

Interoffice Communication

To J. C. Levardsen
 From Tom Grumbles
 Date December 28, 1981
 Subject DYNAMIT NOBEL REQUEST FOR PVC SAFETY INFORMATION

I have discussed the trip report and requested action items from your visit to Dynamit Nobel with Jim Hall and Steve Saborsky. Following are my comments and information concerning the environmental safety of PVC that could be given to Dynamit Nobel.

1. Residual Vinyl Chloride Monomer Levels - The Technical Service Lab will have to certify that our residuals are less than 10 ppm. However, we should also tell them that many years of exposure monitoring on our employees handling PVC resins in our manufacturing plants has shown their exposures to VCM to be significantly less than 0.5 ppm.
2. HCL Regulations - The OSHA permissible exposure limit for HCL is 5.0 ppm as a ceiling value. Ceiling values are not to be exceeded at any time during the work shift. This is a common designation for strong irritants, such as HCL.

However, it is difficult to believe they have HCL coming off of their die face. HCL is a combustion product of PVC, and should not be produced at normal die face operating temperatures. If they are concerned about odors, they are probably smelling plasticizers.

3. Our air samples for VCM are analyzed "in-house" by the plant QC laboratory. However, there are many certified industrial hygiene laboratories that could analyze air samples for them. I have enclosed a list of these labs and highlighted those in their area.

If you need further information on this subject, please contact me.

[Handwritten signature]
 Thomas G. Grumbles

ajo

cc Steve Saborsky

Accredited laboratories . . .

(October 9, 1981)

To make it easier to locate a laboratory or laboratories in a particular area, listings now are broken down geographically by states and alphabetically within each state. To find the listing of a laboratory where the name but not the location is known, refer to the alphabetical cross-reference at the end of the geographical listing.

The following laboratories have been accredited under the Laboratory Accreditation Program of the American Industrial Hygiene Association.

Those marked by a bullet (●) accept samples on a fee basis.

Proficiency testing is an integral part of the American Industrial Hygiene Association's laboratory accreditation program and is fulfilled by the laboratory's participation in the NIOSH Proficiency Analytical Testing Program (PAT). This program presently includes bimonthly samples for lead, cadmium, zinc, asbestos, silica and organic solvents. (The following solvents are provided on a rotating basis: carbon tetrachloride, ben-

zene, trichloroethylene, p-dioxane, toluene and chloroform.) Accredited laboratories are required to analyze all materials in the PAT Program which they analyze as a part of their routine laboratory operations. The numbers in () indicate analyses in which the laboratory participates. Users should check with individual laboratories for current proficiency status if such information is desired.

1. Lead
2. Cadmium

3. Zinc
4. Asbestos

5. Silica
6. Organic solvent

7. All PAT materials (1-6)

ALABAMA

Monsanto Company
P.O. Box 249
Anniston, AL 36202
Jerry L. Brown, Director
(205) 236-6381
(6)

ARIZONA

Arco Copper Company
Environmental Laboratory
P.O. Box 27007
Tucson, AZ 85704
Rodney J. Anderson, Director
(602) 889-5361
(1,2,3,4,5)

Arizona Department of Health Services
Bureau of Epidemiology &
Laboratory Services
1520 W. Adams St.
Phoenix, AZ 85007
Jon M. Counts, Dr. P.H., Director
(602) 255-1188
(7)

CALIFORNIA

Aerojet Strategic Propulsion Company
Environmental Data Laboratory
P.O. Box 15699C, Dept. 5031
Sacramento, CA 95813
Vladimir Moss, Director
(915) 355-5870
(1,2,3,4,6)

● EAL Corporation
2030 Wright Ave.
Richmond, CA 94804
George E. Caesar, Jr., Director
(415) 235-2633

● Fireman's Fund Insurance
Environmental Laboratory
3333 California St.
San Francisco, CA 94119
Jerry Tuma, Ph.D., Director
(415) 929-2053
(7)

● Health Science Associates
Industrial Hygiene Laboratory
10941 Bloomfield St., Ste. B/C
Los Alamitos, CA 90720
Eugene A. Port, Director
(213) 430-1031
(7)

Kaiser Aluminum & Chemical Corporation
Analytical Research Dept.
P.O. Box 877
Pleasanton, CA 94556
H.J. Seim, Ph.D., Director
(415) 462-1122
(1,2,3,5,6)

Lawrence Livermore Laboratory
Hazardous Control Analytical Laboratory
P.O. Box 5505, L-384
Livermore, CA 94550
Marcel W. Nathans, Director
(415) 422-7736
(1,2,3,6)

Naval Regional Medical
Center — Oakland
Regional Industrial Hygiene Laboratory
Bldg. 497 MINS
Vallejo, CA 94592
Frank O. Kieffer, Director
(707) 646-2458
(1,2,3,4,6)

● Radiation Detection Company
162 North Wolfe Rd.
P.O. Box 1414
Sunnyvale, CA 94088
Joe Lipera, Director
(408) 735-8700
(1,2,3,4)

● SRI International
Analytical & Inorganic Chemistry
Laboratory
333 Ravenswood Ave.
Menlo Park, CA 94025
Dale M. Coulson, Ph.D., Director
(415) 859-4621
(7)

State of California
Air and Industrial Hygiene Laboratory
2151 Berkeley Way
Berkeley, CA 94704
Jerome J. Wesolowski, Ph.D., Director
(415) 540-2469
(7)

State of California/Department of
Health Services
Southern California Laboratory
1449 W. Temple St., Rm. 101
Los Angeles, CA 90026
Frank J. Baumann, Director
(213) 620-3376
(7)

Stauffer Chemical Company
DeGuigne Technical Center
1200 South 47th St.
Richmond, CA 94804
David J. Brookman, Director
(415) 231-1000
(1,2,3,6)

● West Coast Technical Service, Inc.
17605 Fabrica Way — Ste. D
Cerritos, CA 90701
Dewey J. Northington, Ph.D., Director
(213) 921-9831
(1,2,3,6)

COLORADO

● Colorado School of Mines
Research Institute
Analytical Services Industrial
Hygiene Laboratory
P.O. Box 112
Golden, CO 80401
Jim Tecklenburg, Director
(303) 279-2581
(1,2,3)

● Coors Porcelain Company
Coors Spectro-Chemical Laboratory
P.O. Box 500
Golden, CO 80401
F.B. Schweitzer, Director
(303) 277-4254
(7)

● Hager Laboratories, Inc.
4725 Paris Ave.
Denver, CO 80239
Robert N. Hager, Jr., Ph.D., Director
(303) 371-1441
(7)

Johns-Manville Corporation
Denver Rocky Mountain Laboratory
P.O. Box 5108
Denver, CO 80217
George L. Swallow, Director
(303) 979-1000
(7)

Union Carbide Corporation
Environmental Laboratory
P.O. Box 1029
Grand Junction, CO 81501
P.W. McDaniel, Director
(303) 245-3700
(1,2,3)

CONNECTICUT

● Aetna Insurance Company
Environmental Health Laboratory
55 Elm St.
Hartford, CT 06115
Floyd B. Parsons, Jr., Director
(203) 525-3451, Ext. 2281
(7)

● Aetna Life and Casualty Company
Engineering Industrial Hygiene Laboratory
Pigeon Hill Rd.
Windsor, CT 06095
Edward Engel, Director
(203) 683-3444
(7)

Connecticut Department of
Health Services
Laboratory Division
10 Clinton St., P.O. Box 1689
Hartford, CT 06115
Jesse Tucker, Ph.D., Director
(203) 566-5063
(7)

CCR 000001583

General Electric Company
Environmental Health Laboratory
1285 Boston Ave., Bldg. 23EE-2
Bridgeport, CT 06602
Dale A. Culp, Director
(203) 382-3506
(1,2,3,4,6)

- **Hartford Insurance Group**
Environmental Sciences Laboratory
Hartford Plaza
Hartford, CT 06115
Darrell B. Smith, Director
(203) 547-4557
(7)

Olin Corporation
Environmental Hygiene &
Toxicology Laboratory
91 Shelton Ave.
New Haven, CT 06511
Leonard A. Krause, Sc.D., Director
(203) 789-5441
(7)

- **Travelers Insurance Company**
Chemical & Environmental Laboratory
248 C.P. Lab
Hartford, CT 06115
Ronald E. McCullen, Director
(203) 277-2677
(7)

United Technologies Corporation
Industrial Hygiene Laboratory
275 Windsor St.
Hartford, CT 06120
Arthur J. Boehm, Director
(203) 522-4894
(7)

DELAWARE

E.I. duPont de Nemours & Company
Haskell Laboratory for Toxicology
& I.H. Medicine
Elkton Rd.
Newark, DE 19711
Charles Reinhardt, M.D., Director
(302) 366-5239
(1,6)

FLORIDA

- **Environmental Science and Engineering, Inc.**
P.O. Box ESE
University Station
Gainesville, FL 32602
E.R. Hendrickson, Ph.D., Director
(904) 372-3318
(1,2,3,6)

GEORGIA

- **Environmental Health Laboratory**
P.O. Box 6195
Macon, GA 31208
Alice C. Farrar, Director
(912) 745-4702
(7)

HAWAII

- **Industrial Analytical Laboratory, Inc.**
1523 Kalakaua Ave., Ste. 207
Honolulu, HI 96826
Fred Herten, III, Director
(808) 947-5402
(7)

State of Hawaii
Dept. of Labor and Industrial Relations
Occupational Health Branch
677 Ala Moana Blvd., Rm. 910
Honolulu, HI 96813
Masayoshi Ogata, Director
(808) 548-5480
(1,2,3,4,6)

ILLINOIS

Abbott Laboratories
Corporation Industrial Hygiene Laboratory
1400 Shendan Rd.
North Chicago, IL 60064
Lawrence H. Hecker, Ph.D., Director
(312) 937-2928
(6)

Abex Corporation
Industrial Hygiene Analytical Laboratory
4550 W. 26th St.
Chicago, IL 60623
F.W. Knoch, M.D., Director
(312) 521-3210
(1,2,3,4,6)

- **American Foundrymen's Society**
Lester B. Knight Environmental
Services Laboratory
Golf & Wolf Roads
Des Plaines, IL 60016
James F. Cerven, Director
(312) 824-0181
(1,2,3,5)

CNA Insurance
Occupational Health Laboratory
CNA Plaza — 3 West
Chicago, IL 60685
Jere Stubblefield, Director
(312) 822-5541
(7)

Granite City Steel Division of National Steel Corporation
Dept. of Environmental Quality Control
20th and States Streets
Granite City, IL 62040
Roger A. Riemann, Director
(618) 451-3457
(7)

Interlake, Inc.
Environmental Services Laboratory
135 St. and Perry Ave.
Chicago, IL 60627
David Holmberg, Director
(312) 849-2500
(1,2,3,6)

Monsanto Chemical Intermediate
W.G. Krummick Plant Laboratory
Sauget, IL 62201
H.J. Horner, Director
(618) 271-5835, Ext. 2068
(1,2,3,6)

- **National Loss Control Service Corporation**
(Lumbermen's Mutual Casualty Company)
Environmental Sciences Laboratory
Rt. 22 & Kemper Center
Long Grove, IL 60049
Joan A. Wronski, Director
(312) 540-2488
(7)

- **Sherwin Williams Company**
10909 S. Cottage Grove Ave.
Chicago, IL 60628
Richard W. Scott, Director
(312) 821-3657
(7)

U.S. Gypsum Research Center
Analytical Laboratory
1000 E. Northwest Hwy.
Des Plaines, IL 60016
L.T. Eby, Ph.D., Director
(312) 299-3381
(7)

INDIANA

Detroit Diesel Allison, Div. GMC
Environmental Sciences
P.O. Box 894 Mail Stop S20
Indianapolis, IN 46206
Peter P. Cook, Director
(317) 242-4388
(1,2,3,6)

General Electric Company
Environmental Chemistry Unit of
Materials Analysis Laboratory
Bldg. 19-5, P.O. Box 2230
Fort Wayne, IN 46801
A.R. Hohl, Director
(219) 743-7431
(1,2,3,6)

IOWA

- **University of Iowa**
University Hygienic Laboratory
Oakdale Campus
Iowa City, IA 52242
W.J. Hausler, Jr., Ph.D., Director
(319) 353-5990
(7)

KANSAS

- **Wilson Laboratories**
528 N. Ninth St.
Salina, KS 67401
Jame C. Butler, Director
(913) 825-7186
(7)

KENTUCKY

State of Kentucky
Bureau for Health Services
Dept. for Human Resources
275 E. Main St.
Frankfort, KY 40601
B.F. Brown, M.D., Director
(502) 564-4486
(7)

LOUISIANA

- **Ramson Environmental Services**
16550 Highland Rd.
Baton Rouge, LA 70808
(504) 293-8650
(1,2,3,5,6)

West-Paine, Inc.
West-Paine Laboratories
7979 G.S.R.I. Ave.
Baton Rouge, LA 70808
Philip W. West, Ph.D., Director
(504) 769-4900
(1,2,3,4,6)

MARYLAND

- **Biospherics, Inc.**
Industrial Hygiene Laboratory
4928 Wyaconda Rd.
Rockville, MD 20852
Donald Curtis Hutchinson, Director
(301) 770-7700
(7)

- **Martin Marietta Corporation**
Center for Occupational Health
1450 S. Rolling Rd.
Baltimore, MD 21227
David L. Goldheim, Ph.D., Director
(301) 247-0700
(1,3,5,6)

Maryland State Dept. of Health & Mental Hygiene
Occupational Health & Air
Quality Laboratory
201 W. Preston St.
Baltimore, MD 21202
Kenneth M. Hallam, Director
(301) 383-2984
(7)

U.S. Army Environmental Hygiene Agency (USA-EHA)
Laboratory Services Directorate
Aberdeen Proving Ground, MD 21010
John F. Mazur, LTC., MSC, Director
(301) 671-3639
(7)

MASSACHUSETTS

- **American Mutual Insurance Companies**
American Mutual Laboratories
Wakefield, MA 01880
Leon O. Horowitz, Director
(617) 245-6000
(1,2,3,4,6)

- **Commercial Union Insurance**
Environmental Sciences Division
332 Second Ave.
Waltham, MA 02154
Victor J. Roman, Ph.D., Director
(617) 890-5531
(7)

Duracell International Inc.
Industrial Hygiene Laboratory
3rd Ave., Northwest Industrial Park
Burlington, MA 01803
Robert Gempel, Director
(617) 272-4100, Ext. 21
(1,2,3)

- **ESA Laboratories, Inc.**
Industrial Hygiene Analytical Laboratory
43 Wiggins Ave.
Bedford, MA 01730
Reginald M. Griffin, Ph.D., Director
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(1,2,3,6)

Liberty Mutual Insurance Research Center
Industrial Hygiene Laboratory
71 Frankland Rd.
Hopkinton, MA 01748
Russell W. VanHouten, Director
(617) 435-3452
(7)

ACCREDITED LABORATORIES . . .

- **Massachusetts Institute of Technology**
Industrial Hygiene Laboratory
7m, 208-245 77 Massachusetts Ave.
Cambridge, MA 02139
George W. Boylen, Jr., Director
(617) 253-2596
(1.2.3.4.6)

MICHIGAN

- Chrysler Corporation**
Industrial Hygiene Services Laboratory
P.O. Box 1919
Detroit, MI 48288
L.P. Gendernalik, Ph.D., Director
(313) 956-5478
(7)
- **Clayton Environmental Consultants, Inc.**
25711 Southfield Rd.
Southfield, MI 48075
Jaswant Singh, Ph.D., Director
(313) 424-8860
(7)
- Dow Chemical U.S.A.**
Industrial Hygiene Laboratory
1803 Bldg.
Midland, MI 48640
E.J. Schneider, Director
(517) 636-0860
(4.6)
- Environmental Research Group, Inc.**
17 N. First St.
Ann Arbor, MI 48104
Donald H. Peters, Director
(313) 662-3104
(1.2.3.4.6)
- Ford Motor Company**
Industrial Hygiene Laboratory
15000 Century Dr., Rm. 104
Dearborn, MI 48121
Roger Wabeke, Director
(313) 337-8955
(1.2.3.4.6)
- General Motors Corporation**
Industrial Hygiene Dept. Laboratory
3-229 Research Administration Bldg.
Warren, MI 48090
Gene X. Kortsha, Director
(313) 575-2791
(1.2.3.4.6)
- **Kemron Environmental Services**
Borg-Warner Corporation
32740 Northwestern Hwy.
Farmington Hills, MI 48018
Cecil L. Smith, Director
(313) 626-2426
(7)
- Michigan Dept. of Public Health**
Bureau of Environmental and Occupational
Health Laboratory
P.O. Box 30035
3500 N. Logan St.
Lansing, MI 48909
Alvin L. Vander Kolk, Director
(517) 373-1410
(7)

MINNESOTA

- **St. Paul Fire & Marine Insurance Company**
Environmental Services
Analytical Laboratory
494 Metro Square Bldg.
7th & Roberts Streets
St. Paul, MN 55101
Donald J. Larsen, Director
(612) 221-8020
(7)
- 3M Company**
Central Research Laboratory
P.O. Box 33221
St. Paul, MN 55133
D.G. Weiblen, Director
(312) 733-2813
(7)
- MISSOURI**
- **Department of Community Health & Medical Care**
Environmental Health Laboratory
801 S. Brentwood Blvd.
Clayton, MO 63105
Wayne E. Black, Ph.D., Director
(314) 726-1100, Ext. 279
(7)
- Mobay Chemical Corporation**
Industrial Hygiene/Air Quality Laboratory
P.O. Box 4913
Kansas City, MO 64120
William J. Brinkman, Ph.D., Director
(816) 242-2759
(6)
- **Monsanto Company**
J.F. Queeny Plant, I.H. Laboratory
1700 S. Second St.
St. Louis, MO 63177
Ronald E. Ackerman, Director
(314) 622-1400
(6)
- **University of Missouri**
Environmental Trace Substances
Research Center
R.R. #3
Columbia, MO 65201
Tom Clevenger, Ph.D., Director
(314) 445-8595
(1.2.3.5.6)
- MONTANA**
- Anacosta Company, Aluminum Division**
Industrial Hygiene Laboratory
P.O. Box 10
Columbia Falls, MT 59912
Donald F. Ryan, Director
(406) 892-3261, Ext. 218
(1.2.3.4)

NEW JERSEY

- AMAX, Inc.**
AMAX Base Metals R & D, Inc.
400 Middlesex Ave.
Carteret, NJ 07008
Peter R. Soriano, Director
(201) 541-4141
(1.2.3.4.5)

- **American Can Company**
Occupational Health Laboratory
U.S. Hwy. 22
Union, NJ 07083
Kirit Vora, Director
(201) 686-4500
(1.2.3.4.6)
- E.I. duPont de Nemours & Company**
Environmental Health Laboratory
Chambers Works
Deepwater, NJ 08023
Michael J. Fahsel, Director
(609) 299-5000
(1.6)
- **Gollob Analytical Service Corp.**
47 Industrial Rd.
Berkeley Heights, NJ 07922
Fred Gollob, Ph.D., Director
(201) 464-3331
(6)
- **Inmont Corporation**
Environmental Testing Laboratory
1255 Broad St.
Clifton, NJ 07015
Eugene G. Wood, Director
(201) 365-3552
(1.2.3.4.6)
- **Mobil Oil Corporation**
Technical Service Laboratories
P.O. Box 1027
Princeton, NJ 08540
J.P. Magoulas, Director
(609) 737-3000
(1.2.3.6)
- Tenneco Chemicals, Inc.**
Environmental Health Laboratory
P.O. Box 365
Piscataway, NJ 08854
W. Philip Osen, Director
(201) 981-5417
(1.2.3.6)
- Union Camp Corporation**
Research & Development Division
P.O. Box 412
Princeton, NJ 08540
Edwin P. Crowell, Director
(609) 896-1200
(1.2.3.6)
- Warner-Lambert Company**
Industrial Hygiene Laboratory
170 Tabor Rd.
Morris Plains, NJ 07950
William L. Beckett, Director
(201) 540-2863
(1.2.3.4.6)
- NEW MEXICO**
- Sandia Laboratories**
Environmental Health Laboratory
Division 3311, P.O. Box 5800
Albuquerque, NM 87185
Donald R. Parker, Director
(505) 844-3665
(1.2.3.6)

University of California
Los Alamos Scientific Laboratory
P.O. Box 1663 MS-486
Los Alamos, NM 87545
James O. Jackson, Director
(505) 667-5231
(1.2.3.4.6)

NEW YORK

- **Carrier Corporation**
Chemistry Laboratory
P.O. Box 4808
Syracuse, NY 13221
Harry F. Kiodowski, Director
(315) 432-6319
(1.2.3.6)
- Eastman Kodak Company**
Health, Safety & Human Factors Laboratory
Industrial Hygiene Section
Bldg. 320 Kodak Park
Rochester, NY 14650
Richard F. Scherberger, Director
(716) 722-0428
(7)
- General Electric Company**
Industrial Hygiene Laboratory
1 River Rd., Bldg. #43-202
Schenectady, NY 12345
John S. Schockley, Jr., Director
(518) 385-2604
(1.2.4.6)
- **Galsco Technical Services**
Industrial Hygiene Laboratory
6601 Kirkville Rd.
East Syracuse, NY 13057
Eva Galsco, Director
(315) 437-7181
(7)
- Industrial Hygienics, Inc.**
755 New York Ave.
Huntington, NY 11743
James T. Schirripa, Director
(516) 427-0950
(7)
- International Paper Company**
Environmental & Industrial
Hygiene Laboratory
P.O. Box 797
Tuxedo Park, NY 10987
George M.J. Susarczuk, Ph.D., Director
(914) 351-2101
(1.2.3.6)
- Reichhold Chemical, Inc.**
Corporate Analytical Laboratory
P.O. Box 607
Tuxedo, NY 10987
Ralph Malek, Director
(914) 351-4724
(1.2.3.6)
- Stauffer Chemical Company**
Livingstone Ave.
Eastern Research Center
Dobbs Ferry, NY 10522
Horst J. Caspers, Ph.D., Director
(914) 693-1200
(7)

CCR 000001585

NORTH CAROLINA

Arlington Industries, Inc.
Industrial Hygiene Laboratory
3330 W. Friendly Ave.
Greensboro, NC 27410
John D. Neefus, Ph.D., Director
(919) 379-0258
(1.2.3.6)

North Carolina Dept. of Human Resources
Division of Health Services
Lab Sec. Env. Science Branch
Occupational Health Unit
P.O. Box 28047
Raleigh, NC 27611
John C. Sheats, Director
(919) 733-7308
(7)

- **Research Triangle Institute**
Air and Industrial Hygiene
P.O. Box 12194
Research Triangle Park, NC 27709
C.E. Decker, Director
(919) 541-6901
(1.2.3.6)

OHIO

Allied Chemical Corporation
Environmental Control Laboratory
3330 S. Third St.
Ironton, OH 45638
R.L. Raines, Director
(614) 533-1040
(2.3.6)

Atlantic Columbus Laboratories
Organic, Analytical & Environmental
Chemistry Section
505 King Ave.
Columbus, OH 43201
Mary M. McKown, Ph.D., Director
(614) 424-6424
(7)

Firestone Tire & Rubber Company
1200 Firestone Pkwy.
Akron, OH 44317
J.H. Bachmann, Director
(216) 379-6215
(7)

General Electric Company
Lighting Business Group
Industrial Hygiene Laboratory
Nela Park
Cleveland, OH 44112
A.O. Rathie, Director
(216) 266-3382
(1.2.3.4.6)

B.F. Goodrich Research & Development Center
Corporate Environmental Service
9921 Brecksville Rd.
Brecksville, OH 44141
Paul M. Zakrinski, Ph.D., Director
(216) 447-5411
(1.2.3.4.6)

Goodyear Tire & Rubber Company
Corporate Industrial Hygiene Laboratory
1144 E. Market St.
Akron, OH 44316
J.G. Collins, Ph.D., Director
(216) 796-4531
(7)

- **Monsanto Research Corporation**
Pollution Monitoring
1515 Nicholas Rd.
Dayton, OH 45418
David Hale, Director
(513) 268-3411
(1.2.3.4.6)

National Institute for Occupational Safety & Health
DPSE Measurement Support Branch
4676 Columbus Pkwy.
Cincinnati, OH 45226
Robert Larkin, Director
(513) 684-4263
(7)

- **Pedco Environmental Inc.**
11499 Chester Rd.
Cincinnati, OH 45246
Lawrence A. Elfers, Director
(513) 782-4700
(1.2.3.4.6)

- **Pollution Control Science, Inc.**
6015 Manning Rd.
Miamisburg, OH 45342
Phillip L. Hayden, Ph.D., Director
(513) 866-5908
(1.2.3.4.6)

PPG Industries
Barberton Technical Center
P.O. Box 31
Barberton, OH 44203
Bernard DeWitt, Sc.D., Director
(216) 848-4161
(7)

Republic Steel Corporation
Industrial Health Laboratory
6801 Bracksville Rd.
Independence, OH 44131
J.K. Samuels, Ph.D., Director
(216) 524-5100, Ext. 233
(1.2.3.6)

SCM Corporation
Dwight P. Joyce Research Center
16651 Sprague Rd.
Strongsville, OH 44136
Jerome H. Blacker, Director
(216) 826-5280
(1.2.3.4.6)

State of Ohio Dept. of Health
Industrial and Occupational Laboratories
1571 Perry St.
Columbus, OH 43201
Charles C. Croft, Sc.D., Director
(614) 466-2280
(7)

Union Carbide Corporation
Battery Products Division
Technology & Analytical Services
P.O. Box 6056
Cleveland, OH 44101
Paul W. McDaniel, Director
(216) 631-3100
(1.2.3.6)

Union Carbide Corporation
Metals Division Laboratory
P.O. Box 299
Marietta, OH 45750
Paul W. McDaniel, Director
(614) 373-1131
(1.2.3)

Union Carbide Corporation
Parma Technical Center
P.O. Box 6116
Cleveland, OH 44101
George Jackson, Ph.D., Director
(216) 676-2313
(1.2.3.6)

- **University of Cincinnati**
Kettering Laboratory, Analytical Section
3223 Eden Ave.
Cincinnati, OH 45267
B.E. Saltzman, Ph.D., Director
(513) 872-5709
(1.2.3.4.6)

OKLAHOMA

Phillips Petroleum Company
Industrial Hygiene Laboratory
267 Petroleum Laboratory
Bartlesville, OK 74004
O.A. Tyler, Director
(918) 661-3858
(6)

OREGON

State of Oregon
Occupational Health Laboratory
Accident Prevention Division
1400 S.W. 5th Ave.
Portland, OR 97201
Olav Menlo, Director
(503) 229-6286
(7)

PENNSYLVANIA

Aluminum Company of America (ALCOA)
Environmental Health Laboratory
Alcoa Technical Center
Alcoa Center, PA 15069
Richard S. Danchik, Ph.D., Director
(412) 337-2154
(7)

- **Bethlehem Steel Corporation**
Environmental Chemistry Laboratory
Environmental Health Division
Homer Research Laboratories
Bethlehem, PA 18016
Fred I. Grunder, Director
(215) 694-2481
(7)

Exide, Inc.
Industrial Hygiene Laboratory
6313 Rising Sun Ave.
Philadelphia, PA 19111
William M. Pallies, Director
(215) 342-1414
(1.2.3)

- **Freeport Brick Company**
Free-Col Laboratories
P.O. Box 557, Cotton Rd.
Meadville, PA 16335
J. Richard Wohler, Ph.D., Director
(814) 724-6242
(7)

- **Gannett-McCreath Laboratories**
Environmental Analytical Laboratory
P.O. Box 1963
Harrisburg, PA 17105
H. Bruce Gerber, Director
(717) 763-7211, Ext. 334
(1.2.3.4.6)

Gulf Science & Technology Corporation
Industrial Hygiene Laboratory
P.O. Box 3240
Pittsburgh, PA 15230
Richard Keenan, Ph.D., Director
(412) 665-6702
(7)

- **Industrial Health Foundation, Inc.**
IHF Analytical Laboratory
3400 Forbes Ave.
Pittsburgh, PA 15213
Daniel C. Braun, M.D., Director
(412) 681-6593
(7)

Materials Consultants & Laboratories, Inc.
1567 Old Abers Creek Rd.
Monroeville, PA 15146
Edward J. Fasiska, Ph.D., Director
(412) 325-1181
(5)

- **MDS Health Group, Inc.**
MDS Laboratories - Reading
4418 Pottsville Pike
Reading, PA 19605
Jerome I. Marcus, M.D., Director
(215) 921-9191
(1.2.3.4.6)

PPG Industries, Coatings & Resins Division
Industrial Hygiene Laboratory
151 Colfax St.
Springdale, PA 15144
L.W. Keller, Director
(412) 274-4500, Ext. 317
(1.2.3.6)

Rohm and Haas Company
Corporate Industrial Hygiene Laboratory
5000 Richmond St.
Philadelphia, PA 19137
William H. Dyre, Director
(215) 533-2000, Ext. 2524
(4.6)

St. Joe Zinc Company/Smelting Division
Health Chemistry Laboratory
P.O. Box A
Monaca, PA 15061
James H. Kanzelmeyer, Ph.D., Director
(412) 774-1020
(1.2.3)

Scott Paper Company
Industrial Hygiene/Analytical
Scott Plaza III
Philadelphia, PA 19113
Carl G. Mayer, Director
(215) 521-5000, Ext. 2785
(4.6)

- **Suntach, Inc.**
Industrial Hygiene Laboratory
P.O. Box 1135
Marcus Hook, PA 19061
David M.G. Lawrey, Director
(215) 447-1832
(1.2.3.4.6)

RHODE ISLAND

General Dynamics/Electric Boat Division
Quonset Point Facility, I.H. Analytical Lab.
Dept. 970
North Kingstown, RI 02852
Robert Secor, Director
(401) 268-2355
(1.2.3.6)

SOUTH CAROLINA

South Carolina Dept. of Health & Environmental Control
 Industrial Hygiene Laboratory
 Bureau of Laboratories
 P.O. Box 2202
 Columbia, SC 29202
 Edward Williams, Ph.D., Director
 (803) 758-5494
 (7)

TENNESSEE

Oak Ridge National Laboratory
 Industrial Hygiene Laboratory
 P.O. Box X — Bldg. 3550
 Oak Ridge, TN 37830
 Walter E. Porter, Director
 (615) 574-6164
 (1,2,3,4,6)

Tennessee Eastman Company
 Industrial Hygiene Analytical Laboratory
 P.O. Box 511
 Kingsport, TN 37662
 William A. McGee, Director
 (615) 246-2111, Ext. 5916
 (7)

Tennessee Dept. of Labor
 Occupational Health Laboratory
 719 Cordell Hull Bldg.
 Nashville, TN 37219
 Donald E. Witt, Director
 (615) 741-2750
 (7)

TEXAS

~~University of Texas at Dallas~~
 Environmental Health Laboratory
 1810 Commerce St.
 Dallas, TX 75201
 David McNamara, Director
 (214) 748-7351, Ext. 403
 (7)

~~University of Texas at Dallas~~
 Environmental Health Laboratory
 P.O. Box 748 MZ 6876
 Fort Worth, TX 76101
 F.L. Paschal, Jr., Director
 (817) 732-4811, Ext. 3381
 (1,2,3,4,6)

Quest Research International, Inc.
 P.O. Box 478
 Tyler, TX 75701
 Tom Cheavens, Ph.D., Director
 (214) 597-4174
 (1,2,3,6)

Radco Corporation
 Industrial Hygiene Laboratory
 8501 Mopec Blvd.
 Austin, TX 78766
 C. Herndon Williams, Jr., Director
 (512) 454-4797
 (1,2,3,5,6)

Shell Development Company
 Industrial Hygiene Laboratory
 P.O. Box 1380
 Houston, TX 77001
 Donald H. Morman, Director
 (713) 493-7267
 (7)

Spectrix Corporation
 7408 Fannin
 Houston, TX 77054
 Donald A. Flory, Ph.D., Director
 (713) 790-1800
 (1,2,3,6)

Tenneco, Inc.
 Port Arthur Research Laboratories
 P.O. Box 1608
 Port Arthur, TX 77640
 R.M. Dille, Director
 (713) 982-5711
 (6)

Texas Research Institute
 Industrial Hygiene Laboratory
 5902 W. Bee Caves Rd.
 Austin, TX 78746
 Robert W. Miller, Director
 (512) 327-2882
 (1,2,3,4,6)

Union Carbide Corporation
 Industrial Hygiene Laboratory
 Texas City Plant, Chemicals & Plastics Div.
 P.O. Box 471 (5th Ave. S.)
 Texas City, TX 77590
 A. Penhan Yalcinkaya, Director
 (713) 945-7411
 (1,2,3,4,6)

U.S. Air Force
 USAF Occupational & Environmental
 Health Laboratory
 Bldg. 140 St. D
 Brooks AFB, TX 78235
 Edward Lefebvre, Director
 (512) 536-3626
 (1,2,3,4,6)

UTAH

ASARCO, Inc.
 Dept. of Environmental
 Sciences Laboratory
 3422 S. 700 West
 Salt Lake City, UT 84119
 Robert D. Putnam, Ph.D., Co-Director
 M.O. Varner, Co-Director
 (801) 262-2459
 (1,2,3,4,5)

Kennecott Minerals Corporation
 Process Technology
 1515 Mineral Square
 Salt Lake City, UT 84147
 Armin P. Langheimmch, Director
 (801) 534-8342
 (7)

University of Utah Research Institute
 UBTI Division
 520 Wakara Way
 Salt Lake City, UT 84108
 James H. Nelson, Ph.D., Director
 (801) 581-8267
 (7)

U.S. Dept. of Labor/OSHA
 Analytical Laboratory
 390 Wakara Way
 Salt Lake City, UT 84108
 Floyd Madsen, Director
 (801) 524-5287
 (7)

Utah State Dept. of Health
 Utah State Health Laboratories
 44 Medical Dr.
 Salt Lake City, UT 84113
 Francis M. Urry, Ph.D., Director
 (801) 533-6131
 (7)

VIRGINIA

Consolidated Biomedical Laboratories
 Analytics Laboratory
 P.O. Box 25249
 Richmond, VA 23260
 James A. Calpin, CIH, Director
 (804) 353-8973
 (1,2,3,4,6)

Navy Environmental Health Center
 Industrial Hygiene Laboratory
 Naval Station, Bldg. X353
 Norfolk, VA 23511
 Gerald E. Wright, Director
 (804) 444-4657
 (1,2,3,4,6)

WASHINGTON

Boeing Aerospace Company
 Industrial Hygiene Engineering Laboratory
 P.O. Box 3999
 Mail Stop 4C 34
 Seattle, WA 98124
 Nicholas P. Novak, Director
 (206) 655-2076
 (1,2,3,4,6)

Hanford Environmental Health
 Foundation/Northwest Health Services
 Environmental Health Sciences Laboratory
 805 Goethal Dr.
 Richland, WA 99352
 Maureen K. Hamilton, Director
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 (7)

State of Washington
 Dept. of Labor & Industries
 Industrial Hygiene Laboratory
 814 E. 4th Ave.
 Olympia, WA 98504
 Phillip M. Peters, Director
 (206) 753-4478
 (7)

University of Washington
 Environmental Health Laboratory
 Dept. of Env. Hlth. SC-34
 Seattle, WA 98195
 David Kaiman, Ph.D., Director
 (206) 543-4252
 (7)

WEST VIRGINIA

Union Carbide Corporation
 Metals Division
 Alloy, WV 25002
 W.E. Jennings, Director
 (304) 779-2111
 (1,2,3)

WISCONSIN

Employers Insurance of Wausau
 Environmental Health Laboratory
 2000 Westwood Dr.
 Wausau, WI 54401
 Thomas G. Stavros, Ph.D., Director
 (715) 842-6810
 (7)

Johnson Controls, Inc.
 Materials Testing Laboratory
 P.O. Box 591
 Milwaukee, WI 53201
 A.C. Eckert, Jr., Ph.D., Director
 (414) 228-2365
 (1)

Sentry Insurance
 1800 N. Point Dr.
 Stevens Point, WI 54481
 Robert Voborsky, Director
 (715) 346-7744
 (7)

West Allis Memorial Hospital
 Industrial Toxicology Laboratory
 8901 West Lincoln Ave.
 West Allis, WI 53227
 Harold J. Conlon, M.D., Director
 (414) 321-1810
 (1,2,3,6)

WYOMING

Wyoming Dept. of Agriculture
 Division of Laboratories
 P.O. Box 3228
 Rm. 151, Physical Science Bldg.
 University Station
 Laramie, WY 82071
 Michael Purko, Director
 (307) 742-2948
 (7)

FOREIGN

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 Safety Compensation
 Occupational Health & Safety Division
 10158 - 103 St.
 Edmonton, Alberta, Canada T5J 0X6
 Ian Drummond, Ph.D., Director
 (403) 427-7989
 (7)

McMaster University
 Occupational Health Laboratory
 1200 Main St. W.
 Hamilton, Ontario, Canada L8N 3Z5
 D.K. Verma, Ph.D., Director
 (416) 525-9140
 (7)

Noranda Mines Ltd.
 Environmental & Industrial
 Hygiene Laboratory
 P.O. Box 415
 Noranda, Quebec, Canada J9X 5C4
 E. Villeneuve, Jr., Director
 (819) 762-2492
 (1,2,3)

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accredited laboratories, alphabetical listing . . .

(Com. listings appear under geographical locations shown.)

A

Abbott Labs. IL
Abex Corp. IL
Aerojet Strategic Propulsion Co. CA
Aetna Insurance Co. CT
Aetna Life & Casualty Co. CT
Alberta Worker's Health & Safety Compensation Canada
Allied Chemical Corp. OH
Aluminum Co. of America PA
AMAX, Inc. NJ
American Can Co. NJ
American Foundrymen's Society IL
American Mutual Insurance Cos. MA
Anaconda Co., Aluminum Div. MT
Anaconda Copper Co. AZ
Arizona Dept. of Health Services AZ
ASARCO, Inc. UT

B

Battelle Columbus Labs. OH
Bethlehem Steel Corp. PA
Biospherics, Inc. MD
Boeing Aerospace Co. WA
Burlington Industries, Inc. NC

C

Carr Corp. NY
Chry Corp. MI
Clayton Environmental Consultants, Inc. MI
CNA Insurance IL
Colorado School of Mines Research Inst. CO
Commercial Union Insurance MA
Connecticut Dept. of Health Services CT
Consolidated Biomedical Labs. VA
Continental Insurance Co. TX
Coors Porcelain Co. CO

D

Dept. of Community Health & Medical Care MO
Detroit Diesel Allison, Div. GMC IN
Dow Chemical U.S.A. MI
E.I. duPont de Nemours & Co. DE
E.I. duPont de Nemours & Co. NJ
Duracell International, Inc. MA

E

Eastman Kodak Co. NY
Employers Insurance of Wausau WI
Environmental Health Lab. GA
ESA Labs., Inc. MA
Environmental Research Group, Inc. MI
Environmental Science and Engineering, Inc. FL
Exide, Inc. PA

F

Fireman's Fund Insurance CA
Firestone Tire & Rubber Co. OH
Ford Motor Co. MI
Freeport Brick Co. PA

G

Galson Technical Services NY
Gannett-McCreath Labs. PA
General Dynamics/Fort Worth Div. TX
General Dynamics/Electric Boat Div. RI
General Electric Co. CT
General Electric Co. OH
General Electric Co. IN
General Electric Co. NY
General Motors Corp. MI
Granite City Steel Div. of National Steel Corp. IL
Gollob Analytical Service Corp. NJ
B.F. Goodrich Research & Development Center OH
Goodyear Tire & Rubber Co. OH
Gulf Science & Technology Corp. PA

H

Hager Lab., Inc. CO
Hanford Environmental Health Foundation WA
Hartford Insurance Group CT
Health Science Associates CA

I

Industrial Analytical Lab., Inc. HI
Industrial Health Foundation, Inc. PA
Industrial Hygienics, Inc. NY
Inmont Corp. NJ
Interlake, Inc. IL
International Paper Co. NY

J

Johns-Manville Corp. CO
Johnson Controls, Inc. WI

K

Kaiser Aluminum & Chemical Corp. CA
Kamron Environmental Services LA
Kamron Environmental Services MI
Kennebec Minerals Corp. UT

L

Lawrence Livermore Lab. CA
LFE Environmental Analysis Labs. CA
Liberty Mutual Insurance Research Center MA

M

Martin Marietta Corp. MO
Maryland State Dept. of Health & Mental Hygiene MD
Massachusetts Inst. of Technology MA
Materials Consultants & Labs., Inc. PA
McMaster University Canada
MOS Health Group, Inc. PA
Michigan Dept. of Public Health MI
Mobay Chemical Corp. MO
Mobil Oil Corp. NJ
Monsanto Chemical Intermediate IL
Monsanto Co. AL
Monsanto Co. MO
Monsanto Research Corp. OH

N

National Inst. for Occupational Safety & Health OH
National Loss Control Service Corp. IL
Naval Regional Medical Center - Oakland CA
Navy Environmental Health Center VA
Noranda Mines Ltd. Canada
North Carolina Dept. of Human Resources NC

O

Oak Ridge National Lab. TN
Olin Corp. CT

P

Pedco Environmental, Inc. OH
Phillips Petroleum Co. OK
Pollution Control Science, Inc. OH
PPG Industries OH
PPG Industries, Coatings & Resins Div. PA

Q

Quest Research International, Inc. TX

R

Radian Corp. TX
Radiation Detection Co. CA
Reichhold Chemical, Inc. NY
Republic Steel Corp. OH
Research Triangle Inst. NC
Rohm and Haas Co. PA

S

St. Joe Zinc Co./Smelting Div. PA
St. Paul Fire & Marine Insurance Co. MN
Sandia Labs. NM
SCM Corp. OH
Scott Paper Co. PA

S

Sentry Insurance WI
Shell Development Co. TX
Sherwin Williams Co. IL
South Carolina Dept. of Health & Environmental Control SC
Spectrix Corp. TX
SRI International CA
State of California CA
State of California/Dept. of Health Services CA
State of Hawaii HI
State of Kentucky KY
State of Ohio Department of Health OH
State of Oregon OR
State of Washington WA
Stauffer Chemical Co. NY
Stauffer Chemical Co. CA
Suntech, Inc. PA

T

Tenneco Chemicals, Inc. NJ
Tennessee Eastman Co. TN
Tennessee Dept. of Labor TN
Texaco, Inc. TX
Texas Research Inst. TX
3M Co. MN
Travelers Insurance Co. CT

U

Union Carbide Corp. NJ
Union Carbide Corp. OH
Union Carbide Corp. CO
Union Carbide Corp. OH
Union Carbide Corp. TX
Union Carbide Corp. WV
Union Carbide Corp. OH
United Technologies Corp. CT
University of California NM
University of Cincinnati OH
University of Iowa IA
University of Missouri MO
University of Utah Research Inst. UT
University of Washington WA
U.S. Air Force TX
U.S. Army Environmental Hygiene Agency MO
U.S. Dept. of Labor/OSHA UT
U.S. Gypsum Research Center IL
Utah State Dept. of Health UT

W

Warner-Lambert Co. NJ
West Allis Memorial Hospital WI
West Coast Technical Service, Inc. CA
West-Paine, Inc. LA
Wilson Labs. KS
Wyoming Dept. of Agriculture WY

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