, Illinois 60602

Peterson, Ross, Schloerb & Seidel  
200 East Randolph - Suite 7300  
Chicago, Illinois

Kralovec, Sweeney, Marquard & Doyle  
39 South LaSalle Street  
Chicago, Illinois 60603

Johnson, Cusack & Bell, Ltd.  
One North LaSalle Street  
Chicago, Illinois 60602

Clausen, Miller, Gorman, Caffrey  
& Witous  
5400 Sears Tower  
Chicago, Illinois 60606

Darci L. Rock  
Trial Attorney, Torts Branch  
Civil Division  
U.S. Department of Justice  
Washington, D.C. 20530

Isham, Lincoln & Beale  
One First National Plaza  
Suite 4200  
Chicago, Illinois 60603

Edward Moran  
Assistant U.S. Attorney  
Everett McKinley Dirksen Bldg.  
219 South Dearborn Street  
Room 1500 South  
Chicago, Illinois 60604

Epton, Mullen, Miller & Druth  
69 West Washington Street  
Chicago, Illinois

Jenner & Block  
One IBM Plaza - 44th Floor  
Chicago, Illinois 60611

Shaheen, Lundberg, Callahan  
& Burke  
20 North Wacker Drive  
Chicago, Illinois 60606

4/10/2022

Defendants.)

i) Surveys of asbestos plants started in 1934 and concluded during 1936. Such investigations included recheck surveys of some of the plants to determine what improvements, if any, had been effected by the

installation of certain equipment designed to control the dust, as well as surveys of a number of new plants, particularly those on the Pacific Coast. Plants studied for Johns-Manville Corp. in 1936 were those located in California at Redwood City, Pittsburg, Los Angeles, and Lompoc.

- ii) During 1937, 1025 x-ray films of the chests of employers of the Asbestos Quebec Plant of Johns-Manville Corp. were read and interpreted and a report was sent to Mr. Vandiver Brown, attorney, at Johns-Manville Corp.'s New York City office.
- iii) During 1941, 1942, and 1943, requests for plant surveys and information were made by and given to Johns-Manville Corp.
- iv) In 1945, Mr. W.G. Hazard, Director of the Industrial Hygiene Division of the Department of Health of New Jersey, was ordered by the War Production Board to make an investigation of the Johns-Manville plant at Manville, N.J.. Mr. Hazard accepted the findings of the inspection made by the Industrial Health Section of Metropolitan Life Insurance Company, made his report to the War Production Board, and the case was closed.
- v) In 1946, tests were conducted on certain days of the week for three consecutive weeks in the carding room of the Johns-Manville Plant at Manville, N.J..
- vi) In 1947, 1948, 1949, and 1950, surveys of a number of Johns-Manville Corp. plants were conducted. Two letters from Johns-Manville Corp. regarding such surveys are attached.

However, in response to subparagraphs (c) through (f), the records of the specific nature, dates, manner, and results of such tests and studies are no longer contained in the files of Metropolitan Life Insurance Company. Investigation continues.

2. Has Metropolitan Life Insurance Company ever undertaken an inspection of any Johns-Manville plant? If answer is affirmative, state:

- (a) List the date and place of such inspection.
- (b) Identity of the person making such inspection.
- (c) Attach to your answers copies of all reports or memoranda of inspection.
- (d) Attach copies of your answers to interrogatories of writings and documents referring to said inspection.

ANSWER: See answers to Interrogatory No. 1. Investigation  
( continues.

3. Has Metropolitan Life Insurance Company been sued in any other Court in the United States on allegations similar to the ones set forth in plaintiff's Complaint in the above entitled cause? If answer is affirmative, state:

- (a) Name of plaintiff(s).
- (b) Court number and Court where case is pending.
- (c) Name and address of plaintiff's attorney.

ANSWER: Yes. Attached is a list of all information requested.

4. Has Metropolitan Life Insurance Company ever conducted studies concerning the potential danger of breathing significant amounts of asbestos fibers? If answer is affirmative, state:

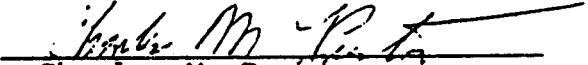
- (a) Date or dates of said studies.
- (b) Name and address of person or persons conducting studies.
- (c) Location at which the studies were performed.
- (d) Name and address of person or persons to whom reports were made of said studies.
- (e) Attach to your answers copies of all studies, reports and/or recommendations made by Metropolitan Life Insurance Company.

ANSWER: Yes. Based on, where available, the annual reports of the Industrial Health Section of Metropolitan Life Insurance Company for the years 1924 through 1951, copies of the relevant excerpts of which are attached, the following references to studies conducted by Metropolitan Life Insurance Company concerning the potential danger of breathing significant amounts of asbestos fibers can be found, and attached is a copy, where available, of each such study:

- i) Study of the Raybestos-Manhattan Plant in Passaic, N.J. in 1934;
- ii) Studies of the Bridgeport and Stratford Plants of Raybestos-Manhattan in 1930, 1935, 1936, and 1939;
- iii) Studies of the Raybestos Plants in Charleston, S.C. in 1930, 1934, and 1936;
- iv) Studies of the Raybestos Plants in Mannheim, Pa. in 1930, 1935, and 1939;
- v) A report of the physical examinations of asbestos workers at Thetford Mines, Quebec in 1930;
- vi) An article entitled "Effects of the Inhalation of Asbestos Dust on the Lungs of Asbestos Workers" by Dr. A.J. Lanza (now deceased) in 1935, a copy which was published in Public Health Reports and a copy issued directly to Johns-Manville Corp. .
- vii) An article entitled "Asbestosis" by Dr. A.J. Lanza published in the February 1, 1936 issue of the Journal of the American Medical Association.

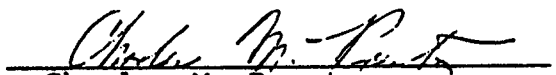
viii) An article entitled "Air Sampling of Asbestos Dust" by J. Wm. Fehnel (now deceased) of Metropolitan Life's Industrial Health Section published in an issue of Industrial Medicine in 1939.

Any other studies which were conducted are referred to in the copies of the excerpts of the annual reports of the Industrial Health Section. Based on information and belief, these and the above enumerated studies are the only incidents involving Metropolitan Life Insurance Company's conducting studies specifically concerning the dangers of breathing significant amounts of asbestos fibers. Investigation continues.

  
Charles M. Preston

State of New York       )  
                                  ) SS.  
County of                )

CHARLES PRESTON, being first duly sworn upon his oath, states that he is the Associate General Counsel for Metropolitan Life Insurance Company; and that he has read the above and foregoing answers to interrogatories and that the same are true to the best of his knowledge and belief.

  
Charles M. Preston

SUBSCRIBED AND SWORN to  
this 9th. day of August, 1979.

  
Notary Public

WILLIAM D. HONEST  
NOTARY PUBLIC, State of New York  
No. 31-4624475 Qual. in N. Y. County  
Certificate filed in New York County  
Commission Expires March 30, 1980

| Yr of Dx | No. Cases | Lengths of Service (yrs.)                                                                                                                                   |
|----------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1932     | 4         | 12(3), 14                                                                                                                                                   |
| 33       | -         |                                                                                                                                                             |
| 34       | -         |                                                                                                                                                             |
| 35       | -         |                                                                                                                                                             |
| 36       | -         |                                                                                                                                                             |
| 37       | -         |                                                                                                                                                             |
| 38       | -         |                                                                                                                                                             |
| 39       | 9         | 10(3), 11(2), 13, 15, 18, 21                                                                                                                                |
| 1940     | 4         | 3(2), 13, 17                                                                                                                                                |
| 41       | -         |                                                                                                                                                             |
| 42       | 2         | 23, 28                                                                                                                                                      |
| 43       | 3         | 2, 14, 27                                                                                                                                                   |
| 44       | 5         | 7, 9(2), 22, 34                                                                                                                                             |
| 45       | 7         | 4, 5, 8, 18, 22, 25, 36                                                                                                                                     |
| 46       | -         |                                                                                                                                                             |
| 47       | -         |                                                                                                                                                             |
| 48       | -         |                                                                                                                                                             |
| 49       | 1         | 30                                                                                                                                                          |
| 1950     | 7         | 14, 24(2), 30(2), 34(2)                                                                                                                                     |
| 51       | 27        | 4(2), 7(2), 8(2), 9(3), 10, 11, 12, 14, 16, 21, 22(3), 26, 27, 28(3), 29, 33, 38, 39                                                                        |
| 52       | 65        | 4(2), 6(4), 7, 8, 9, 10(4), 11(4), 12(2), 15(2), 16(5), 17(6), 18, 19(4), 22, 23(4), 24(2), 25(2), 27(2), 28(2), 29, 30, 31(3), 32(2), 33, 34(2), 35, 37(2) |
| 53       | 47        | 5, 6(3), 7, 10(2), 11(6), 12(3), 13(4), 14, 16(4), 17(2), 18, 20(3), 21, 23, 24, 25(2), 27(2), 28(2), 29, 30, 33, 34, 35, 37, 38                            |
| 54       | 41        | 7(2), 8, 11(2), 12, 14(4), 15, 17(4), 18, 19(2), 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 37, 38                                     |
| 55       | 1         | 1, 13, 19, 26, 27, 29, 33                                                                                                                                   |
| 56       | 17        | 6, 8, 10, 15, 16, 19(2), 20, 21, 33, 34, 36, 38(2)                                                                                                          |
| 57       | 16        | 5, 6, 11(3), 16, 21(3), 22, 27, 30(2), 34, 36, 37                                                                                                           |
| 58       | 10        | 9, 11, 15, 16, 18, 22(2), 28(2), 29                                                                                                                         |
| 59       | 16        | 12(2), 13(2), 14, 18, 19, 20, 23(2), 29, 34, 36, 40, 41, 43                                                                                                 |
| 1960     | 13        | 9, 12(2), 13, 14, 17, 24, 27, 30, 31(2), 36, 37                                                                                                             |
| 61       | 19        | 10, 11(2), 15, 18, 19(2), 23, 24, 26, 27, 29, 32, 33, 36, 37(2), 39, 49                                                                                     |
| 62       | 27        | 4, 13, 15(3), 16(4), 21(5), 23, 25(2), 26(3), 27, 29, 35, 38, 42, 43, 46                                                                                    |
| 63       | 14        | 12, 14, 15, 16, 20, 22(2), 25, 26, 27(2), 28, 34, 41                                                                                                        |
| 64       | 10        | 13(2), 14, 16, 18, 27, 28, 36(2), 37                                                                                                                        |
| 65       | 20        | 9(2), 15, 16, 17(2), 18, 19(4), 23, 24(3), 26, 29, 30, 31, 38                                                                                               |
| 66       | 14        | 11(2), 13, 15, 16(2), 18, 20, 25, 27, 30, 33(2), 43                                                                                                         |
| 67       | 11        | 14, 15, 20(2), 21(3), 22, 23(2), 24, 26(2), 28(2), 29, 31(2), 34(2), 38, 41(2), 42(2), 46                                                                   |
| 68       | 15        | 1, 15, 17, 18, 20, 22, 23, 25, 27, 28(2), 31, 32, 35(2), 43                                                                                                 |
| 69       | 38        | 14, 17(4), 22(8), 23(4), 24, 27(3), 28, 29(3), 30, 32, 33(2), 34, 36, 40(4), 41(2), 45                                                                      |
| 1970     | 16        | 15, 16, 20, 23(4), 24(2), 29, 30, 31(2), 33, 34, 42                                                                                                         |
| 71       | 6         | 17, 18, 20, 21, 24, 29                                                                                                                                      |
| 72       | -         |                                                                                                                                                             |
| 73       | 2         | 37, 48                                                                                                                                                      |
| 74       | 10        | 26, 27(3), 28, 29, 30, 33, 34, 38                                                                                                                           |
| TOTAL    |           |                                                                                                                                                             |

PRINTED  
J-M 83



Johns-Manville

## Internal Correspondence

To: G. E. PARKER

Date: NOV. 26, 1975

From: W. B. REITZE

Copies: P. KOTIN, MD

Subject: OCCUPATIONAL DISEASE INFORMATION - MANVILLE PLANT

SOME TIME AGO I DISCUSSED THE DATA CONTAINED ON THE ATTACHED SHEET WITH YOU. THIS IS A LIST OF ALL THE PNEUMOCONIOSIS CASES AT THE MANVILLE/FINDERNE COMPLEX.

THE FIRST COLUMN INDICATES THE DATE OF DIAGNOSIS. THE SECOND COLUMN DESIGNATES THE NUMBER OF CASES DIAGNOSED IN THAT PARTICULAR YEAR. THE THIRD COLUMN INDICATES LENGTHS OF SERVICE IN YEARS. IN OTHER WORDS, IN 1932, FOUR CASES OF PNEUMOCONIOSIS WERE DIAGNOSED. THREE OF THOSE FOUR CASES HAD 12 YEARS' EXPERIENCE. ONE HAD 15 YEARS' EXPERIENCE. IN 1943, THREE CASES WERE IDENTIFIED-- ONE CASE WITH ONLY TWO YEARS OF EXPOSURE, THE SECOND WITH 14 YEARS OF EXPOSURE, AND THE THIRD WITH 27 YEARS OF EXPOSURE. AS YOU CAN SEE, MANY OF THE EMPLOYEES IN THOSE EARLY YEARS HAD VERY FEW YEARS OF EXPOSURE BEFORE THEY CONTRACTED SOME DEGREE OF PNEUMOCONIOSIS.

AT THE BOTTOM OF THE PAGE IN THE YEAR 1971, SIX CASES WERE IDENTIFIED. IN 1972, NO CASES WERE IDENTIFIED. IN 1973, ONLY TWO CASES WERE IDENTIFIED. IN 1974, TEN CASES WERE IDENTIFIED. THERE ARE MANY CONCLUSIONS THAT COULD BE DRAWN FROM THIS DATA. THERE ARE MANY EXTRAPOLATIONS THAT COULD BE MADE FROM THIS DATA.

AS YOU MAY KNOW, WE ARE CURRENTLY ENGAGED IN A VERY MASSIVE STUDY OF OUR MANVILLE POPULATION TO FURTHER OUR UNDERSTANDING OF THE ASBESTOS-RELATED DISEASE QUESTION. THIS STUDY IS BEING CONDUCTED UNDER THE SUPERVISION OF DR. JERRY CHASE WITH ON-LOCATION ASSISTANCE OF CLIFF SHECKLER. BECAUSE OF THE SIZE OF THE STUDY, WE WILL NOT HAVE THE COMPLETED RESULTS FOR APPROXIMATELY THREE TO FOUR YEARS. HOWEVER, MANY ANSWERS SHOULD BE FORTHCOMING AT THAT TIME.

*WBR*

W. B. REITZE

ATTACH.

PRIVILEGED  
J-M 83

0 0 0 0 0 1 1 0 0 8 5

# METROPOLITAN LIFE INSURANCE COMPANY

LEROY A. LINCOLN, *President*

ONE MADISON AVENUE, NEW YORK 10, N.Y.

WILLIAM J. McCONNELL, M.D.  
ASSISTANT MEDICAL DIRECTOR

February 16, 1951

Mr. Hugh M. Jackson  
Johns Manville Products Corporation  
22 East 40 Street  
New York 16, N.Y.

Dear Mr. Jackson:

The following are analyses of air samples collected in the Manville Plant by Mr. E. Culwick on February 2, 1951, and received in our Laboratory on February 9, 1951.

| Sample No. | Date   | Description                                                                                              | Dust M.P.P.C.F.                  | Percent Fibre | Fibre M.P.P.C.F. |
|------------|--------|----------------------------------------------------------------------------------------------------------|----------------------------------|---------------|------------------|
| 18         | 2/2/51 | #114 L Frame Dept. Sample taken in aisle between machines #1 and 2. No exhaust nor protective equipment. | 5.7                              | 22.0          | .1               |
| 19         | 2/2/51 | #114 L Frame Dept. Sample taken in aisle between machines 2 and 3.                                       | 7.3                              | 16.6          | 1                |
| 20         | 2/2/51 | #114 L Frame Dept. Sample taken in aisle between Machines 3 and 4                                        | 10.7                             | 18.6          | 1                |
| 21         | 2/2/51 | #114 L Frame Dept. Sample taken between machines 5 and 5204.                                             | 9.9                              | 13.8          |                  |
| 22         |        | Blank                                                                                                    | 13 particles per counting field. | -             |                  |

Very truly yours,

*J. Wm. Fehnel*  
J. Wm. Fehnel, Director  
Industrial Hygiene Laboratory  
Health and Welfare Division

0 0 0 0 0 1 1 0 0 5 7

CHQ. Box 91  
July 16, 1947

H. F. Maylar - Maxville

**Industrial Health Survey - Maxville Plants  
January - February 1947**

We have reviewed the report forwarded by the Metropolitan Life Insurance Company following their survey of the Maxville Plants.

Since there are several areas in which conditions are definitely unfavorable, we would appreciate advice as to what steps are being taken to correct the hazards involved.

In general, there are conditions which represent potential silicosis hazards in the Textile, Cement, Magnesia, Asphalt and Rigid Shingle Departments; excessive exposure to lead in the Packing Department -- both of which should receive immediate attention.

It might be well to review pages 21, 22 and 23 listing the specific recommendations and to indicate what action is being taken for each.

H. M. Jackson

cc: A. R. Fisher  
L. C. Hart  
J. P. Woodard  
G. W. Hite

Manville General  
February 3, 1947  
Dict. 1/31/47

Mr. Vandiver Brown  
General Headquarters

Dust Counts at Manville Factory

I am attaching herewith some data on dust counts at Manville Factory. The figures shown in the first column on the left are those that have just been completed by Metropolitan in the month of January. The pencilled figures to the right of the first column are counts that were taken by Metropolitan in 1934 in similar locations, that is, when this equipment was in another building.

Opposite the second column of typed figures, we have put in counts taken by the New Jersey State Health Department in 1944. Three of these as shown are in the identical spots where Metropolitan took their counts.

From the counts taken recently by Metropolitan, you will see that at no location in this department is the count below five million. The counts are also much higher than those taken by the State of New Jersey but the equipment used is different and it is our understanding that Metropolitan gets much higher values with their equipment than does the New Jersey State Department. In other words, while we have check figures, they are not arrived at by the same method and are not of much value for comparison purposes.

I will be pleased to talk with you on the 'phone about these after you have had a chance to study them.

JEB:HM

J. E. Begert

encl.

PLAINTIFF'S  
EXHIBIT

5245.0

Memorandum on Plant of Johns-Manville Corp., Supplementing the General Report, "Preliminary Dust Investigation for Asbestos Textile Institute" of June, 1947.

### Dust Control Practices

Data from this plant are not included in the tabulation of exhaust rates for cards (page 8, general report) because the single cards would not be comparable and the control of dust in this department is not good, as judged by dust counts. Observations of dust connections on Whitin cards indicate an original exhaust capacity of over 4,000 to 5,000 cfm.

Dust control arrangements in the new Whitin cards diverge from the best practices listed on page 9 (general report) as to items 2, 3, 6 and 7.

The best combination of exhaust for this card would be worked out in the engineering phases of the long-term investigation proposed in the general report (see page 27, I and A).

Recirculation of air from dust collectors has been touched upon above.

The comments on page 13 are pertinent. We do not believe that the efficiency of a burlap dust house is adequate to permit recirculation of air from it back to the workroom as is the present practice. We do not rule out the possibility that safeguards can be devised that will permit the recovery of heat represented thereby.

### Medical

The incidence of asbestosis in this plant is comparable to only one other plant (A). The medical problem of diagnosis is complicated in this plant by the fact that many workers have been employed in anthracite coal mines and some show evidence of anthracosis. The panel activity referred to on page 13 should be especially valuable in these circumstances.

JHM33046

COPY

INDUSTRIAL HYGIENE FOUNDATION OF AMERICA, INC.

4400 FIFTH AVENUE

PITTSBURGH 13, PA.

July 11, 1947

Memorandum on Plant of  
Johns-Manville Corporation  
Supplementing The  
General Report

"Preliminary Dust Investigation for Asbestos Textile Institute"  
Of June, 1947

---

Dustiness

This plant is designated J in the general report. The summary of dustiness in column J of Table I may be compared with all except plants C and I. There is a consistently higher dustiness in all operations in spite of the fact that large sums of money have been expended for dust control equipment.

The dust count data do indicate satisfactory control of dust in weaving operations.

We suspect that the major cause of the poor dust conditions results from the practice of returning air from the bag house to the work room. This should be investigated (see discussion of recirculation, page 13, general report).

JHM33045

ESTIMATED INCIDENCE OF ASBESTOSIS

The incidence of asbestosis among employees of those plants where employees were examined in recent years, shows a marked variation as indicated by the following:

*M. J. K.* Plant A has recorded cases diagnosed as asbestosis to the extent about 20 per cent, and in the past nine years has compensated, on the average two cases per annum. Total textile employment about 400.

Plant C on the basis of a recent systematic survey, estimates asbestosis incidence to be about three to four per cent.

Plant D has results from an incomplete survey in which four cases were found among those volunteering for examination with a total textile employment of around 150. They have compensated one case in about 10 years. Three more are pending.

*J. K.* Plant H with a textile employment of 300 finds five or six cases annually that the physician believes show early changes due to asbestos.

Plant J has counted potential cases of asbestosis amounting in number to about 20 per cent, comparable with Plant A.

The other plants have conducted no systematic x-ray surveys of their own and have no information as to incidence among their employees. None of these has had cases requiring compensation.

While we have no complete data on history of employment and labor turnover in the several plants, it is apparent that there is, at least superficially, a marked inconsistency in this picture. Also, it is clear that

INDUSTRIAL HYGIENE FOUNDATION OF AMERICA, INC.

4400 Fifth Avenue  
Pittsburgh 13, Pa.

225

REPORT OF  
PRELIMINARY DUST INVESTIGATION  
FOR  
ASBESTOS TEXTILE INSTITUTE  
JUNE, 1947

By

W.C.L. Eason  
Head Engineer

Industrial Hygiene Foundation of America, Inc.

By John F. McMahon  
Managing Director

June 18, 1947

5-12-77  
R-M 274-12

Copies of these letters

J. P. McMahon, I. H. P. (4 copies)  
/B. F. Stanton  
C. P. Elterich  
/B. W. Littenberger  
/J. L. Gathke  
/G. P. Burke  
/C. E. Carleough  
G. L. Abbott  
/F. J. Waken  
/E. Muehleck  
/E. R. Teubner, Jr.  
/G. S. Pabel  
/J. C. Balch  
/P. Sims McGrath

Total of 17 copies in all were sent out.

COMMENTS

In the course of the discussions covering the direction and scope of the survey, the following points were considered worthy of record:

- A. The desirability of standardization among member companies on dust count procedure and routine, is obvious.
- B. Inquiry into the practicability of using as many "wet" operations as possible in the manufacture of Asbestos Textiles, appears to be well warranted. It was felt that the present sales department and customer objections to textiles made by "wet" operations were based, to some extent, on a natural resistance to change rather than on a true comparison of the respective products. Because "wet" operations are so effective in reducing dust at the source, inquiry should be directed towards these possibilities.
- C. Mr. Luttenberger volunteered to send Mr. Hemen a group of catalogs and other literature relating to asbestos textile machinery so that Mr. Hemen could familiarize himself with the units involved, prior to his survey visits.

HARRIS D. MCKINNEY  
Acting Secretary

### PLANTS TO BE COVERED BY THE SURVEY

It was agreed that as many as practicable of the member company textile plants should be visited during the course of the field work. The following list was recommended:

| <u>Company</u>              | <u>Location</u>         |
|-----------------------------|-------------------------|
| Asbestos Textile Co., Inc.  | North Brookfield, Mass. |
| J. Franklin Burke & Co.     | Northfield, Vt.         |
| Carolina Asbestos Co.       | Davidson, N.C.          |
| Garlock Packing Co.         | Palmyra, N.Y.           |
| Johns-Manville Corp.        | Manville, N. J.         |
| Keasbey & Mattison          | Ambley, Pa.             |
| Philadelphia Asbestos Co.   | Norristown, Pa.         |
| Raybestos-Manhattan, Inc.   | Manheim, Pa.            |
| Raybestos-Manhattan, Inc.   | Charleston, S. C.       |
| Southern Asbestos Co.       | Charlotte, N.C.         |
| Union Asbestos & Rubber Co. | Chicago(Cicero) Ill.    |

### INDIVIDUALS IN MEMBER COMPANIES FOR SURVEY CONTACTS

It was suggested that Mr. McKinney write to all member companies and obtain the name of the individual at each plant who is to act as contact man with the Industrial Hygiene Foundation in their survey work over the forthcoming months. This list of companies and contact-individuals therein, will be sent to Mr. McMahon who can then make his arrangements directly with the member companies as to when they would like to visit the various plants, the individuals they would like to talk with, the range of information desired, etc.

ASBESTOS TEXTILE INSTITUTE

NOTES on the meeting of the  
Air Hygiene Committee  
held February 5, 1947 at the  
Mellon Institute, Pittsburgh, Pa.

ATTENDANCE:

INDUSTRIAL HYGIENE FOUNDATION

J. F. McMahon  
Managing Director

W. C. L. Hemson  
Head Engineer

F. R. Holden  
Head Chemist

Dr. Walmer  
Medical Director

ASBESTOS TEXTILE INSTITUTE

B. F. Stanton, Committee Chairman  
Johns-Manville Corp.

C. F. Elterich  
Keasbey & Mattison

B. W. Luttenberger  
Raybestos-Manhattan, Inc.

H. D. McKINNEY  
Manager

REPORT OF THE MEETING

The Industrial Hygiene Foundation proposal for a preliminary survey, as approved at the general meeting on December 12, 1947, formed the basis for this meeting. The objectives of the survey, as outlined in their proposal, were read and discussed in some detail, and no changes were found necessary. The major purpose of this meeting was to make plans for assisting the Industrial Hygiene Foundation in starting the work of their survey.

|                       |               |         |                           |            |   |
|-----------------------|---------------|---------|---------------------------|------------|---|
| Post-It Fax Note 7671 |               | Date    | 6-1-95                    | # of pages | 4 |
| To                    | Bill Ben-Edge | From    | John Ben-Edge             |            |   |
| Co./Dept.             |               | Co.     | Raytheon, Girard & Hawley |            |   |
| Phone #               |               | Phone # | 415-877-1011 x 203        |            |   |
| Fax #                 | 410-645-7155  | Fax #   | 415-878-1247              |            |   |

EX-11-325

which made studies of illumination, ventilation, and control of toxic fumes in Army operated plants. The Division was also responsible for setting up the Armored Medical Research Laboratory located at Fort Knox which had to do with research affecting personnel attached to tanks.

Dr. Lanza attained the rank of Colonel.

Another one of our staff to return from service is John J. Milesnick of the Laboratory. Mr. Milesnick entered the service on January 13, 1943 and returned December 7, 1945. He was attached to the Engineers and saw service on Australia, New Guinea, the Philippines and Japan.

Captain John J. Ferry of the Laboratory Staff is still in Service.

Personnel of  
Industrial Health Section  
And Industrial Hygiene Laboratory

A. J. Lanza, M.D., Associate Medical Director  
W. J. McConnell, M.D., Assistant Medical Director  
J. E. Fehnel, B. S.  
Anna A. Reilly  
Peter A. Petrick  
Owen Cullimore  
Ruth Russ  
Joan Shanahan  
John Milesnick

*A. J. Lanza*  
A. J. Lanza, M. D.  
Associate Medical Director

*W. J. McConnell*  
W. J. McConnell, M. D.  
Assistant Medical Director

National organization and the Metropolitan Chapter; and a member of the American Public Health Association.

Mr. Patrick is a member of the Metropolitan Chapter of the American Industrial Hygiene Association.

#### LITERATURE

During the year, 8,390 copies of our booklets in the Industrial Health Series were sent on request.

\*\*\*\*\*

Dr. McConnell, who was granted a leave of absence on August 27, 1942 to take charge of the Industrial Hygiene Section of the Office, Chief of Ordnance, Safety and Security Division of the United States Army, returned to the office in November. His headquarters were in Chicago and he represented the Surgeon General of the War Department in the Ordnance Department and traveled all over the country to plants manufacturing, loading, handling and storing explosives to investigate health hazards. He was promoted to the rank of Colonel, M. C., A.U.S. in May 1945 and was awarded the Legion of Merit.

Dr. Lanza returned to the office on January 1, 1945 after a leave of absence since March 1942 when he left to head up the Division of Occupational Health in the Preventive Medicine Service of the Surgeon General's office, War Department. The Division maintained an Industrial Hygiene Laboratory which was located at the Johns Hopkins School of Hygiene in Baltimore and

Member of the Committee on Ventilation of the American Public Health Association.

Member-at-large of the Sectional Committee on Ventilation Code of the American Standards Association.

Member of the Sectional Committee on Exhaust systems of the American Standards Association.

Official representative of the American Medical Association to serve as a member of the Sectional Committee on Building Code Requirements for Light and Ventilation of the American Standards Association.

Member of the Committee on Climate and Its Relation to Air Conditioning Fundamentals and Member of a Committee dealing with all research activities involving the relations of air conditioning to workers in industry of the American Society of Heating and Ventilating Engineers.

Member of the Committee on Ventilation and Atmospheric Pollution,  
Member of the Committee on Standard Methods for the Examination of the Air of the American Public Health Association.

Member of the Technical Advisory Committee on Sensations of Comfort of the American Society of Heating and Ventilating Engineers.

Member of the Committee on Biology of the American Society of Refrigerating Engineers.

Member of the Industrial Relations Committee of the National Association of Manufacturers

Mr. Fehnel is a member of the American Industrial Hygiene Association,

Addressed the Annual Conference on Health Education at the New York Academy of Medicine. The subject of the talk was "The Opportunity of Health Education in Industry".

COMMITTEES

Dr. Lanza is a member of the following committees:

Member of the Council on Industrial Health; Chairman of the Committee on Professional Relations; Member of the Editorial Board, Occupational Medicine of the American Medical Association.

Chairman, Industrial Medical Committee and member of the Board of Trustees of the Industrial Hygiene Foundation of America.

Chairman of the Industrial Medical Subcommittee (Health Advisory Council) of the U. S. Chamber of Commerce.

Vice-Chairman of the Industrial Health and Medicine Advisory Committee, Procurement and Assignment Service of the Federal Security Agency.

Member of the Medical Board to advise The United States Employees' Compensation Commission on medical aspects of disability claims.

Dr. McConnell is a member of the following committees:

Fellow of the American Medical Association and the American Public Health Association.

Member of the Section Council of the Division of Industrial Hygiene of the American Public Health Association.

Member of the Scholarship Committee of the American Association of Industrial Physicians and Surgeons.

Attendance at the annual sessions of the Industrial Hygiene Foundation, at which he presided over the medical sessions.

Attended the meeting of the New England Section of the American Industrial Hygiene Section of the American Industrial Hygiene Association at Boston and gave a short paper on the present status of pneumoconiosis.

Attended the meeting of the Medical Advisory Committee of the United States Chamber of Commerce.

Attended the meetings of the Council on Industrial Health of the American Medical Association.

Attended a meeting of the Committee on Physical Examinations of the American Medical Association with the Veterans Placement Committee of the War Manpower Commission at Washington, D. C.

Attended and presided over the Regional Industrial Health Conference at Chicago, Illinois.

Attended a Symposium on Industrial Medicine held at the New York Post Graduate Medical School and spoke on "The Industrial Physician's Responsibility to Improve Industrial Hygiene".

Gave an address before the St. Louis Medical Society Symposium on Pneumoconiosis on the subject of "Recent Trends and Developments with Respect to the Pneumoconioses".

Lectured on silicosis to the Fourth Year medical students at the University of Pittsburgh.

Attended a Symposium on Pneumoconiosis held in Montreal and gave a short paper.

representatives of our Group policyholders, Group prospects brought to the office by our Group Supervisors, and individuals from health organizations desiring information.

#### VISITS TO GROUPS

Dr. Lanza also made visits to the plants of ten of our policyholders to discuss either their high Accident and Health claim experience, or their nursing service problems, industrial health hazards. Among policyholders visited were the General Motors Corporation, P. R. Mallory Company, Peter Cailler Kohler Swiss Chocolate Company, Collins-Aliman Corporation, and the Alexander Smith Carpet Company.

Dr. Lanza attended a conference on Asbestosis and Tuberculosis held in Montreal. He visited the Division of Industrial Hygiene of the Provincial Health Department of Ontario and interviewed the Minister and Deputy Ministers of Health of Ontario. As a follow-up of the visits which Dr. Wheatley made at Thetford Mines previously, Dr. Lanza visited the Division of Industrial Hygiene of the Provincial Health Department of Quebec and discussed the work of this Division and the situation in Thetford Mines. The Mine operators have established an Industrial Health Clinic in an endeavor to reduce the morbidity and mortality due to Asbestosis and Tuberculosis.

#### MEETINGS AND ADDRESSES

During the year, Dr. Lanza attended 65 meetings, at which he made 13 addresses. The following are but a few of these:

in which grain, flour and other products are shipped, as it was necessary for their employees to enter these cars.

Another policyholder wanted to know the toxicity, if any, of chlorinated phenols - methods of safe handling and other precautions.

Another question which is being asked with increasing frequency is the effectiveness of the aluminum dust therapy in the treatment of silicosis.

Several questions as to the effectiveness of odorizers and ozone have been received.

Our Group policyholders are again sending in for interpretation X-rays of the chests of their employees, now that our doctors have returned from service.

Questions having to do with all phases of medicine from all sources are sent to Dr. Lanza's office. These cover a wide range, i.e., cancer, heart disease, coronary thrombosis, asthma and hay fever, nephritis, etc.

#### PUBLICATIONS

The revised edition of our booklet "Methods of Testing and Protecting Eyesight in Industry" (formerly called "Functions of an Industrial Eye Clinic") was distributed during the year and was reviewed in a number of journals. The booklet was very well received by our policyholders, health organizations, optical companies, and others. A few of the many complimentary letters received are attached.

#### CONFERENCES IN OFFICE

During the year, Dr. Lanza held 45 conferences in the office with repre-

by our Laboratory and instructions given regarding their safe use.

TRAVEL CREDIT

The incidental expenses incurred by our field men for travel and maintenance while conducting surveys are charged to the Group policyholders for which these surveys are made. During 1945, our Group policyholders were billed for such charges in the amount of \$3962.00. The amount of money expended for travel by the members of this Section amounted to approximately \$4320.00. Therefore, practically all of the money spent for travel in surveying plants was returned to us by our Group policyholders.

SPECIAL INQUIRIES

Over 300 requests were received from our policyholders and others for assistance and information on industrial health subjects. These requests are received by mail as well as through conferences and visits to the Zone Office. In addition to the old stand-bys for information on lead poisoning and its control, installation of a medical department and physical examinations, a great deal of interest is being shown regarding the bacterial control of air by radiation and aerosols, all types of dermatitis, as for instance those cases due to artificial resins and plastics, coal tar pitch, aniline dyes, and sodium silicate. A prospect in upper New York State wanted information on the prevention of dermatitis caused by red oil which is used in lubricating wool preparatory to spinning. The Group Supervisor told us that our service was instrumental in closing the Group.

A large food Company in Rochester, N. Y. wanted to know if there was a health hazard involved in the use of methyl bromide used to fumigate box cars

Representatives of both labor and management of the Eljer Company at Ford City, Pa. requested the Metropolitan to make a survey of conditions in the plant to determine the existence of any health hazards. Our findings were acceptable to both factions.

Attached are copies of a few letters from our policyholders testifying to the value to them of these surveys.

#### ANALYSES

The atmospheric samples of dusts, fumes, and gases collected in the plants by our technicians necessitated making 2,499 separate analyses in the laboratory.

#### HOME OFFICE SURVEYS

Our office has continued to be of assistance to a number of divisions in the Home Office, particularly the Home Office Service Division and the Medical Division, in inspecting unhealthful or dangerous conditions arising throughout the buildings. In this connection this office will make periodic sanitary and industrial hygiene inspections of the Commissary Division. The inspection will include methods of preservation of food, refrigeration, food handling and disposal, dishwashing, vermin control, and cleanliness generally. Inspections will also include such work operations as paint spraying, lead soldering, welding, and other operations where solvents and toxic materials are employed throughout the building. Plumbing installations will be inspected occasionally for violation of sanitary codes and regulations.

All chemical materials used by our Building Divisions will be analyzed

in the plant accounting for a large labor turnover. Due to the fact that we have periodically been surveying this plant, Mr. Hazard asked that we make the survey. Our investigations indicated that the asbestosis hazard was adequately controlled and had been for a number of years. Mr. Hazard accepted our findings and made his report to the War Production Board. The case was closed.

The Puhanoid Company of Gloucester City, N. J. also asked for a survey of their plant at the suggestion of Mr. Hazard and our findings were accepted by the New Jersey State Department.

The Industrial Hygiene Division of the Department of Health of Alabama was planning to survey the iron ore mines of the Republic Steel Corporation in Birmingham, Ala. and the Company asked us to make a check of conditions prior to the state's study so that they would have a clean bill of health.

Mr. Dyktor, Director of the Bureau of Industrial Hygiene of the City of Cleveland, Ohio made a visual survey of the Corrigan-McKinney plant of the Republic Steel Corporation. After learning that the Metropolitan was supervising the plant conditions affecting the health of the employees, Mr. Dyktor said that it would not be necessary for his Department to make a survey.

The National Carbon Company of the Union Carbide Corporation at Cleveland, Ohio asked the Metropolitan to conduct a survey of their Amalgam Mixing and Drying Department at the time the State Department was conducting an investigation of working conditions. However, the State Department did not have the proper equipment nor the personnel to take the tests and the Metropolitan was asked to complete these studies.

ANNUAL REPORT  
OF THE INDUSTRIAL HEALTH SECTION  
1945

PLANT SURVEYS

The Laboratory of Industrial Hygiene conducted sixty surveys of health conditions in the plants of our Group policyholders. These consisted of surveys of new plants, as well as recheck surveys in plants of a number of our policyholders which request that we make these periodic checks to determine whether or not any new health hazards have developed and, if so, how they can be controlled. They also wanted to know if the fume and dust control systems installed on our recommendation are efficient.

The following instances of service may be of interest to show how the work of the Metropolitan Life Insurance Company in the field of industrial hygiene is accepted by management, employees and the Divisions of Industrial Hygiene of the State Departments of Health:

The Bates Manufacturing Company of West Orange, N. J. requested a survey of health conditions in their plant because their grievance committee, consisting of representatives of management and labor, wanted such a survey made to use as a guide in improving conditions in the plant.

Mr. W. G. Hazard, Director of the Industrial Hygiene Division of the Department of Health of New Jersey was ordered by the War Production Board to make an investigation of the plant of the Johns-Manville Corporation at Manville on the basis that there were a number of unhealthy working conditions

PCC  
EXHIBIT  
MET-385

PLAINTIFF'S  
EXHIBIT

ML-4813

PLAINTIFF'S  
EXHIBIT

4813

00631

164

October 24, 1945

Metropolitan Life Insurance Co.  
New York, N.Y.

Attn: Mr. J. William Pehnel  
Chemist; Laboratory of Industrial Hygiene

Dear Mr. Pehnel:

Our company at Mariaville Factory has recently organized a committee for Factory Industrial Hygiene Committee, whose main duties will be to direct activities designed to improve hygiene conditions in the plant. One of the first problems will be the study of dust conditions.

I would like to arrange a visit to your laboratory at your earliest convenience to discuss sampling procedure, and methods of analyses and equipment for testing dust samples.

Thanking you for your courtesy.

Very truly yours

JOHN-MARIVILLE CORP.

ATTN:

cc - Mr. E.C. Lindstrom  
Mr. D.P. Stanton

R. Jacobs, Chief Chemist  
Inspection & Control Dept.

NOTICE: If the film image  
is less clear than this  
notice, it is due to the  
quality of the document  
being filmed

SAFETY/Minor/Analysis of Air Sampling  
G-133-5

JSZ001

IAAA  
IACB  
IACD  
IACB  
IACB  
IACB

October 24, 1945

Metropolitan Life Insurance Co.  
New York, N.Y.

Attn: Mr. J. William Fehnel  
Chemist; Laboratory of Industrial Hygiene

Dear Mr. Fehnel:

Our company at Naville Factory has recently  
organized a committee for Factory Industrial  
Hygiene Committee, whose main duties will be  
to direct activities designed to improve  
hygienic conditions in the plant. One of the  
first problems will be the study of dust  
conditions.

I would like to arrange a visit to your lab-  
oratory at your earliest convenience to dis-  
cuss sampling procedure, and methods of  
analyses and equipment for testing dust samples.

Thanking you for your courtesy.

Very truly yours

JOHN-SAWVILLE CORP.

R. Jacobs, Chief Chemist  
Inspection & Control Dept.

cc - Mr. E.C. Lindstrom  
Mr. D.P. Stanton