Federal Building, Burlington, Vermont 05401.

GREAT LAKES REGION

John C. Kluczynski Federal Building, 30th Floor, 230 South Dearborn St., Chicago, Illinois 60604.

Area Offices

219 S. Dearborn St., Chicago, Illinois 60604.
U.S. Courthouse and Federal Building, 46 E. Ohio St., Indianapolis, Indiana 46204.
477 Michigan Ave., Room 565, Detroit, Michigan 48226.
Federal Building, Room 501, Fort Snelling, Twin Cities, Minnesota 55111.
U.S. Courthouse and Federal Building, Room 507, 200 W. 2nd Street, Dayton, Ohio 45402.
161 W. Wisconsin Ave., Milwaukee, Wisconsin 53203.

SOUTHWEST REGION

1100 Commerce St., Dallas, Texas 75242.

Area Offices

Federal Building, 610 South St., New Orleans, Louisiana 70130.
421 Gold Ave., S.W. Albuquerque, New Mexico 87102.
200 N.W. 6th St., Oklahoma City, Oklahoma 73102.
1100 Commerce St., Room 6B4, Dallas, Texas 75242.
643 E. Durango Blvd., San Antonio, Texas 79205.

ROCKY MOUNTAIN REGION

Building 20, Denver Federal Center, Denver, Colorado 80225.

Area Offices

The Rocky Mountain Region has no OPM Area Offices.

EASTERN REGION

Jacob K. Javits Federal Building, 26 Federal Plaza, New York, New York 10278.

Area Offices

Peter W. Rodino, Jr. Federal Building, 970 Broad St., Newark, New Jersey 07102.
26 Federal Plaza, New York, New York 10278.
U.S. Courthouse and Federal Bldg., 100 S. Clinton St., Syracuse, New York 13260.
Federico Degetau Federal Office Building, Carlos A. Chardon St., Hato Rey, Puerto Rico 00918.

MID-ATLANTIC REGION

William J. Green, Jr., Federal Building, 600 Arch St., Philadelphia, Pennsylvania 19106.

Area Offices

Edward A. Garmartz Federal Building and Courthouse, 101 W. Lombard St., Baltimore, Maryland 21201.
William J. Green, Jr., Federal Building, 600 Arch St., Philadelphia, Pennsylvania 19106.
Federal Building, 1000 Liberty Ave., Pittsburgh, Pennsylvania 15222.
Federal Building, 200 Granby Mall, Norfolk, Virginia 23510.

MID-CONTINENT REGION

1256 Federal Building, 1520 Market St., St. Louis, Missouri 63103.

Area Offices

120 S. Market St., Wichita, Kansas 67202.
601 E. 12th St., Kansas City, Missouri 64106.
1520 Market St., St. Louis, Missouri 63103.

WESTERN REGION

23rd Floor, 525 Market Street, San Francisco, California 94105.

Area Offices

522 North Central Ave., Phoenix, Arizona 85004.
845 S. Figueroa Street, 3rd Floor, Los Angeles, California 90017.
650 Capitol Mall, Sacramento, California 95814.
880 Front Street, San Diego, California 92188.
525 Market Street, San Francisco, California 94105.
300 Ala Moana Boulevard, Book 50028, Honolulu, Hawaii 96850.

NORTHWEST REGION

Room 2562, Federal Building, 915 Second Avenue, Seattle, Washington 98174.

Area Offices

Federal Building and Courthouse 701 C Street, Box 22, Anchorage, Alaska 99513.
Federal Building, Room 376, 1220 S.W. 3rd St., Portland, Oregon 97204.
Room 2562 Federal Building, 915 Second Ave., Seattle, Washington, 98174.

[FR Doc. 82-10152 Filed 4-15-82; 8:45 am]
BILLING CODE 6325-01-M

federal register

Friday
April 16, 1982

Part IV

Department of Labor

Employment Standards Administration, Wage and Hour Division

Minimum Wages for Federal and Federally Assisted Construction; General Wage Determination Decisions

DEPARTMENT OF LABOR

Employment Standards Administration, Wage and Hour Division

Minimum Wages for Federal and Federally Assisted Construction; General Wage Determination Decisions

General wage determination decisions of the Secretary of Labor specify, in accordance with applicable law and on the basis of information available to the Department of Labor from its study of local wage conditions and from other sources, the basic hourly wage rates and fringe benefit payments which are determined to be prevailing for the described classes of laborers and mechanics employed on construction projects of the character and in the localities specified therein.

The determinations in these decisions of such prevailing rates and fringe benefits have been made by authority of the Secretary of Labor pursuant to the provisions of the Davis-Bacon Act of March 3, 1931, as amended (46 Stat. 1494, as amended, 40 U.S.C. 276a) and of other Federal statutes referred to in 29 CFR 1.1 (including the statutes listed at 36 FR 306 following Secretary of Labor's Order No. 24–70) containing provisions for the payment of wages which are dependent upon determination by the Secretary of Labor under the Davis-Bacon Act; and pursuant to the provisions of part 1 of subtitle A of title 29 of Code of Federal Regulations, Procedure for Predetermination of Wage Rates (37 FR 21138) and of Secretary of Labor's Orders 12–71 and 15–71 (36 FR 8755, 8756). The prevailing rates and fringe benefits determined in these decisions shall, in accordance with the provisions of the foregoing statutes, constitute the minimum wages payable on Federal and federally assisted construction projects to laborers and mechanics of the specified classes engaged on contract work of the character and in the localities described therein.

Good cause is hereby found for not utilizing notice and public procedure thereon prior to the issuance of these determinations as prescribed in 5 U.S.C. 553 and not providing for delay in effective date as prescribed in that section, because the necessity to issue construction industry wage determination frequently and in large volume causes procedures to be impractical and contrary to the public interest.

General wage determination decisions are effective from their date of publication in the **Federal Register** without limitation as to time and are to be used in accordance with the provisions of 29 CFR Parts 1 and 5. Accordingly, the applicable decision together with any modifications issued subsequent to its publication date shall be made a part of every contract for performance of the described work within the geographic area indicated as required by an applicable Federal prevailing wage law and 29 CFR, Part 5. The wage rates contained therein shall be the minimum paid under such contract by contractors and subcontractors on the work.

Modifications and Supersedeas Decisions to General Wage Determination Decisions

Modifications and supersedeas decisions to general wage determination decisions are based upon information obtained concerning changes in prevailing hourly wage rates and fringe benefit payments since the decisions were issued.

The determinations of prevailing rates and fringe benefits made in the modifications and supersedeas decisions have been made by authority of the Secretary of Labor pursuant to the provisions of the Davis-Bacon Act of March 3, 1931, as amended (46 Stat. 1494, as amended, 40 U.S.C. 276a) and of other Federal statutes referred to in 29 CFR 1.1 (including the statutes listed at 36 FR 306 following Secretary of Labor's Order No. 24–70) containing provisions for the payment of wages which are dependent upon determination by the Secretary of Labor under the Davis-Bacon Act; and pursuant to the provisions of part 1 of subtitle A of title 29 of Code of Federal Regulations, Procedure for Predetermination of Wage Rates (37 FR 21138) and of Secretary of Labor's Orders 13–71 and 15–71 (36 FR 8755, 8756). The prevailing rates and fringe benefits determined in foregoing general wage determination decisions, as hereby modified, and/or superseded shall, in accordance with the provisions of the foregoing statutes, constitute the minimum wages payable on Federal and federally assisted construction projects to laborers and mechanics of the specified classes engaged in contract work of the character and in the localities described therein.

Modifications and supersedeas decisions are effective from their date of publication in the **Federal Register** without limitation as to time and are to be used in accordance with the provisions of 29 CFR Parts 1 and 5.

Any person, organization, or governmental agency having an interest in the wages determined as prevailing is encouraged to submit wage rate information for consideration by the Department. Further information and self-explanatory forms for the purpose of submitting this data may be obtained by writing to the U.S. Department of Labor, Employment Standards Administration, Wage and Hour Division, Office of Government Contract Wage Standards, Division of Government Contract Wage Determinations, Washington, D.C. 20210. The cause for not utilizing the rulemaking procedures prescribed in 5 U.S.C. 553 has been set forth in the original General Determination Decision.

Modifications to General Wage Determination Decisions

The numbers of the decisions being modified and their dates of publication in the **Federal Register** are listed with each State.

California:	
CA81–5119	May 15, 1981.
CA81–5132	July 7, 1981.
Connecticut:	
CT82–3001	Feb. 5, 1982.
CT81–3032	May 15, 1981.
Hawaii: HI82–5105	Mar. 12, 1982.
Idaho: ID81–5157	Oct. 9, 1981.
Louisiana: LA81–4085	Nov. 6, 1981.
Minnesota: MN81–2047	July 17, 1981.
Montana: MT82–5101	Feb. 5, 1982.
New Jersey: NJ81–305	Oct. 9, 1981.
Oregon: OR82–5100	Mar. 12, 1982.
Tennessee: TN81–1202	May 1, 1981.
Texas: TX81–4079	Oct. 2, 1981.
Utah: UT81–5156	Oct. 2, 1981.
Washington: WA81–5163	Dec. 4, 1981.

Supersedeas Decisions to General Wage Determination Decisions

The numbers of the decisions being superseded and their dates of publication in the **Federal Register** are listed with each State. Supersedeas decision numbers are in parentheses following the numbers of the decisions being superseded.

Illinois: IL79–2071(IL82–2028)	Sept. 7, 1979.
Kansas:	
KS81–4053(KS82–4013)	Oct. 2, 1981.
KS81–4047(KS82–4014)	July 6, 1981.
KS82–4003(KS82–4015)	Jan. 15, 1982.
KS81–4099(KS82–4016)	Nov. 27, 1981.
KS81–4100(KS82–4017)	Dec. 4, 1981.
Minnesota: MN80–2088(MN82–2029)	DEc. 19, 1980.

Cancellation of General Wage Determination Decisions

This is to advise all interested parties that the Department of Labor intends to withdraw 14 days from the date of this notice the following general wage determination:

IN78–2132, Vanderburgh County, Indiana—Residential Construction in 42 FR 49196 dated October 20, 1978.

Signed at Washington, D.C., this 9th day of April 1982.

Dorothy P. Come,

Assistant Administrator, Wage and Hour Division.

BILLING CODE 4510–27–M

DECISION NO. CA81-5119 - Mod. #6
(46 FR 27017 - May 15, 1981)

Alameda, Amador Calaveras, Contrs Costa, Del Norte, El Dorado, Humboldt, Marin, Mariposa, Merced, Napa, Nevada, Placer, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Tuolumne, Yolo, and Yuba Counties, California	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
Change:					
Bricklayers:					
Area 5	$18.31	$1.64	$2.05	$1.10	
Roofers:					
Area 6	14.15	1.40	1.65	2.00	.10
Omit:					
Carpenters (entire schedule as previously issued)					
Add:					
Carpenters:					
Area 1:					
Carpenters, Millwrights	16.95	1.755	2.95	1.35	.17
Hardwood Floorlayers; Shingler; Power Saw Operator; Steel Scaffold Erector and Steel Shoring; Saw Filers	17.10	1.755	2.95	1.35	.17
Area 2:					
Carpenters	16.05	1.755	2.95	1.35	.17
Hardwood Floorlayers; Shinglers; Power Saw Operators; Steel Scaffold Erector and Steel Shoring; Saw Filers	16.20	1.755	2.95	1.35	.17
Sheet Metal Workers:					
Area 5	19.26	1.46	3.29		.21

AREA DESCRIPTIONS

Area 1: Alameda, Contra Costa, Marin, Monterey, Napa, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano and Sonoma Counties
Area 2: Amador, Calaveras, Del Norte, El Dorado, Mariposa, Merced, Nevada, Placer, Sacramento, San Joaquin, Sutter, Tuolumne, Yolo, and Yuba Counties
SHEET METAL WORKERS:
Area 5: Monterey, San Benito, Santa Clara, and Santa Cruz Counties

DECISION NO. CA81-5132 - Mod. #10
(46 FR 35860 - July 7, 1981)

Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba Counties, California	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
Change:					
Bricklayers:					
Area 5	$18.31	$1.64	$2.05	$1.10	
Area 7	15.95	1.41	2.10	2.00	.04
Area 8	14.89	1.40	2.26	2.00	.10
Brick Tenders:					
Area 3	15.54	1.30	2.00	1.55	
Area 4	15.54	1.30	2.00	1.55	
Carpenters:					
Areas 1 and 2 change Fringe Benefits ONLY		1.755	1.95	1.35	.17
Cement Masons:					
Cement Masons	15.60	1.65	1.75	2.00	.08
Mastic; Magnesite; All Composition Masons	15.85	1.65	2.75	2.00	.08
Men working from swinging or slip form scaffolds	15.85	1.65	2.75	2.00	.08
Roofers:					
Area 7	14.15	1.40	1.65	2.00	.10
Sheet Metal Workers:					
Area 2	17.05	1.28	2.37		.02
Area 3	16.51	1.28	2.68		.13
Area 4	17.05	1.28	2.68		.04
Area 5	19.36	1.46	3.29		.21

Change: Modification No. 8 in Vol. 47 FR, Page 14337, April 2, 1982 to read Modification No. 9
Add: Del Norte County to Modifications 4 thru 9 published in the Federal Register

DECISION NO. CT82-3001 - MOD. #4 (47 FR 5621 - February 5, 1982) FAIRFIELD, LITCHFIELD AND WINDHAM COUNTIES, CONNECTICUT	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
CHANGE:					
POWER EQUIPMENT OPERATORS					
BUILDING CONSTRUCTION:					
Derrick, hoisting engineer 2 drums and over, hoisting structural steel, pile driver & setting stone	17.01	1.30	1.35	a	.20
Dragline, forklift - over 5' lift, front end loader - 7 cy. or over, gradall, hoisting engineer (all types of equipment where a drum and cable are used to hoist, pull or drag material regardless of motive power or operation), Koehring scooper loader and/or hoe, master mechanic, shovel & tower crane	16.85	1.30	1.35	a	.20
Maintenance engineer	16.69	1.30	1.35	a	.20
Central mix operator, Coleman loader and screening plant or similar equipment, combination hoe and loader over ½ yd, conveyors - regardless of motive power, front end loader 3 cy. up to 7 cy., joy drill limited to joy heavy weight champion or equivalent, mucking machine, post hole digger, pumpcrete machine, rock boring machine, vibratory hammer, welder & well digger	16.31	1.30	1.35	a	.20
Asphalt spreader	15.97	1.30	1.35	a	.20

DECISION NO. CT82-3001 - (CONT'D)	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
Bulldozer, carry-all operators, grader & scraper pan	15.87	1.30	1.35	a	.20
Combination hoe and loader machine, concrete mixer - 5 bags and over, front end loader under 3 cy., powerstone spreader	15.81	1.30	1.35	a	.20
Fork lift not over 4' & Steam Jenny	15.64	1.30	1.35	a	.20
Mechanical Heater	14.28	1.30	1.35	a	.20
Roller	15.49	1.30	1.35	a	.20
Dinky machine, power pavement breaker	15.23	1.30	1.35	a	.20
Fireman (High Pressure)	13.96	1.30	1.35	a	.20
Oiler	13.24	1.30	1.35	a	.20
Crane with boom excluding jib, over 150' - $.25 extra					
Crane with boom, excluding jib, over 200' - $.50 extra					
FOOTNOTE:					
a. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day, and Good Friday					
POWER EQUIPMENT OPERATORS					
HEAVY & HIGHWAY:					
Class 1	17.06	1.30	1.35	a	.20
Class 2	16.81	1.30	1.35	a	.20
Class 3	16.33	1.30	1.35	a	.20
Class 4	16.03	1.30	1.35	a	.20
Class 5	15.78	1.30	1.35	a	.20
Class 6	15.51	1.30	1.35	a	.20
Class 7	15.17	1.30	1.35	a	.20
Class 8	13.81	1.30	1.35	a	.20
Class 9	13.98	1.30	1.35	a	.20
Class 10	14.52	1.30	1.35	a	.20
Class 11	15.06	1.30	1.35	a	.20
Class 12	13.27	1.30	1.35	a	.20
Class 13	14.42	1.30	1.35	a	.20
Class 14	8.81	1.30	1.35	a	.20
Crane with 150' boom $.25 extra					
Crane with 200' boom $.50 extra					

DECISION NO. CT82-3001 -
(CONT'D)

Class 1: Erecting and handling structural steel; front end loader (7 cy. or over)
Class 2: Piledriver; power shovel and crane; dragline; gradall; trenching machine; lighter derrick; paver (concrete); derrick (stiff leg and guy); steel pile sheeting; koehring loader (scooper) master mechanic
Class 3: Drill (joy heavy weight champion or equivalent); side boom; loader (euclid); mucking machine; pumpcrete; rock and earth boring machine; post hole digger; well digger; & hammer (vibratory) central mix; combination hoe & loader (over ½ yd.)
Class 4: Asphalt spreader
Class 5: Front end loader (3 yds. or over); grader; power stone spreader; combination hoe and loader
Class 6: Asphalt roller; bulldozer; carryall; maintenance engineer concrete mixer (5 bags and over); welder
Class 7: Front end loader (under 3 yds.); roller; power chipper; fork lift; finishing machine; asphalt plant; power pavement breaker; dinky machine
Class 8: Compressor; pump
Class 9: Fireman (high pressure)
Class 10: Well point system
Class 11: Compressor battery
Class 12: Oiler
Class 13: Batch plant; bulk cement plant
Class 14: Track backhoe oiler

FOOTNOTE:
a. Paid Holidays: New Year's Day, Memorial Day, Independence Day Labor Day, Thanksgiving Day, Christmas Day and Good Friday

DECISION NO. CT81-3032 - MOD. #11 (46 FR 27040 - May 15, 1981) HARTFORD, MIDDLESEX, NEW HAVEN, NEW LONDON AND TOLLAND COUNTIES, CONNECTICUT	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
CHANGE:					
POWER EQUIPMENT OPERATORS					
BUILDING CONSTRUCTION:					
Derrick, hoisting engineer 2 drums and over, hoisting structural steel, pile driver & setting stone	17.01	1.30	1.35	a	.20
Dragline, forklift - over 5' lift, front end loader - 7 cy. or over, gradall, hoisting engineer (all types of equipment where a drum and cable are used to hoist, pull or drag material regardless of motive power or operation), Koehring scooper loader and/or hoe, master mechanic, shovel & tower crane	16.85	1.30	1.35	a	.20
Maintenance engineer	16.69	1.30	1.35	a	.20
Central mix operator, Coleman loader and screening plant or similar equipment, combination hoe and loader over ½ yd, conveyors - regardless of motive power, front end loader 3 cy. up to 7 cy., joy drill limited to joy heavy weight champion or equivalent, mucking machine, post hole digger, pumpcrete machine, rock boring machine, vibratory hammer, welder & well digger	16.31	1.30	1.35	a	.20
Asphalt spreader	15.97	1.30	1.35	a	.20

DECISION NO. CT81-3032 (CONT'D)

	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
Bulldozer, carry-all operators, grader & scraper pan	15.87	1.30	1.35	a	.20
Combination hoe and loader machine, concrete mixer - 5 bags and over, front end loader under 3 cy., powerstone spreader	15.81	1.30	1.35	a	.20
Fork lift not over 4' & Steam Jenny	15.64	1.30	1.35	a	.20
Mechanical Heater	14.28	1.30	1.35	a	.20
Roller	15.49	1.30	1.35	a	.20
Dinky machine, power pavement breaker	15.23	1.30	1.35	a	.20
Fireman (High Pressure)	13.96	1.30	1.35	a	.20
Oiler	13.24	1.30	1.35	a	.20

Crane with boom excluding jib, over 150' - $.25 extra

Crane with boom, excluding jib, over 200' - $.50 extra

FOOTNOTE:
a. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day, and Good Friday

POWER EQUIPMENT OPERATORS HEAVY & HIGHWAY:					
Class 1	17.06	1.30	1.35	a	.20
Class 2	16.81	1.30	1.35	a	.20
Class 3	16.33	1.30	1.35	a	.20
Class 4	16.03	1.30	1.35	a	.20
Class 5	15.78	1.30	1.35	a	.20
Class 6	15.51	1.30	1.35	a	.20
Class 7	15.17	1.30	1.35	a	.20
Class 8	13.81	1.30	1.35	a	.20
Class 9	13.98	1.30	1.35	a	.20
Class 10	14.52	1.30	1.35	a	.20
Class 11	15.06	1.30	1.35	a	.20
Class 12	13.27	1.30	1.35	a	.20
Class 13	14.42	1.30	1.35	a	.20
Class 14	8.81	1.30	1.35	a	.20
Crane with 150' boom $.25 extra					
Crane with 200' boom $.50 extra					

DECISION NO. CT81-3032 (CONT'D)

Class 1: Erecting and handling structural steel; front end loader (7 cy. or over)
Class 2: Piledriver; power shovel and crane; dragline; gradall; trenching machine; lighter derrick; paver (concrete); derrick (stiff leg and guy); steel pile sheeting; koehring loader (scooper) master mechanic
Class 3: Drill (joy heavy weight champion or equivalent); side boom; loader (euclid): mucking machine; pumpcrete; rock and earth boring machine; post hole digger; well digger; & hammer (vibratory) central mix; combination hoe & loader (over ½ yd.)
Class 4: Asphalt spreader
Class 5: Front end loader (3 yds. or over); grader; power stone spreader; combination hoe and loader
Class 6: Asphalt roller; bulldozer; carryall; maintenance engineer concrete mixer (5 bags and over); welder
Class 7: Front end loader (under 3 yds.); roller; power chipper; fork lift; finishing machine; asphalt plant; power pavement breaker; dinky machine
Class 8: Compressor; pump
Class 9: Fireman (high pressure)
Class 10: Well point system
Class 11: Compressor battery
Class 12: Oiler
Class 13: Batch plant; bulk cement planst
Class 14: Track backhoe oiler

FOOTNOTE:
a. Paid Holidays: New Year's Day, Memorial Day, Independence Day Labor Day, Thanksgiving Day, Christmas Day and Good Friday

DECISION NO. HI82-5105 - Mod #1 (47 FR 10948 - March 12, 1982) Statewide Hawaii	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
CHANGE:					
PLUMBERS; STEAMFITTERS	$14.00	1.05	2.05	15.86%	.15

DECISION NO. ID81-5157 - Mod #9 (46 FR 50223 - Oct. 9, 1981) Statewide Idaho	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
CHANGE:					
BOILERMAKERS: (Area 1)	$18.41	1.30	1.25	1.00	.04

DECISION NO. LA81-4085 - MOD. #4 (46 FR 55206 - November 6, 1981) Allen, Beauregard, Bossier, Caddo, Calcasieu, Cameron, Jefferson, Jefferson Davis, Orleans, Plaquemines, St. Bernard & St. Charles Parishes, Louisiana	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
CHANGE:					
Carpenters & piledrivermen:					
Zone 1	$11.97	.75	.55		.06
Cement masons - Zone 2	11.80	.70			
Electricians:					
Zone 3 - Electricians	14.80	2.20	3%		1%
Cable splicers	15.30	2.20	3%		1%
Laborers:					
Zone 2 - Group 1	7.98	.25	.27		.05
Group 2	8.08	.25	.27		.05
Group 3	8.53	.25	.27		.05
Group 4	8.78	.25	.27		.05
Painters:					
Zone 2 - Group 1	12.05	.975	.80		.12
Group 2	12.43	.975	.80		.12
Group 3	14.00	.975	.80		.12
Power equipment ops.:					
Zone 2 - Group 1	12.28	.65	1.20		.10
Group 2	12.53	.65	1.20		.10
Group 3	12.03	.65	1.20		.10
Group 4	10.72	.65	1.20		.10
Group 5	10.02	.65	1.20		.10
Group 6	8.74	.65	1.20		.10
Group 7	7.77	.65	1.20		.10
Group 8	10.35	.65	1.20		.10
Group 9	10.62	.65	1.20		.10
Group 10	8.35	.65	1.20		.10
Truck drivers:					
Zone 2 - Group 1	9.21				
Group 2	9.31				
Group 3	9.54				
Group 4	9.75				
Group 5	10.17				

DECISION NO. MN81-2047 - MOD. #2
(46 FR 37182 - July 17, 1981)
Benton, Sherburne & Stearns Cos., Minnesota

	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
CHANGE:					
Plumbers & Steamfitters: Benton & Stearns Cos. & the Western ½ of Sherburne Co.	$14.77	.85	.63		.06

DECISION NO. MT82-5101 - Mod. #2
(46 FR 5630-February 5, 1982)
Statewide, Montana

	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
Change:					
Painters- Area 2:					
Brush; Preparatory work; Pot Tender; Parking Lot Striping and related work; Roller up to 9"	$11.97	$1.24	.40		1%
Hand Taper	12.37	1.24	.40		1%
Machine Taper	13.62	1.24	.40		1%
Paperhanger; Brush on Steel	12.47	1.24	.40		1%
Roller over 9" long	15.57	1.24	.40		1%
Water and Sandblasting Application of cold tar products, epoxies and polyurethanes and acid resistant paints; Spraying and airless spray	14.22	1.24	.40		1%

DECISION NO. NJ81-3053 - MOD. #11
(46 FR 50243 - October 9, 1981)
BERGEN, ESSEX, HUDSON, HUNTERDON, MIDDLESEX, MORRIS, PASSAIC, SOMERSET, SUSSEX, UNION AND WARREN COUNTIES, NEW JERSEY

	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
CHANGE:					
LABORERS, BUILDING CONSTRUCTION: ZONE 6	9.50	.75	1.50		.10

DECISION NO. OR82-5100 - Mod #2
(47 FR 10954 - March 12, 1982)
Statewide Oregon

	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
CHANGE:					
BOILERMAKERS	$18.41	1.30	1.25	1.00	.04
SOFT FLOOR LAYERS: Area 1	13.74	.95	1.15	b	.13

DECISION #TN81-1202 - Mod. #5 (46 FR 24886 - May 1, 1981) Shelby County, Tennessee	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
CHANGE:					
Asbestos workers	$15.05	.85	1.50		.09
Boilermakers	$14.50	1.475	1.50		.04
Bricklayers & Stone masons	14.75	.63	.30		.15
Carpenters, Piledrivermen, & Soft floor layers	12.63	.85	1.10		.085
Elevator Constructors:					
Mechanics	13.60	1.345	1.085	a + b	.035
Helpers	9.52	1.345	1.085	a + b	.035
Probationary helpers	6.80				
Glaziers	13.40	.75	.40		
Laborers:					
Group 1	9.115	.50	.45		.05
Group 2	9.215	.50	.45		.05
Group 3	9.265	.50	.45		.05
Group 4	9.465	.50	.45		.05
Group 5	9.665	.50	.45		.05
Group 6	9.60	.50	.45		.05
Marble, Tile, & Terrazzo workers	10.66	.73	.36		.05
Marble, Tile, & Terrazzo finishers	6.10				
Painters:					
Commercial work	12.575	.60	.55		.10
Industrial work, spray, & sandblast	12.825	.60	.55		.10
Roofers	11.50		.45		.04

DECISION NO. TX81-4079 - MOD. #4 (46 FR 48867 - October 2, 1981) Bell, Bosque, Coryell, Falls, Hill & McLennan Cos., Texas	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
CHANGE:					
Building Construction:					
Sheet metal workers - Zone 1	$12.13	3%+.65	.84		.09
Zone 2	12.61	3%+.65	.84		.09
Zone 3	13.58	3%+.65	.84		.09
OMIT:					
All rates & classifications for Incidental Paving & Utilities					
ADD:					
Incidental Paving & Utilities:					
Asphalt Heaterman	4.55				
Asphalt Raker	5.55				
Carpenter	6.50				
Carpenter Helper	5.00				
Concrete Finisher (Structures)	5.50				
Concrete Finisher Helper (Structures)	4.25				
Concrete Rubber	4.70				
Electrician	9.00				
Electrician Helper	5.90				
Form Builder (Structures)	5.50				
Form Builder Helper (Structures)	4.50				
Form Setter (Structures)	5.00				
Form Setter Helper (Structures)	4.40				
Laborer, Common	4.10				
Laborer, Utility Man	4.45				
Mechanic	6.55				
Oiler	5.50				
Serviceman	4.75				
Pipelayer:					
Bosque, Falls, Hill & McLennan Cos.	6.00				
Pipelayer (Concrete & clay):					
Bell & Coryell Cos.	6.00				
Plumbers (Bell & Coryell Cos.)					
Zone 1 - 20 to 45 miles from McLennan Court House including towns of Temple & Belton	12.65	.40	.55		.04
Zone 2 - all areas not included in Zone 1	13.65	.40	.55		.04
Reinforcing Steel Setter (Structures)	5.85				
Reinforcing Steel Setter Helper	5.00				

DECISION NO. TX81-4079 - MOD. #4 (CONT'D)

	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
Sign Erector	$ 4.65				
Spreader Box Man	4.80				
Power Equipment Operators:					
Asphalt Distributor	5.65				
Asphalt Paving Machine	5.25				
Broom or Sweeper Operator	4.65				
Bulldozer 150 HP & Less	5.15				
Bulldozer over 150 HP	6.00				
Crane, Clamshell, Backhoe, Derrick, Dragline, Shovel (less than 1½ CY)	5.25				
Crane, Clamshell, Backhoe, Derrick, Dragline, Shovel (1½ CY & Over)	6.50				
Crushing or Screening Plant Op.	4.60				
Front End Loader (2½ CY & Less)	5.15				
Front End Loader (Over 2½ CY)	6.15				
Motor Grader Op., Fine Grade	7.00				
Motor Grader Operator	5.50				
Roller, Steel Wheel (Plant-Mix Pavements)	4.50				
Roller, Steel Wheel (Other-Flat Wheel or Tamping)	4.95				
Roller, Pneumatic (Self-Propelled)	4.45				
Scrapers (17 CY & Less)	5.10				
Scrapers (Over 17 CY)	5.25				
Tractor (Crawler Type) 150 HP & Less	4.10				
Tractor (Pneumatic) 80 HP & Less	4.65				
Tractor (Pneumatic) over 80 HP	5.20				
Truck Drivers:					
Single Axle, Light	4.65				
Single Axle, Heavy	5.50				
Tandem Axle or Semitrailer	5.60				

DECISION NO. UT81-5156 - Mod. #6

(46 FR 48870 - October 2, 1981)

Statewide, Utah

	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
Change					
Painters:					
Area 1:					
Brush; Roller	$11.22	.51	.50		.05
Spray; Sandblaster; Steeplejack; Brush, steel and bridge; Brush (swing stage)	11.47	.51	.50		.05
Spray (swing stage); Sandblaster (swing stage); Spray, steel and bridge	11.67	.51	.50		.05
Omit:					
Power Equipment Operators Schedules as issued:					
Heavy and Highway (Areas 1 and 2)					
Steel Erection and Piledriving					
Add:					
Power Equipment Operators Schedules-attached					

DECISION NO. UT81-5156 - (Cont'd)

	Basic Hourly Rates	Basic Hourly Rates	Fringe Benefits Payments			
			H & W	Pensions	Vacation	Education and/or Appr. Tr.
Power Equipment Operators:						
Heavy and Highway Construction:	AREA 1	AREA 2				
Group 1	$12.51	$14.51	$1.88*	$2.00	$1.32	.17
Group 2	12.86	14.86	1.88*	2.00	1.32	.17
Group 3	13.04	15.04	1.88*	2.00	1.32	.17
Group 4	13.15	15.15	1.88*	2.00	1.32	.17
Group 5	13.61	15.61	1.88*	2.00	1.32	.17
Group 6	13.76	15.76	1.88*	2.00	1.32	.17
Group 6-A	13.87	15.87	1.88*	2.00	1.32	.17
Group 7	14.17	16.17	1.88*	2.00	1.32	.17
Group 7-A	14.23	16.23	1.88*	2.00	1.32	.17
Group 8	14.29	16.29	1.88*	2.00	1.32	.17
Group 9	14.45	16.45	1.88*	2.00	1.32	.17
Group 10	14.89	16.89	1.88*	2.00	1.32	.17
Group 10-A	15.85	16.85	1.88*	2.00	1.32	.17
Group 10-B	16.30	18.30	1.88*	2.00	1.32	.17
Group 11	16.46	18.46	1.88*	2.00	1.32	.17

* Includes $.40 to Pensioned Health and Welfare

UNDERGROUND and SHAFT WORK:
Underground Work; Employees working underground shall receive $0.30 per hour in addition ot their straight-time hourly rate.

Shaft Work: Employees working within Shafts, Stopes and Raises shall receive $0.50 per hour in addition to their straight-time hourly rate.

DECISION NO. UT81-5156 (Cont'd)

	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
Power Equipment Operators:					
Steel Erection:					
Group 1	$13.77	$1.88*	$2.00	$1.32	.17
Group 2	14.27	1.88*	2.00	1.32	.17
Group 3	15.65	1.88*	2.00	1.32	.17
Group 4	15.83	1.88*	2.00	1.32	.17
Group 4-A	16.25	1.88*	2.00	1.32	.17
Group 5	16.92	1.88*	2.00	1.32	.17
Group 6	17.49	1.88*	2.00	1.32	.17
Group 7	17.90	1.88*	2.00	1.32	.17
Group 8	18.29	1.88*	2.00	1.32	.17
Group 9	19.69	1.88*	2.00	1.32	.17
Piledriving:					
Group 1	13.14	1.88*	2.00	1.32	.17
Group 1-A	13.60	1.88*	2.00	1.32	.17
Group 1-B	13.87	1.88*	2.00	1.32	.17
Group 2-A	13.87	1.88*	2.00	1.32	.17
Group 2-B	14.60	1.88*	2.00	1.32	.17
Group 2-C	14.88	1.88*	2.00	1.32	.17
Group 2-D	15.08	1.88*	2.00	1.32	.17
Group 3	15.28	1.88*	2.00	1.32	.17
Group 3-A	15.86	1.88*	2.00	1.32	.17
Group 4	16.59	1.88*	2.00	1.32	.17
Group 5	16.83	1.88*	2.00	1.32	.17
Group 6	18.35	1.88*	2.00	1.32	.17

* Includes $.40 to Pensioned Health and Welfare

UNDERGROUND and SHAFT WORK:
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Shaft Work: Employees working within Shafts, Stopes and Raises shall receive $0.50 per hour in addition to their straight-time hourly rate.

	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
DECISION NO. WA81-5163 - Mod #9					
(46 FR 59457 - Dec. 4, 1981)					
Statewide Washington					
CHANGE:					
BOILERMAKERS:	$18.41	1.30	1.25	1.00	.04
SOFT FLOOR LAYERS:					
Area 5	15.03	1.43	1.50		1%
Area 6	13.74	.95	1.15	c	.13
TERRAZZO WORKERS; TILE SETTERS					
Area 8	15.11	1.22	1.80		.16

STATE: Illinois COUNTY: Kankakee
DECISION NUMBER: IL82-2028 DATE: Date of Publication
Supersedes Decision No. IL79-2071, dated September 7, 1979 in 44 FR 52545
DESCRIPTION OF WORK: Building (Including Residential) Construction Projects

	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
ASBESTOS WORKERS	$17.00	1.145	1.645		.06
BOILERMAKERS	16.80	1.675	1.75	5%	.18
BRICKLAYERS; Caulkers, Cement Masons; Cleaners; Pointers; Stonemasons; & Tile Setters	15.20	.80	1.55		
CARPENTERS:					
Commercial Building:					
Carpenters; Dry Wallers; Millwrights; Piledrivermen & Soft Floor Layers	15.85	.95	.80		.03
Residential	70%JR				
ELECTRICIANS:					
Commercial Building:					
Electricians	16.88	.88	3%+1.20		.6%
Cable Splicers	17.28	.88	3%+1.20		.6%
Residential	10.75	.88	3%+.70		.6%
ELEVATOR CONSTRUCTORS:					
Constructors	17.36	1.345	.95	a & b	.035
Helpers	70%JR	1.345	.95	a & b	.035
Helpers (Prob.)	50%JR				
GLAZIERS:					
Excluding Area East of Cabery	15.70	.83	1.42		.02
IRONWORKERS	16.00	1.345	1.255		.05
PAINTERS:					
Brush; Roller; & Taping (Hand)	12.45	.70	1.50		
Spray	13.95	.70	1.50		
Paperhanging	13.45	.70	1.50		
Taping (Machine); Sandblasting; & Steamcleaning	14.45	.70	1.50		
PLASTERERS	15.00	.80	1.55		
PLUMBERS; Pipefitters; & Steamfitters	16.86	.70	1.10		.08
ROOFERS	16.35	.65			
SHEET METAL WORKERS	16.43	1.32	1.30		.14
SPRINKLER FITTERS	15.31	.95	1.40		.08
TILE SETTERS' FINISHERS	12.80	.81	.72		
TRUCK DRIVERS:					
2-3 Axle Trucks	12.025	$29.50c	$31.00c		
4 Axle Trucks	12.225	29.50c	31.00c		
5 Axle Trucks	12.425	29.50c	31.00c		
6 Axle Trucks	12.575	29.50c	31.00c		

DECISION NO. IL82-2028

FOOTNOTES:
a. 7 Paid Holidays: New Year's Day; Memorial Day; Independence Day; Labor Day; Thanksgiving Day; Day after Thanksgiving Day; & Christmas Day
b. Employer contributes 8% of regular hourly rate to vacation pay credit for employee who has worked in business more than 5 years; 6% for less than 5 years
c. Per Employee Per Week

LABORERS:	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
Unskilled	$13.20	.65	.85		.05
Semi-Skilled	13.40	.65	.85		.05
Skilled	13.60	.65	.85		.05
Pump Men	14.00	.65	.85		.05

LABORERS CLASSIFICATIONS
UNSKILLED: Asphalt Plant Laborers; Carpenter Tender; Cleaning of Windows, Doors, Walls, Floors, Scrubbing & Waxing of Floors; Common Laborer; Dumpmen & Spotters; Firemen or Salamander Tender; Fireproofing Laborer; Gravel Box Men; Landscapers; Planting & Placing of Trees, Shrubs, Sod & Seeding; Tool Cribmen; Unloading Explosives; & All Laborers not otherwise mentioned
SEMI-SKILLED: Asphalt Workers w/Machine & Layers; Bankmen on Floating Plant; Batch Dumpers; Cement Handlers; Cement Silica, Clay, Fly Ash, Lime & Plasters, Handlers (Bulk or Bag); Chloride Handlers; Cofferdam Workers Plus Depth; Concrete Workers (wet); Deck Hand, Dredge Hand & Shore Laborers; Driving All Stakes, Stringlines for all Machinery; Grade Checker; Handling of Materials Treated w/Oil, Creosote, Asphalt and/or Foreign Material Harmful to Skin or Clothing; Kettle & Tar Men; Laborers w/De-watering Systems; Mason Tenders; Mortar Mixer Operators; Motorized Buggies or Motorized Unit Used for Wet Concrete or Handling of Building Materials; On All Concrete Paving & Slope Walls, Placing, Cutting & Tying of Reinforcing (re-bars & wire mesh); On Concrete Paving, Placing, Cutting & Tying of Reinforcing; Plastic Installers; Power Tools; Scaffold Workers; Setting & Building of Manholes & Catch Basins; Sewer Workers Plus Depth; Stripping of all Concrete Forms, except Paving Forms; Tank Cleaners; The Unloading & Laborers w/Steel Workers & Re-bars; Track Laborers; Tunnel Tenders in free air; & Vibrator Operators
SKILLED: Air Tamping Hammerman; Asphalt Raker; Caisson Workers Plus Depth; Chain Saw Operators; Concrete Burning Machine Operator; Concrete Saw Operator; Coring Machine Operator; Curb Asphalt Machine Operator; Front End Man on Chip Spreader; Gunnite Nozzle Men; Laborers Handling Masterplate or Similar Materials; Laborers Tending Masons w/Hot Material or Where Foreign Materials are used; Laser Beam Operator; Layout Man and/or Tile Layer; Lead Man on Sewer Work; Luteman; Multiple Concrete Duct-Leadman; Paving Breaker, Jackhammer & Drill Operators; Plaster Tenders; Ready Mix Scalemen, Permanent, Portable or Temporary Plant; Screenman on Asphalt Pavers; Signal Man on Crane; Steel Form Setters-Street & Highway; Tree Topper or Trimmer; Underpinning & Shoring of Buildings; & Welders, Cutters, Burners & Torchmen

DECISION NO. IL82-2028

POWER EQUIPMENT OPERATORS:	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
CLASS I	$15.80	$1.50	$1.35	.80	.05
CLASS II	14.50	1.50	1.35	.80	.05
CLASS III	13.05	1.50	1.35	.80	.05
CLASS IV	11.60	1.50	1.35	.80	.05

CLASS I: Asphalt Plant; Asphalt Spreader; Autograde; Batch Plant; Benoto (requires two engineers); Boiler and Throttle Valve; Caisson Rigs; Central Redi-mix Plant; Combination Back Hoe Front Endloader Machine; Compressor and Throttle Valve; Concrete Breaker (truck mounted); Concrete Conveyor; Concrete Paver; Concrete Placer; Concrete Pump (truck mounted); Concrete Tower; Cranes; Creter Crane; Crusher, stone; Derricks; Derricks, traveling; Formless Curb and Gutter Machine; Crader, elevating; Grouting Machines; Highlift Shovels or Front Endloader, 2½ yards and over; Hoists, elevators (outside type rack and pinion and similar machines); Hoists, one, two, and three drum; Hoists, two tugger one floor; Hydraulic Backhoes; Hydraulic Dump Trucks; Locomotives; Mechanic; Motor Patrol; Pile Drivers and Skid Rig; Post Hole Digger; Pre-stress Machine; Pump Cretes Dual Ram; Pump Cretes: Squeeze Cretes - screw type pumps, Gypsum Bulker and Pump; Raised and Blind Hole Drill; Rock Drill (self-propelled); Rock Drill (truck mounted); Roto Mill Grinder; Scoops, tractor drawn; Slip Form Paver; Straddle Buggies; Tournapull; Tractor with boom, and side boom; Trenching Machines
CLASS II: Bobcat (over 3/4 cu. yd.); Boilers; Brick Forklift; Broom, all power propelled; Bulldozers; Concrete Mixer (two bag and over); Conveyor, portable; Forklift Trucks; Greaser Engineer; Highlift Shovels or Front Endloaders, under 2½ yds.; Hoists, automatic; Hoists, inside freight elevators; Hoists, sewer dragging machine; Hoists, tugger single drum; Rollers; Steam Generators; Tractors; Tractor drawn Vibratory Roller (receives an additional $0.50 per hour); Winch Trucks with "A" Frame
CLASS III: Air Compressor; Combination, small equipment Operator; Generators; Heaters, mechanical; Hoists, inside elevators (Rheostat manual controlled and push button with automatic doors); Hydraulic Power Units (Pile Driving and extracting); Pumps, over 3" (1 to 3 not to exceed a total to 300 ft.); Pumps, Well Points; Welding Machines (2 through 5); Winches, 4 small electric Drill Winches; Bobcat (up to and including 3/4 cu. yd.); Brick Forklift
CLASS IV: Oilers

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR, 5.5 (a) (1) (ii)).

SUPERSEDEAS DECISION

STATE: Kansas COUNTY: Leavenworth
DECISION NUMBER: KS82-4013 DATE: Date of Publication
Supersedes Decision No. KS81-4053 dated October 2, 1981, in 46 FR 48847
DESCRIPTION OF WORK: Building Construction Projects (does not include single family homes and apartments up to and including 4 stories).

	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
ASBESTOS WORKERS	$16.69	1.05	1.75		.06
BOILERMAKERS	14.97	1.375	1.15		.05
BRICKLAYERS, STONEMASONS	13.39	1.00	.95	1.50	
CARPENTERS:					
Carpenters, Millwrights, & Piledrivermen	14.05	.65	.75		.07
CEMENT MASONS	13.925	.80	.85		
ELECTRICIANS:					
Zone 1:					
Delaware, Kickapoo, High Prairie & Leavenworth Townships	16.18	.69	3%+1.00	7%	.12
Zone 2:					
Remainder of County	15.55	1.00	3%+ .85		.13
ELEVATOR CONSTRUCTORS	14.135	1.195	.95	a	.035
ELEVATOR CONSTRUCTORS' HELPERS	9.89	1.195	.95	a	.035
GLAZIERS	13.53	.90	1.34	17.14%	.05
IRONWORKERS	15.10	.85	1.80	1.00	.10
LATHERS	14.05	.65	.75		.07
LINE CONSTRUCTION:					
Zone 1:					
Southwest 2/3 of Leavenworth County:					
Linemen	14.52	.45	3%		½%
Cable Splicers	15.26	.45	3%		½%
Groundmen	9.03	.45	3%		½%
Powdermen	12.03	.45	3%		½%
Line Truck & Equipment Operators	12.03	.45	3%		½%
Zone 2:					
Remainder of Leavenworth County:					
Linemen	17.33	.45	3%+.25		½%
Linemen Operators	16.13	.45	3%+.25		½%
Groundmen Powdermen	12.02	.45	3%+.25		½%
Groundmen	11.42	.45	3%+.25		½%
MARBLE & TILE SETTERS	15.20	5%	5%		
PAINTERS:					
Brush, Roller, Tapers	12.19	.55	.70		.08
Spray	13.19	.55	.70		.08
Paperhangers	12.69	.55	.70		.08
PLASTERERS	15.80				

	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
PIPEFITTERS	$14.54	.72	1.60		.10
PLUMBERS	16.16	1.20	1.30		.15
ROOFERS	13.05	.75	.75		.14
SHEET METAL WORKERS	14.17	.75	1.44	1.25	.17
SOFT FLOOR LAYERS	11.26	.60	1.00	1.00	1%
SPRINKLER FITTERS	15.10	.95	1.40		.08
TERRAZZO WORKERS	14.31	5%	5%		
WELDERS - Receive rate prescribed for craft performing operation to which the welding is incidental.					

FOOTNOTE:

a. Employer contributes 8% of basic hourly rate for over 5 years' service and 6% basic hourly rate for 6 months' to 5 years' service as Vacation Pay Credit. Also 7 paid holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the day after Thanksviging Day, & Christmas Day.

LABORERS (Building Construction:					
General Laborers	8.85	.75	.60	.50	.05
Power Tool Operators; Compactors; Concrete Breakers; Chipping Tools; Drilling Tools; Concrete Saws; Mechanically Operated Georgia Buggy	9.05	.75	.60	.50	.05
Mason Tenders; Plaster Tenders; Mortar Mixers for Plasterers, Masons and Cement Finishers; All Stocking Scaffold; Clean up for Masons (Building & Wrecking)	9.15	.75	.60	.50	.05
Sand and Concrete Gun Nozzlemen Powdermen	9.25	.75	.60	.50	.05
LABORERS (Site Preparation and Grading):					
Group 1	8.20	.95	.60	.50	.05
Group 2	8.35	.95	.60	.50	.05
Group 3	8.45	.95	.60	.50	.05
Group 4	8.60	.95	.60	.50	.05

LABORERS (Site Preparation & Grading) - Classifications:

Group 1: Board Mat Weavers and Cable Tiers; Georgia Buggy, Manually Operated; Mixermen - No Skip Lift; Salamander Tenders; Track Men; Tractor Swampers; Truck Dumpers; Wire Mesh Setters; Water Pump up to 4 inches; and all other General Laborers.
Group 2: Air Tool Operators; Cement Handlers (Bulk); Chain Saw; Georgia Buggy (Mechanically Operated); Grade Men; Hot Mastic Kettlemen; Crusher Feeders; Joint Men; Jute Men; Mason Tenders; Material Batch Hopper and Scale Men; Mixer Men; Pier Hole Men Working 10 ft. deep; Pipelayer - Drainage (Concrete and/or Corrugated Metal); Signal Men (Crane); Truck Dumper--Dry Batch; Vibrator Operator; Wagon & Churn Drill Operator.
Group 3: Asphalt Raker; Barco Tamper; Concrete Saw, Creosote Material--Handling and Applying; Nozzle Burner (Cutting Torch and Burning Bar).
Group 4: Conduit Pipe; Tile and Duct Line Setter; Form Setter and Liner on Concrete Paving; Powderman; Sand-blasting and Gunnite Nozzleman; Sanitary Sewer Pipe Layer; Steel Plate Structure Erectors; Water and Gas Distribution Lines.

POWER EQUIPMENT OPERATORS (Building Construction):	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
Group 1	$16.51	1.00	1.65		.20
Group 2	16.16	1.00	1.65		.20
Group 3	13.76	1.00	1.65		.20
Group 4	14.26	1.00	1.65		.20
Group 5	14.51	1.00	1.65		.20
Group 6	16.41	1.00	1.65		.20
Group 7	16.76	1.00	1.65		.20
Group 8	16.26	1.00	1.65		.20
Group 9	16.01	1.00	1.65		.20
Group 10	14.01	1.00	1.65		.20
Group 11	17.01	1.00	1.65		.20

Group 1: Asphalt Paver and Spreader; Asphalt Plant Mixer Operator; Asphalt Plant Operator; Back Fillers; Backhoe, All Types; Barber-Green Loader (Similar Type); Blade--Power, All Types; Boats--Power; Boilers (2); Boring Machines (All Types); Cable Ways; Cherry Pickers (All Types); Chip Spreader; Clamshells; Combination Concrete Hoist and Mixer, Such As Mixermobile; Concrete Ready-Mixed Plant, Portable (Job Site); Concrete Mixer Paver; Crane--Overhead; Crain or rigs (All Types); Crusher, Rock; Derricks and Derrick Cars (Power Operated); Ditching Machines; Dozer; Draglines; Dredges--Any Type Power; Forklift (All Types and Sizes Except

POWER EQUIPMENT OPERATORS (Building Construction) (Cont'd):

Masonry); Grade-all--Similar Type; Hoist, Endless Chain--Power Operated with Power Travel; Loaders, All Types; Locomotives, All Types; Mechanics and Welders; Mucking Machines; Orange Peels; Pile Drivers (All Types); Pumps--Material--All Types; Push Cats; Scoops (All Types); Self-Propelled Rotary Drill; Shovel; Power; Side Boom; Skimmer Scoop; Testhold Machine; Throttle Man.

Group 2: Boilers (1); Brooms, Power Operated (All Types); Chip spreader (Font Man); Clef Plane Operator; Compressor (1), 105 Ft. or Over; Compressors (2), 105 Ft. or Over, Not More Than 20 Ft. Apart; Compressors, Tandem (Any Size); Compressor, Single, Truck Mounted; Concrete Saws, Self-Propelled; Crab--Power Operated; Curb Finishing Machine; Elevator; Finishing Machine; Fireman on Rigs; Flex Plane; Floating Machine; Form Grader; Greaser, Hoist, Endless Chain, Power Operated; Hopper, power operated; Hydra Hammer (All Types); Lad-A-Vator, Similar Type; Roller, All Types; Siphone, Jets and Jennies; Sub-grader; Tractors over 50 HP.

Group 3: Oiler

Group 4: Fork Lift, Masonry; Oiler Driver, All Types.

Group 5: "A" Frame Trucks; Mixers (With Side Loaders); Pumps (With Well Points Dewatering Systems, Test and Pressure Pumps); Tractors (Except When Hauling Material), less than 50 HP.

Group 6: Hoists, Each Additional Drum Over 1 Drum.

Group 7: Clamshells, 80 Ft. of Boom or Over (Including Jib); Crane or Rigs, 80 Ft. of Boom or Over (Including Jib) and Over 200 Feet; Draglines, 80 Ft. of Boom or Over (Including Jib); Pile Drivers, 80 Ft. of Boom or Over (Including Jib).

Group 8: Crane Operator.

Group 9: Loader Operator; Plant Man.

Group 10: Conveyor Operator

Group 11: Crane, Tower or Climbing.

POWER EQUIPMENT OPERATORS: (Cont'd) Site Preparation & Grading:	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
Group 1	$14.00	1.00	1.50	1.07	.20
Group 2	13.75	1.00	1.50	1.07	.20
Group 3	13.05	1.00	1.50	1.07	.20
Group 4: (A)	11.55	1.00	1.50	1.07	.20
(B)	9.03	1.00	1.50	1.07	.20
(C)	12.05	1.00	1.50	1.07	.20

Group 1: Asphalt Paver and Spreader; Asphalt Plant Console Operator; Auto Grader; Backhoe; Blade Operator, all types; Boilers (2); Booster Pump on Dredge; Boring Machine (truck or crane mounted); Bulldozer Operator; Clamshell Operator; Compressor Maintenance Operator, 2; Concrete Plant Operator, Central Mix; Concrete Mixer Paver; Crane Operator; Derrick or Derrick Trucks; Ditching Machine; Dragline Operator; Dredge Engineman; Dredge Operator; Drill Cat with Compressor mounted on Cat; Drilling or Boring Machine, Rotary, self-propelled; High Loader-Fork Lift; Hoisting Engineer, 2 active drums; Locomotive Operators, Standard Guage; Mechanics and Welders, field or shop; Maintenance Operator; Mucking Machine; Piledriver Operator; Pitman Crane Operator; Pump, 2; Pushcat Operator; Quad-trac; Scoop Operator, all types; Scoops in Tandem; Self-Propelled Rotary Drill (Leroy or equal, not air trac); Shovel Operator; Side Discharge Spreader; Sideboom Cats; Skimmer Scoop Operator; Slip-Form Paver (CMI, REX, or equal); Throttle Man; Truck Crane; Welding Machine Maintenance Operator (2).

Group 2: A-Frame Truck; Asphalt Hot Mix Silo; Asphalt Plant Fireman, Drum or Boiler; Asphalt Plant Mixer Operator; Asphalt Plant Man; Asphalt Roller Operator; Backfiller Operator; Chip Spreader; Concrete Batch Plant, Dry, Power-Operated; Concrete Mixer Operator; Skiploader; Concrete Pump Operator; Crusher Operator; Elevating Grader Operator; Greaser, Hoisting engine, 1 drum; LaTourneau Rooter; Multiple Compactor; Pavement Breaker, Self-Propelled of the Hydra-hammer or similar type; Power shield; Pug Mill Operator; Stump Cutting Machine; Towboat Operator; Tractor Operator, over 50 HP.

Group 3: Boilers, 1; Chip Spreader (Front Man); Churn Drill Operator; Compressor Maintenance Operator, 1; Concrete Saws, self-propelled; Conveyor Operator; Distributor Operator; Finishing Machine Operator; Fireman, Rig; Float Operator; Form Grader Operator; Pump; Pump Maintenance Operator, other than dredge; Roller Operator, other than high type asphalt;

POWER EQUIPMENT OPERATORS (Cont'd)
Site Preparation and Grading (Cont'd):

Group 3 -(Cont'd): Screening and Washing Plant Operator; Self-propelled Street Broom or Sweeper; Siphons and Jets; Sub-grading Machine Operator; Tank Car Heater Operator combination Boiler and Booster; Tractor, 50 HP or less, without attachments; Vibrating Machine Operator, not hand; Welding Machine Maintenance Operator, 1.

Group 4 (A): Mechanics' Helpers.

Group 4 (B): Oiler

Group 4 (C): Oiler Driver, all Types

TRUCK DRIVERS: (Building Construction):	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
Single Axle Trucks	$ 6.55	.75	1.00		
Warehousemen - Supply	9.925	.75	1.00		
Fork Lift - Supply	10.175	.75	1.00		
Tandem Axle Trucks	10.84	.75	1.00		
Warehousemen & Stock Men	10.925	.75	1.00		
Flat Bed Trucks; Pick-up Trucks; Dump Trucks (under 10 yards capacity)	10.975	.75	1.00		
Dump Trucks (10 yds. capacity & over); Semi-truck; Steel Truck	11.05	.75	1.00		
Transit Mix (under 5 yds)	11.025	.75	1.00		
Oiler, Greaser & Mechanic Helpers; Distributor Driver & Operator	11.075	.75	1.00		
Transit Mix (5 Yds.& Over)	11.125	.75	1.00		
Straddle Trucks; Wheel Tractors (when used for towing); Heavy Hauling, A-frame & Winch Trucks; Fork Lift Trucks; Hydro Lift Trucks; Hydraulically operated Aerial Lift, heavy excavating; Double bottom units (20 ton capacity & over)	11.175	.75	1.00		
Transit Mix Tractor Trailer; Mechanics	11.275	.75	1.00		

TRUCK DRIVERS: (Cont'd)	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
Site Preparation & Grading:					
Group 1	$11.50	1.00	1.50	.75	
Group 2	11.70	1.00	1.50	.75	
Group 3	12.01	1.00	1.50	.75	
Group 4	12.16	1.00	1.50	.75	
Group 5	11.28	1.00	1.50	.75	

Group 1: One Team; Station Wagons; Pickup Trucks; Material trucks, single axle, Tank Wagon Drivers, single axle.

Group 2: Material Trucks, Tandem; Two teams; Semi-trailer; Winch Truck, Fork Trucks; Distributor Drivers and Operators; Agitator and Transit Mix; Tank Wagon Drivers; single axle; Tank Wagon Drivers, Tandem or Semi-trailers; Insley Wagon; Dump Trucks; excavating, 5 cu. yds. and over, Dumpster, Half-trucks, Speedace, Euclids and other similar excavating equipment.

Group 3: A-Frame, Low Boy, and Boom Truck Drivers

Group 4: Mechanics and Welders

Group 5: Mechanics' Helpers; Oilers and Greasers.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses, (29 CFR, 5.5(a)(1)(ii)).

SUPERSEDEAS DECISION

STATE: Kansas COUNTY: Sedgwick
DECISION NO. KS82-4014 DATE: Date of Publication
Supersedes Decision No. KS81-4047, dated July 6, 1981, in 46 FR 34971

DESCRIPTION OF WORK: Building Construction Projects(excluding single family homes and apartments up to and including four stories).

	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
ASBESTOS WORKERS	$15.53				
BOILERMAKERS	14.97	1.375	1.15		.05
BRICKLAYERS; STONEMASONS	13.00	.85	.75		.03
CARPENTERS:					
Carpenters	12.65	.70			.08
Millwrights, Piledrivermen	12.95	.70			.08
CEMENT MASONS	11.10				
ELECTRICIANS	14.25	.75	3%+.75		1%
Cable Splicer	14.50	.75	3%+.75		1%
ELEVATOR CONSTRUCTORS	12.21	1.345	.95	a	.035
ELEVATOR CONSTRUCTOR HELPERS	8.55	1.345	.95	a	.035

FOOTNOTE:
a-Employer contributes 8% of basic hourly rate for over 5 years service, and 6% of basic hourly rate for under 5 years as Vacation Pay Credit. Also 7 paid holidays.

GLAZIERS	10.99	.90	.80	1.53	.06
IRONWORKERS	12.76		1.00	.53	.14
LABORERS (BUILDING CONSTRUCTION):					
Group 1-Common laborers	8.60	.85	.50	.50	.05
Group 2-Power tool operator, compactors, concrete breaker chipping tools, drilling tools, concrete saws, mechanically operated georgia buggy, mason tenders, plaster tenders, mortar mixers for plasterers, mason and cement finishers, all stocking scaffold, clean up for masons(building & wrecking), Sand and concrete gun nozzleman,powderman	8.80	.85	.50	.50	.05
LABORERS (SITE PREPARATION AND GRADING):					
Group 1	6.00	.85	.50	.50	.05
Group 2	6.15	.85	.50	.50	.05
Group 3	6.25	.85	.50	.50	.05
Group 4	6.40	.85	.50	.50	.05

CLASSIFICATION DEFINITIONS - LABORERS (SITE PREPARATION & GRADING)

Group 1 - Board mat weavers & cable tiers, georgia buggy (manually operated) Mixerman-no skip, lift, salamander tenders, track men, tractor swamper, truck dumper, wire mesh setter, water pump up to 4 inches,& all other general laborers.
Group 2 - Air tool operators, cement handlers (bulk), chain saw, georgia buggy (mechanically operated), grade man, hot mastic kettlemen, crusher feeder, joint man, jute man, mason tenders, material batch hopper & scale man, mixer man, pier hole man working 10 ft. deep, pipelayer-drainage (concrete and/or corrugated metal), signal man (crane), truck dumper-dry batch, vibrator operator, wagon and churn drill operator.
Group 3 - Asphalt raker, barco tamper, concrete saw, creosote material--handling & applying, nozzle burner (cutting torch and burning bar).
Group 4 - Conduit pipe, tile & duct line setter, form setter & liner on concrete paving, powderman, sandblasting & gunnite nozzleman, sanitary sewer layer, steel plate structure erectors, water and gas distribution lines.

	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
LINE CONSTRUCTION:					
Linemen	$14.52	.45	3%		½%
Cable Splicers	15.26	.45	3%		½%
Groundman	9.03	.45	3%		½%
Powderman	12.03	.45	3%		½%
Line truck & equipment opr.	12.03	.45	3%		½%
PAINTERS:					
Brush	12.14	.10	.60		
Spray	12.84	.10	.60		
PLASTERERS	11.00				
PIPEFITTERS, PLUMBERS	14.60	.80	1.00		.08
POWER EQUIPMENT OPERATORS (BUILDING CONSTRUCTION):					
Cranes with lifting ring	14.75	1.00	1.25		
Cranes with shovels- 100 ft of boom or over including jib or 30 tons or over or 2 yard capacity, three (3) drum hoist	14.00	1.00	1.25		
Cranes & shovels - boom 200 ft. & over four (4) drum hoist, frankie - type pile driving machines, & tower cranes & derricks	14.25	1.00	1.25		
GROUP I	13.75	1.00	1.25		
GROUP II	13.35	1.00	1.25		
GROUP III: CLASS A	11.70	1.00	1.25		
CLASS B	11.95	1.00	1.25		
GROUP IV: CLASS A	11.15	1.00	1.25		
CLASS B	11.40	1.00	1.25		

CLASSIFICATION DEFINITIONS - POWER EQUIPMENT OPERATORS (BUILDING CONSTRUCTION)

Group I - Boiler (2), boom cat, boring machine, ditching machine, concrete ready mix plant, crane, truck crane, clamshell dragline, dozer, scraper, all types, patrol, firemen (when operating steam or air valve),gradall, hi-loaders (over 1 yard), hoist two drum, mechanic or welder, mixermobile, paver, or any other machine with power swing, piledriver operator, power shovel, pump, concrete or other material, locomotive.
Group II - A-frame truck, bob cat/hi-loaders (1 yard or under), barber-greene loader or similar type, boiler (1), ditching machine - small, elevator operator, fireman, forklift, hoist, one active drum, hydra hammer jeep ditcher, mixer, other than paver, power broom, pump 4" or larger, small machine engineer, welding machine (1), greaser equipment.
Group III:
CLASS A - Farm tractor (without attachments).
CLASS B - Farm tractor (with attachments)
Group IV:
CLASS A - Oiler
CLASS B - Motor crane oiler.

	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
POWER EQUIPMENT OPERATORS (Site Preparation & Grading)					
GROUP 1	$12.10	1.00	1.25		.20
GROUP 2	11.85	1.00	1.25		.20
GROUP 3	11.60	1.00	1.25		.20
GROUP 4	11.25	1.00	1.25		.20
GROUP 4-A	11.35	1.00	1.25		.20

CLASSIFICATION DEFINITIONS - SITE PREPARATION AND GRADING - PEO:
Group 1 - Asphalt paver and spreader; backhoe, boring machine; blades, all types; clamshell; concrete mixer paver operator; concrete central plant operator (automatic); crane, truck crane, pitman crane, hydro crane, or any machine with power swing;derrick or derrick trucks; dragline operator; dredge operator; dozer; ditching machine; euclid loader; hoist - 2 active drums; loader; all types; mechanic or welder; mixer-mobile; multi-unit scrapper; pile driver operator; power shovel operator scoop operator, all types; side boom-cherry picker; skimmer scoop operator; pushcat operator; quad track.
Group 2 - Asphalt plant operator; elevating grader operator.
Group 3 - A-frame truck, asphalt roller operator; asphalt plant boiler fireman; backfiller operator; barber-greene loader; boiler other than asphalt bull float operator; churn drill operator; compressor operator (1); concrete central plant operator; concrete mixer operator skip; concrete pump operator; crusher operator, distributor operator; finish machine operator - concrete; fireman other than asphalt; flex plane operator, fork lift; form grader operator; greaser; hoist-1 drum; jeep ditching machine; pavement breakers, self-propelled (of the hydra hammer or similar type); pump operator, 4" or over, two; pump operator, other than dredge; screening and gas plant operator; small machine operator; spreader

CLASSIFICATION DEFINITION - SITE PREPARATION AND GRADING - PEO:
(Cont'd):
box operator, self-propelled; tractor operator over 50 h.p.; self-propelled roller operator, other than asphalt; siphons and jets; subgrading machine operator; tank car heater operator, combination booster and boiler; towboat operator; vibrator machine operator, not hand.
Group 4 - Concrete gang saw, self-propelled (con-cut); conveyor operator; Harrow, disc, seeder; oiler; tractor operator, 50 h.p. or less without attachments.
Group 4-A - Oiler, motor crane

	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
ROOFERS:					
Roofers, Kettlemen	$11.60	.48			.02
Pitch	12.35	.48			.02
SHEET METAL WORKERS	12.56	3%+1.18	.66		.14
SPRINKLER FITTERS	15.10	.95	1.40		.08
TILE, MARBLE & TERRAZZO MECHANICS	11.80				
TRUCK DRIVERS (BUILDING CONSTRUCTION):					
Group 1 - Pickups, station wagons, flat beds 12,000 and under GVW license capacity	8.90	.50	.35		
Group 2 - Flat Beds - 16,000# GVW license capacity	8.975	.50	.35		
Group 3 - Flat beds - 20,000# over GVW license capacity, dump, batch & water truck, single axle	9.05	.50	.35		
Group 4 - Lowboys, semi-trailers dumpstors, A-frame tandems winch truck when used as such & transit mix	9.15	.50	.35		
TRUCK DRIVERS (SITE PREPARATION & GRADING):					
Group 1	8.65	.70	.50		
Group 2	8.75	.70	.50		
Group 3	8.90	.70	.50		

TRUCK DRIVER (SITE PREPARATION & GRADING) CLASSIFICATION DEFINITIONS

Group 1 - Pickups; panel trucks; station wagons; flat beds; dump and batch trucks (single axle)

Group 2 - Tandem trucks, warehousemen or partsmen; mechanic helpers and servicemen.

Group 3 - Lowboys; semi-trailers, all transit mixer trucks (single or tandem axle); A-frame and winch trucks when used as such; euclid, end and bottom dump; tournarockers; atheys; dumptors and similar off-road equipment and mechanics on such equipment

WELDERS: Receive rate prescribed for craft performing operation to which welding is incidental.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR, 5.5(a)(1)(ii)).

SUPERDEDEAS DECISION

STATE: KANSAS

COUNTIES: Douglas, Jefferson, Leavenworth, Miami and Shawnee

DECISION NUMBER: KS82-4015 DATE: Date of Publication
Supersedes Decision No. KS82-4003 dated January 15, 1982, in 47 FR 27048
DESCRIPTION OF WORK: Highway Construction

	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
CARPENTERS & PILEDRIVERMEN:*					
Zone 1	$11.15	.70	.75		.05
Zone 2	14.05	.65	.75		.07
Zone 3	8.50	.70	.75		
CEMENT MASONS:*					
Zone 1	10.20	.40	.50	1.25	
Zone 2	11.60	.70	.35		
Zone 3	11.30	.70	.35		
ELECTRICIANS:*					
Zone 1	16.18	.69	3%+1.00	7%	.12
Zone 2	15.55	1.00	3%+ .85		.13
IRONWORKERS	15.10	.85	1.80	1.00	.10
LINE CONSTRUCTION:*					
Zone 1:					
Lineman	17.33	.45	3%+.25		½ of 1%
Lineman Operator	16.13	.45	3%+.25		½ of 1%
Groundman Powderman	12.02	.45	3%+.25		½ of 1%
Groundman	11.42	.45	3%+.25		½ of 1%
Zone 2:					
Lineman	14.52	.45	3%		½%
Cable Splicers	15.26	.45	3%		½%
Groundman	9.03	.45	3%		½%
Powderman	12.03	.45	3%		½%
Line Truck & Equipment Operator	12.03	.45	3%		½%

*ZONE DESCRIPTIONS

CARPENTERS AND PILEDRIVERMEN:
Zone 1: Douglas, Shawnee and Jefferson Counties
Zone 2: Leavenworth County
Zone 3: Miami County

CEMENT MASONS:
Zone 1: Leavenworth and Miami Counties
Zone 2: Douglas and Shawnee Counties
Zone 3: Jefferson County

ELECTRICIANS:
Zone 1: Leavenworth County (Delaware, High Prairie, Kickapoo and Leavenworth Townships)
Zone 2: Douglas, Jefferson, Miami, Shawnee and the remainder of Leavenworth County

LINE CONSTRUCTION:
Zone 1: Leavenworth County, north of Fairmont Strainger, and Tanganoxie Townships
Zone 2: Douglas, Jefferson, Miami, Shawnee Counties, and remainder of Leavenworth County

LABORERS:

ZONE 1: Jefferson County
ZONE 2: Douglas and Shawnee Counties
ZONE 3: Leavenworth County
ZONE 4: Miami County

GROUPS	ZONE 1	ZONE 2	ZONE 3	ZONE 4
1	$ 7.60	$ 8.40	$ 8.40	$ 7.60
2	7.75	8.55	8.55	7.75
3	7.85	8.65	8.65	7.85
4	8.00	8.80	8.80	8.00

FRINGE BENEFITS PAYMENTS - ZONES 1, 2 and 4:

Health and Welfare	$0.85
Pensions	0.50
Vacations	0.50
Apprenticeship Training	0.05

FRINGE BENEFITS PAYMENTS - ZONE 3:

Health and Welfare	$0.75
Pensions	0.60
Vacations	0.50
Apprenticeship Training	0.05

Group 1: Board Mat Weavers and Cable Tiers; Georgia Buggy (manually operated); Mixerman-on skip lift; Salamander Tenders; Track Men; Tractor Swamper; Truck Dumper; Wire Mesh Setter; Water Pump, up to 4 inches and all other General Laborers

Group 2: Air Tool Operators; Cement Handlers (bulk); Chain Saw; Georgia Buggy (mechanically operated); Grademen; Hot Mastic Kettlemen; Crusher Feeder; Joint Man; Jute Man; Mason Tender; Material Batch Hopper and Scale Man; Mixer Man; Pier Hole Man working 10 feet deep; Pipelayer-drainage (concrete and/or corrugated metal); Signal Man (Crane); Truck Dumper-Dry Batch; Vibrator Operator; Wagon and Churn Drill Operator

Group 3: Asphalt Raker; Barco Tamper; Concrete Saw; Creosote Material, handling and applying; Nozzle Burner (cutting torch and burning bar)

Group 4: Conduit Pipe; Water and Gas Distribution Lines; Tile and Duct Line Setter; Form Setter and Liner on concrete paving; Powderman; Sandblasting and Gunite Nozzleman; Sanitary Sewer pipe Layer; Steel Plate Structure Erectors

POWER EQUIPMENT OPERATORS: Zone 1: Leavenworth County:	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
Group 1	$14.00	1.00	1.50	1.07	.20
Group 2	13.75	1.00	1.50	1.07	.20
Group 3	13.05	1.00	1.50	1.07	.20
Group 4A	11.55	1.00	1.50	1.07	.20
Group 4B	9.03	1.00	1.50	1.07	.20
Group 4C	12.05	1.00	1.50	1.07	.20

Group 1: Asphalt Paver and Spreader; Asphalt Plant Console Operator; Auto Grader; Back Hoe; Blade Operator, all types; Boiler, 2; Booster Pump on Dredge; Boring Machine (truck or crane mounted); Bulldozer Operator; Clamshell Operator; Compressor Maintenance Operator, 2; Concrete Plant Operator, Central Mix; Concrete Mixer Paver; Crane Operator; Derrick or Derrick Trucks; Ditching Machine; Dragline Operator; Dredge Engineman; Dredge Operator; Drillcat with compressor mounted on cat; Drilling or Boring Machine; Rotary, self-propelled; High Loader-Fork Lift; Locomotive Operator, standard guage; Mechanics and Welders; Maintenance Operator; Mucking Machine; Pile Driver Operator; Pitman Crane Operator; Pump, 2; Quad-trac; Scoop Operator, all types; Scoops in tandem; Self-propelled Rotary Drill (Leroy or equal-not Air Trac); Shovel Operator; Side Discharge Spreader; Sideboom Cats; Skimmer Scoop Operator; Slip-form Paver (CMI, REX, or equal); Throttle Man; Truck Crane; Welding Machine Maintenance Operator, 2; Hoisting Engine, 2; Active Drums

Group 2: "A" Frame Truck; Asphalt Hot Mix Silo; Asphalt Plant Fireman, drum or boiler; Asphalt Plant Mixer Operator; Asphalt Plant Man; Asphalt Roller Backfiller Operator; Chip Spreader; Concrete Batch Plant, dry-power operated; Concrete Mixer Operator; Skip Loader; Concrete Pump Operator; Crusher Operator; Elevating Grader Operator; Greaser, hoisting engine, 1 drum; Latourneau Rooter; Multiple Compactor; Pavement Breaker, self-propelled of the Hydra-hammer or similar type; Power Shield; Pug Mill Operator; Stump Cutting Machine; Towboat Operator; Tractor Operator, over 5 H.P.

Group 3: Boilers, 1; Chip Spreader (Front Man); Churn Drill Operator; Compressor Maintenance Operator, 1; Concrete Saws;, self-propelled; Conveyor Operator; Distributor Operator; Finishing Machine Operator; Fireman, Rig; Float Operator; Form Grader Operator; Pump; Pump Maintenance Operator, other than Dredge; Roller Operator, other than high type asphalt; Screening and Washing Plant Operator; Self-propelled Street Broom or Sweeper; Siphons and Jets; Sub-grading Machine Operator; Tank Car Heater Operator, combination boiler and booster; Tractor, 50 H.P. or less without attachments; Vibrating Machine Operator, not hand; Welding Machine Maintenance Operator, 1

Group 4A: Mechanic's Helper

Group 4B: Oiler

Group 4C: Oiler Driver, all types

Men working in tunnels or shafts (not air shafts or coffer dams) of twnety-five (25) feet or more in length or depth will be paid fifty (50) cents per hour above the regular classification

POWER EQUIPMENT OPERATORS: (Cont'd) Zone 2: Jefferson & Miami Counties:	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
Group 1	$8.60	.50	1.00	.75	.10
Group 2	8.35	.50	1.00	.75	.10
Group 3	8.10	.50	1.00	.75	.10
Group 4	7.85	.50	1.00	.75	.10
Group 5	7.50	.50	1.00	.75	.10
Group 6	7.60	.50	1.00	.75	.10

Group 1: Master Mechanic

Group 2: Asphalt Paver & Spreader; Backhoe; Boring Machine; Blades, all types; Clamshell; Concrete Mixer Paver Operator; Concrete Plant Operator (automatic); Crane; Truck Crane; Pitman Crane; Hydro Crane or any machine with power swing; Derrick or Derrick Trucks; Dragline Operator; Dredge Operator; Dozer; Ditching Machine; Euclid Loader; Hoist, 2 active drums; Loader, all types; Mechanic or Welder; Mixermobile; Multi-unit Scraper; Piledriver Operator; Power Shovel Operator; Quad Track; Scoop Operator, all types; Sideboom Cat, Cherry Picker; Skimmer Scoop Operator; Push-cat Operators

Group 3: Asphalt Plant Operator; Elevating Grader Operator

Group 4: A-frame Truck; Asphalt Roller Operator; Asphalt Plant Boiler Fireman; Backfiller Operator; Barber Green Loader; Boiler, other than asphalt; Bull Float Operator; Churn Drill Operator; Compressor Operator (1); Concrete Central Plant Operator; Concrete Mixer Operator, Skip; Concrete Pump Operator; Crusher Operator; Distributor Operator; Finish Machine Operator, concrete; Fireman, other than asphalt; Flex Plane Operator; Fork Lift; Form Grader Operator; Greaser; Hoist, 1 drum; Jeep Ditching Machine; Pavement Breaker, self-propelled (of the Hydra Hammer or similar type); Pump Operator, 4" or over, two; Pump Operator, other than Dredge Screening and Wash Plant Operator; Small Machine Operator; Spreader Box Operator, self-propelled; Tractor Operator, over 50 H.P.; Self-propelled Roller Operator, other than Asphalt Siphons and Jets; Subgrading Machine Operator; Tank Car Heater Operator; Combination Booster and Boilers; Towboat Operator; Vibrating Machine Operator, not hand

Group 5: Concrete Gang Saw, Self-propelled (con-cut); Conveyor Operator; Harrow, disc. Seeder; Oiler; Tractor Operator, 50 H.P. or less without attachments

Group 6: Oiler; Motor Crane

POWER EQUIPMENT OPERATORS: (Cont'd)	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
Zone 3: Douglas & Shawnee Counties:					
Group 1	$12.10	1.00	1.25		.20
Group 2	11.85	1.00	1.25		.20
Group 3	11.60	1.00	1.25		.20
Group 4	11.25	1.00	1.25		.20
Group 4A	11.35	1.00	1.25		.20

Group 1: Asphalt Paver and Spreader; Backhoe; Boring Machine; Blades, all types; Clamshell; Concrete Mixer Paver Operator; Concrete Plant Operator (automatic); Crane; Truck Crane; Pitman Crane; Hydro Crane or any machine with power swing; Derrick or Derrick Trucks; Dragline Operator; Dredge Operator; Dozer; Ditching Machine; Euclid Loader; Hoist, 2 active drums; Loaders, all types; Mechanic or Welder; Mixer-Mobile; Multi-unit Scraper; Piledriver Operator; Power Shovel Operator; Quad Track; Scoop Operators, all types; Sideboom Cat, Cherry Picker; Skimmer Scoop Operator; Pushcat Operators

Group 2: Asphalt Plant Operator; Elevating Grader Operator

Group 3: A-frame Truck; Asphalt Roller Operator; Asphalt Plant Boiler Fireman; Backfiller Operator; Barber Green Loader; Boiler, other than asphalt; Bull Float Operator; Churn Drill Operator; Compressor Operator (1); Concrete Central Plant Operator; Concrete Mixer Operator, skip; Concrete Pump Operator; Crusher Operator; Distributor Operator; Finish Machine Operator, concrete; Fireman, other than asphalt; Flex Plane Operator; Fork Lift; Form Grader Operator; Greaser; Hoist, 1 drum; Jeep Ditching Machine; Pavement Breaker, self-propelled (of the Hydra Hammer or similar type); Pump Operator, 4" or over, two; Pump Operator, other than Dredge Screening and Wash Plant Operator; Small Machine Operator; Spreader Box Operator, self-propelled; Tractor Operator over 50 H.P.; Self-propelled Roller Operator, other than asphalt siphons and jets; Subgrading Machine Operator; Tank Car Heater Operator; Combination Booster and Boilers; Towboat Operator; Vibrating Machine Operator, not hand

Group 4: Concrete Gang Saw, self-propelled (con-cut); Conveyor Operator; Harrow; Disc. Seeder; Oiler; Tractor Operator, 50 H.P. or less without attachments

Group 4A: Oiler; Motor Crane

TRUCK DRIVERS	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
Zone 1: Leavenworth County:					
Group 1	$8.89	.75	1.00	.75	
Group 2	9.09	.75	1.00	.75	
Group 3	9.40	.75	1.00	.75	
Group 4	9.55	.75	1.00	.75	
Group 5	8.665	.75	1.00	.75	
Zone 2: Douglas, Shawnee and Jefferson Counties:					
Group 1	9.40	.70	.50		
Group 2	9.50	.70	.50		
Group 3	9.65	.70	.50		
Group 3: Miami County:	8.35	.75	1.00	.75	

CLASSIFICATIONS - ZONE 1

Group 1: One Team; Station Wagons; Pickup Trucks; Material Trucks, single axle; Tank Wagon Drivers, single axle

Group 2: Material Trucks; Tandem; Two Teams; Semi-trailers; Winch Trucks-Fork Trucks; Distributor Drivers and Operators; Agitator and Transit Mix Tank Wagon Drivers, single axle; Tank Wagon Drivers; Tandem or Semi-trailer; Insley Wagons; Dump Trucks; Excavator, 5 cu. yds. and over; Dumpsters; Half-tracks; Speedace; Euclids and other similar excavating equipment

Group 3: A-frame; Lowboy; Boom Truck Drivers

Group 4: Mechanics and Welders

Group 5: Mechanics' Helpers; Oilers and Greasers

CLASSIFICATIONS - ZONE 2

Group 1: Pickups; Panel Trucks; Station Wagons; Flat Beds; Dump and Batch Trucks, single axle

Group 2: Tandem Trucks; Warehousemen or Partsmen; Mechanic Helpers and Servicemen

Group 3: Lowboys; Semi-trailers; all Transit Mixer Trucks (single or tandem axle); A-frame and Winch Trucks when used as such; Euclid, End and Bottom Dump; Tournarockers, Atheys, Dumpsters and similar off-road equipment and Mechanics on such equipment

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR, 5.5(a)(1)(ii)).

SUPERSEDEAS DECISION

STATE: Kansas COUNTY: Shawnee
DECISION NO.: KS82-4016 DATE: Date of Publication
Supersedes Decision No. KS81-4099 dated November 27, 1981 in 46 FR 58026
DESCRIPTION OF WORK: Building Construction Projects (excluding single family homes & apartments up to & including 4 stories)

	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
ASBESTOS WORKERS	$16.69	1.05	1.75		.06
BOILERMAKERS	14.97	1.375	1.15		.05
BRICKLAYERS;STONEMASONS	14.44	.70	.25		
CARPENTERS:					
Carpenters	12.50	.70	.75		.05
Millwrights	11.90	.70	.75		.05
Piledrivermen	12.875	.70	.75		.05
CEMENT MASONS	11.70	.70	.35		
ELECTRICIANS:					
Electricians	15.55	1.00	3%+.85		.13
Cable Splicers	17.11	1.00	3%+.85		.13
ELEVATOR CONSTRUCTORS	12.21	1.345	.95	a	.035
GLAZIERS	12.23	.90	1.26	2.73	.05
IRONWORKERS	15.10	.85	1.80	1.00	.10
LABORERS (Building Construction):					
General Laborers	9.25	.85	.50	.50	.05
Power tool operators, compactors concrete breakers, chipping tools, drilling tools, concrete saws, mechanically operated georgia buggy	9.45	.85	.50	.50	.05
Mason tenders, plaster tenders, mortar mixers for masons and cement finishers, all stocking scaffold, clean up for masons (building & wrecking)	9.55	.85	.50	.50	.05
Sand & concrete gun nozzleman & powderman	9.65	.85	.50	.50	.05
LABORERS (Site Preparation & Grading:					
Group 1	8.40	.85	.50	.50	.05
Group 2	8.55	.85	.50	.50	.05
Group 3	8.65	.85	.50	.50	.05
Group 4	8.80	.85	.50	.50	.50

CLASSIFICATION DEFINITIONS

LABORERS (Site Preparation and Grading):

Group 1 - Board mat weavers and cable tiers; Georgia buggy (manually operated); mixerman - no skip; lift; nailers, salamander tenders; track men; tractor swamper; truck dumper, wire mesh setter, water pump up to 4 inces; & all other general laborer

Group 2 - Air tool operators, cement handlers (bulk), chain saw, georgia buggy (mechanically, operated); grade man, hot mastic kettlemen, crusher feeder, joint man, jute man; mason tenders; material batch hopper and scale man, mixer man; pier hole man working 10 ft. deep; pipelayer-drainage (concrete and/or corrugated metal); signal man(crane), truck dumper-dry batch; vibrator operator; wagon and churn drill operator

Group 3 - Asphalt raker, barco tamper; concrete saw; creosote material-handling and applying; nozzle burner (cutting torch and burning bar)

Group 4 - Conduit pipe; tile and duct line setter; form setter and liner on concrete paving; powderman; sandblasting and gunite nozzleman; sanitary sewer pipe layer; steel plate structure erectors; water and gas distribution

	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
LATHERS	$12.50	.70	.75		.05
LINE CONSTRUCTION:					
Lineman	14.52	.45	3%		½%
Cable Splicers	15.26	.45	3%		½%
Groundman	9.03	.45	3%		½%
Powderman	12.03	.45	3%		½%
Line Truck & Equipment Oprs.	12.03	.45	3%		½%
PAINTERS:					
Brush, drywall, sandling & taping	12.79	.70			.03
Painting of structures over 50' (all types); spray	13.54	.70			.03
PLASTERERS	14.40				.01
PIPEFITTERS; PLUMBERS	14.93	1.00	1.00		.04
ROOFERS:					
Roofers, Flate Slate & Tile damproofers and Waterproofers	14.66		.60	b	
Roofers working in pitch, tar or Creosote, Coal	15.76		.60	b	
SHEET METAL WORKERS	13.76	3%+.75	1.77		.07
SOFT FLOOR LAYERS	12.45	.50	.55		.06
SPRINKLER FITTERS	15.10	.95	1.40		.08
TILE SETTERS	14.00				

POWER EQUIPMENT OPERATORS BUILDING CONSTRUCTION:	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
Cranes with lifting ring	$14.90	1.00	1.25		.20
Cranes and shovels-100 ft. of boom or over including jib or 30 tons or over or 2 yard capacity, three (3) drum hoist	14.15	1.00	1.25		.20
Cranes and shovels-booms 200 ft. & over four (4) drum hoist, Frankie - type pile driving machines, & tower cranes & derricks	14.40	1.00	1.25		.20
GROUP I	13.90	1.00	1.25		.20
GROUP II	13.50	1.00	1.25		.20
GROUP III:					
CLASS A	11.70	1.00	1.25		.20
CLASS B	11.95	1.00	1.25		.20
GROUP IV:					
CLASS A	11.15	1.00	1.25		.20
CLASS B	11.40	1.00	1.25		.20

GROUP I
Boiler (2), boom cat, boring machine, ditching machine, concrete ready-mix plant, crane, truck crane, clamshell dragline, dozer, scrapper, all types, patrol, fireman (when operating steam or air valve), gradall, hi-loaders (over one yard), hoist, two drum, mechanic or welder, mixermobile, paver, or any other machine with power swing, piledriver operator, power shovel, pump, concrete or other material, locomotive

GROUP II
A-frame truck, bob cat/hi-loaders (1 yard or under), barber-greene loader or similar type, boiler (1), ditching machine - small - elevator operator, fireman, forklift, hoist, or active drum, hydra hammer jeep ditcher, mixer, other than paver, power broom, pump 4" or larger, small machine engineer, welding machine (1), greaser equipment

GROUP III
CLASS A - Farm tractor (without attachments)
CLASS B - Farm tractor (with attachments)

GROUP IV
CLASS A - Oiler
CLASS B - Motor crane oiler

POWER EQUIPMENT OPERATORS Site Preparation & Grading:	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
Group 1	$12.10	1.00	1.25		.20
Group 2	11.85	1.00	1.25		.20
Group 3	11.60	1.00	1.25		.20
Group 4	11.25	1.00	1.25		.20
Group 4A	11.35	1.00	1.25		.20

CLASSIFICATION DEFINITIONS

Group 1 - Asphalt paver and spreader, backhoe; boring machine, blades, all types; clamshell; concrete mixer paver operator; concrete central plant operator (automatic); crane, truck crane, pitman crane, hydro crane, or any machine with power swing; derrick or derrick trucks; dragline operator; dredge operator; dozer; ditching machine; euclid loader; hoist - 2 active drums; loader, all types, mechanic or welder; mixer-mobile; track; scoop operator, all types; side boom cat-cherry picker; skimmer scoop operator; pushcat operator
Group 2 - Asphalt plant operator; elevating grader operator
Group 3 - A-frame truck; asphalt roller operator; asphalt plant boiler fireman; backfiller operator; barber greene loader; boiler other than asphalt; bull float operator; churn drill operator; compressor operator (1); concrete central plant operator; concrete mixer operator skip; concrete pump operator; crusher operator; distributor operator; finish machine operator - concrete; fireman other than asphalt; flex plane operator, fork lift; form grader operator; greaser; hoist 1 drum; jeep ditching machine; pavement breakers, self-propelled (of the hydra hammer or similar type); pump operator, 4" or over, two; pump operator, other than dredge; screening and wash plant operator; small machine operator; spreader box operator, self-propelled; tractor operator over 50 h.p.; self-propelled roller operator, other than asphalt; siphon and jets; subgrading machine operator; tank car heater operator, combination booster and boiler; towboat operators; vibrating machine operator, not hand
Group 4 - Concrete gang saw, self-propelled (con-cut); conveyor operator; Harrow, disc seeder; oiler; tractor operator, 50 h.p. or less without attachments
Group 4A - Oiler, motor crane

	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
TRUCK DRIVERS - BUILDING CONSTRUCTION:					
TRUCK DRIVERS - Light Station Wagons, Pickups	$9.225	.40	.35		
TRUCK DRIVERS - Medium Flatbeds and dump five ton or less, Warehousemen & Partsmen	9.325	.40	.35		
TRUCK DRIVERS - Heavy - Over 5 ton, Semi-Trailers, Fork Lifts, Industrial Tractors as used in Teamsters jurisdiction, Straddle Trucks, A-frame & Winch Trucks when used as such	9.575	.40	.35		
Mechanics & Dispatchers	9.725	.40	.35		
TRUCK DRIVERS (Site Preparation & Grading):					
Group 1	9.40	.70	.50		
Group 2	9.50	.70	.50		
Group 3	9.65	.70	.50		

CLASSIFICATION DEFINITIONS

TRUCK DRIVERS (SITE PREPARATION & GRADING):

Group 1 - Pickups; panel trucks; station wagons; flat beds; dump and batch trucks (single axle)

Group 2 - Tandem trucks, warehousemen or partsmen; mechanic helpers and servicemen

Group 3 - Lowboys; semi-trailers, all transit mixer trucks (single or tandem axle); A-frame and winch trucks when used as such; euclid, end and bottom dump; tournarockers; atheys; dumptors; and similar off-road equipment and mechanics on such equipment

FOOTNOTES:

a. Employer contributes 8% of basic hourly rate for over 5 years of service and 6% of basic hourly rate for 6 months to 5 years service as Vacation Pay Credit. Also 7 paid holidays.

b. After 6 months of employment $.26; after 5 years $.52.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR, 5.5(a)(1)(ii)).

SUPERSEDEAS DECISION

STATE: KANSAS COUNTY: Shawnee
DECISION No. : KS82-4017 DATE: Date of Publication
Supersedeas Decision No. KS81-4100 dated Dec. 4, 1981, in 46 FR 59439

DESCRIPTION OF WORK: Residential construction consisting of single family homes and apartments up to and including 4 stories.

	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
Asbestos Workers	$16.69	1.05	1.75		.06
Boilermakers	14.97	1.375	1.15		.05
Bricklayers & Stonemasons	14.44	.70	.25		
Carpenters	9.12	.70	.75		.05
Cement Masons	11.70	.70	.35		
Electricians	10.65	.75	3% + .50		.10
Ironworkers	15.10	.85	1.80	1.00	.10
Laborers:					
General Laborers	9.25	.85	.50	.50	.05
Power tool operators, compactors concrete breakers, chipping tools, drilling tools, concrete saws, mechanically operated georgia buggy	9.45	.85	.50	.50	.05
Mason tenders, plaster tenders, mortar mixers for plasterers, masons and cement finishers, all stocking scaffold, clean up for masons (building & wrecking)	9.55	.85	.50	.50	.05
Sand and concrete gun nozzleman powderman	9.65	.85	.50	.50	.05
Laborers (Site preparation and grading)					
Group 1	8.40	.85	.50	.50	.05
Group 2	8.55	.85	.50	.50	.05
Group 3	8.65	.85	.50	.50	.05
Group 4	8.80	.85	.50	.50	.05

CLASSIFICATION DEFINITIONS

Laborers (Site Preparation and Grading)
Group 1 - Broad mat weavers and cable tiers; georgia buggy (manually operated); mixerman - no skip; lift; nailers; salamander tenders; track men; tractor swamper; truck dumper; wire mesh setter; water pump up to 4 inches; and all other general laborer

Group 2 - Air tool operators; cement handlers (bulk); chain saw; georgia buggy (mechanically operated); grade man; hot mastic kettlemen; crusher feeder; joint man; jute man; mason tender; material batch hooper and scale man; mixer man; pier hole man working 10 feet deep; pipe layer - drainage (concrete and/or corrugated metal); signal man (crane); truck dumper-dry batch; vibrator; wagon and churn drill operator

Group 3 - Asphalt raker; barco tamper; concrete saw; creosote material handling and applying; nozzle burner (cutting torch and burning bar)

Group 4 - Conduit pipe; tile and duct line setter; from setter and liner on concrete paving; sandblasting and gunite nozzleman; sanitary sewer pipe layer; steel plate structure erectors; water and gas distribution

	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
Line Construction					
Lineman	$14.52	.45	3%		½%
Cable Splicers	15.26	.45	3%		½%
Groundman	9.03	.45	3%		½%
Powderman	12.03	.45	3%		½%
Line truck and equipment operator	12.03	.45	3%		½%
Painters	8.52	.70			.03
Plasterers	14.40				.01
Plumbers & Pipefitters	14.93	1.00	1.00		.04
Roofers					
Roofers flat slate and tile damproofers	14.66		.60	a	
Roofers working in pitch, tar or creosote coal	15.76		.60	a	
Sheet Metal Workers	13.76	3% + .75	1.77		.07
Soft Floor Layers	12.45	.50	.55		.06
Sprinkler Fitters	15.10	.95	1.40		.08
Tile Setters	14.00				

FOOTNOTE: a - After 6 months of employment .26; After 5 years .52

	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
Power Equipment Operators Site Preparation and Grading					
Group 1	$12.10	1.00	1.25		.20
Group 2	11.85	1.00	1.25		.20
Group 3	11.60	1.00	1.25		.20
Group 4	11.25	1.00	1.25		.20
Group 4A	11.35	1.00	1.25		.20

CLASSIFICATION DEFINITIONS

POWER EQUIPMENT OPERATORS (Site preparation and Grading)
Group 1 - Asphalt paver and spreader, backhoe, boring machine, blades all types, clamshell, concrete mixer paver operator, concrete central plant operator (automatic), crane, truck crane, pitman crane, hydro crane, or any machine with power swing, derrick or derrick trucks, dragline operator, dozer, ditching machine euclid loader, hoist - 2 active drums, loader, all types, mechanics or welder, mixer-mobile, track, scoop operator, all types, side boom cat-cherry picker, skimmer scoop operator, pushcat operator, dredge operator
Group 2 - Asphalt plant operator, elevating grader operator
Group 3 - A-frame truck, asphalt roller operator, asphalt plant boiler fireman, backfiller operator, barber greene loader, boiler other than asphalt, bull float operator, churn drill operator, compressor operator (1), concrete central plant operator, concrete mixer operator skip, concrete pump operator, crusher operator, distributor operator, finish machine operator - concrete, fireman other than asphalt, flex plane operator, fork lift, form grader operator, greaser, hoist 1 drum, jeep ditching machine, pavement breakers, self-propelled (of the hydro hammer or similar type), pump operator, 4" or over, two, pump operator, other than dredge, screening and wash plant operator, small machine operator, spreader box operator, self-propelled, tractor operator over 50 h.p., self-propelled roller operator, other than asphalt, siphon and jets, subgrading machine operator, tank car heater operator, combination booster and boiler, towboat operators, vibrating machine operator, not hand
Group 4 - Concrete gang saw, self-propelled (con-cut), conveyor operator, Harrow, disc seeder, oiler, tractor operator, 50 h.p. or less without attachments
Group 4 - Oiler, motor crane

TRUCK DRIVERS	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
TRUCK DRIVERS - Light Station Wagons, Pickups	$9.225	.40	.35		
TRUCK DRIVERS - Medium Flatbeds and dump five ton or less, Warehousemen & Partsmen	9.325	.40	.35		
TRUCK DRIVERS - Heavy - Over 5 tons, Semi-Trailers, Fork Lifts, Industrial Tractors as used in Teamsters jurisdiction, Staddle Trucks when used as such	9.575	.40	.35		
Mechanics and Dispatchers	9.725	.40	.35		
TRUCK DRIVERS (Site Preparation and Grading)					
Group 1	9.40	.70	.50		
Group 2	9.50	.70	.50		
Group 3	9.65	.70	.50		

CLASSIFICATION DEFINITIONS

TRUCK DRIVERS: (Site Preparation and Grading)

Group 1 - Pickups, panel trucks, station wagons, flat beds, dump and batch trucks (single axle)

Group 2 - Tandem trucks, warehousemen or partsmen, mechanic helpers and servicemen

Group 3 - Lowboys, semi-trailers, all transit mixer trucks (single or tandem axle), A-frame and winch trucks when used as such, euclid, end and bottom dump, tournarockers, atheys, dumptors and similar off-road equipment and mechanics on such equipment

WELDERS: Receive rates prescribed for craft performing operation to which welding is incidental.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR. 5.5 (a)(1)(ii)).

[FR Doc. 82-10257 Filed 4-15-82; 8:45 am]

BILLING CODE 4510-27-C

SUPERSEDEAS DECISION

STATE: Minnesota COUNTIES: *See Below
DECISION NO.: MN82-2029 DATE: Date of Publication
Supersedes Decision No. MN80-2088, dated December 19, 1980 in 45 FR 83810
DESCRIPTION OF WORK: Heavy and Highway Construction Projects

*Becker, Cass, Clay, Hubbard, Otter Tail, Todd, Wadena, & Wilkin

	Basic Hourly Rates	Fringe Benefits Payments			
		H & W	Pensions	Vacation	Education and/or Appr. Tr.
CARPENTERS	$11.49	.18	.70	.50	.03
CEMENT MASONS	10.15				
LABORERS:					
General	7.23				
Rakers	7.87	.56	.47		
POWER EQUIPMENT OPERATORS:					
Roller Compactor Operator	8.83	.56	.47		
Firemen	9.51	.56	.47		
Roller, Finish	9.54	.46	.40		
Scrapers	9.56				
Roller Operator	9.58	.56	.47		
Mechanics	9.91	.56	.47		
Oilers	9.92	.95	.70		.05
Front End Loaders	10.22				
Asphalt Distributor Spreader; Bulldozer; Crushing & Screening Plant; Paver; Screedman; Tractor; & Turnapull	10.32	.56	.47		
Asphalt Plant; Motor Patrols	10.70	.56	.47		
Cranes, Derricks, & Draglines	11.18				
TRUCK DRIVERS:					
Dumpman	7.25	.46	.47		
Single Axle	8.22	.56	.47		
Wheel Tractor	8.83	.56	.47		
Truck Mechanic	9.13	.46	.40		
Bituminous Distributor Driver; Tandem	9.51	.56	.47		
Five Axle	9.91	.56	.47		

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR, 5.5 (a) (1) (ii)).

federal register

Friday
April 16, 1982

Part V

Department of Agriculture

Animal and Plant Health Inspection Service

Swine Health Protection

DEPARTMENT OF AGRICULTURE

Animal and Plant Health Inspection Service

9 CFR Part 166

[Docket 81-061]

Swine Health Protection

AGENCY: Animal and Plant Health Inspection Service, USDA.

ACTION: Proposed rule.

SUMMARY: This document proposes to regulate the treatment of garbage to be fed to swine pursuant to the Swine Health Protection Act. This action is necessary to prevent the introduction into or dissemination within the United States of any infectious or communicable diseases of swine through the medium of garbage. The proposed regulations would establish minimum standards for treating garbage to be fed to swine.

DATE: Comments must be received on or before June 18, 1982.

ADDRESS: Written comments should be submitted to the Deputy Administrator, Veterinary Services, APHIS, USDA, Room 870, Federal Building, 6505 Belcrest Road, Hyattsville, MD 20782.

FOR FURTHER INFORMATION CONTACT: R. D. Good, Staff Veterinarian, Swine Diseases, Swine and Poultry Diseases Staff, Veterinary Services, APHIS, USDA, Federal Building, Room 841, Hyattsville, MD 20782, 301-436-8487.

SUPPLEMENTARY INFORMATION:

Paperwork Reduction Act

In accordance with the Paperwork Reduction Act of 1980 (44 U.S.C. 3507), the recordkeeping provisions that are included in this proposed rule will be submitted for approval to the Office of Management and Budget (OMB). They are not effective until OMB approval has been obtained.

Background

Garbage can serve as a means of transmission of numerous infectious or communicable foreign and domestic diseases of swine including, but not limited to, African swine fever (ASF), hog cholera, foot-and-mouth disease, swine vesicular disease, and vesicular exanthema of swine.

Domestic swine are highly susceptible to and have no resistance to any of these foreign diseases. This susceptibility is because there is no natural immunity to any of these diseases and there is either an ineffective vaccine or no vaccine available for some of the diseases. Slaughter of infected or exposed swine is the only disease eradication technique available. The effect of the diseases themselves and the necessary slaughter of infected or exposed swine would result in the death of all swine involved. Depending on the population of swine involved, this number could be great. Foreign disease outbreaks could, therefore, cause a severe economic crisis for U.S. swine producers and the pork industry in general. Widespread outbreaks would result in shortages of pork and pork products, causing higher food prices for consumers.

ASF is potentially the most dangerous of the above-named diseases because of its close proximity to the United States and Puerto Rico. Since 1978, ASF has been diagnosed in Cuba, the Dominican Republic, Brazil, and Haiti. It has apparently been eradicated from the Dominican Republic and Cuba. There is no effective vaccine for ASF.

All these foreign diseases can be spread through infected meat scraps in improperly treated garbage that is fed to swine or material that has been associated with such meat scraps. For example, ASF was most likely introduced into the Dominican Republic and Brazil via garbage from international airline flights. U.S. officials are conducting an intensified program to inspect meat and related products entering the United States, especially from countries in the Western Hemisphere with ASF. Complete surveillance is impossible considering the tremendous volume of international traffic, especially between the Caribbean Islands and the United States. A single contaminated meat product in garbage that reaches susceptible hogs could cause an outbreak.

Under these circumstances, the domestic swine population would be best protected by requiring pathogen-killing treatment of garbage that is to be fed to swine. Cooking of garbage prior to being fed to hogs is the only known practical means of protecting swine from the pathogens contained in garbage. Proper heat treatment of garbage kills the organisms that cause the aforementioned foreign animal diseases and generally assists in endemic disease control by eliminating one source of infection. This process also provides a source of food for swine that could not otherwise be utilized because of the danger of disease transmission. In addition, the conversion of discarded food to swine feed lessens the burden on disposal landfills, lagoons, and sewage plants.

The Swine Health Protection Act (7 U.S.C. 3801 *et seq.*), hereinafter referred to as the Act, is designed to protect the commerce of the United States and the health and welfare of the people of this country by regulating the treatment of garbage to be fed to swine and the feeding thereof in accordance with the provisions of the Act. Based on the above needs, Congress selected two basic methods to achieve this objective: (1) establishing standards for the handling and treatment of garbage that is intended to be fed to swine and (2) licensing garbage-treatment facilities. The Secretary of Agriculture is authorized by the Act to issue such regulations and to require the maintenance of such records as he deems necessary to carry out the provisions of the Act.

In accordance with the Act, these proposed regulations would prohibit the feeding of garbage to swine except when it is properly heat treated at a licensed treatment facility. Garbage is defined in the Act and these proposed regulations as all waste material derived in whole or in part from the meat of any animal (including fish and poultry) or other animal material, and other refuse of any character whatsoever that has been associated with any such material, resulting from the handling, preparation, cooking, or consumption of food, except that such term shall not include waste from ordinary household operations which is fed directly to swine on the same premises where such household is located. The regulations would establish procedures and standards for treating garbage and for the issuance, suspension, and revocation of licenses for treatment facilities.

Feeding of garbage to swine would be allowed if it is properly treated, except in States where prohibited. Handling, storage, and treatment operations for garbage to be fed to swine would have to be constructed so that swine would not have access to these areas.

It was Congress' intent for the Act to serve as minimum standards for the individual State programs. Primary enforcement responsibility under the Act would be delegated to States which have developed adequate laws and regulations concerning the treatment of garbage to be fed to swine and the feeding thereof, which laws and regulations meet the minimum standards of the Act and regulations. To be delegated primary enforcement responsibility, a State would also have to have adopted and be implementing adequate procedures for the effective enforcement of such State laws and regulations, and keep such records and make such reports showing compliance with these standards as required by

regulations. This determination would be made by the Deputy Administrator under Section 10 of the Act (7 U.S.C. 3809).

At present, 16 States with more than 50 percent of the national swine population prohibit the feeding of garbage, in any form, to swine. The 34 remaining States and Puerto Rico already have laws and/or regulations that regulate the treatment of garbage before it is fed to swine. However, the adequacy of the enforcement fo these State laws and regulations is yet to be determined.

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Based on information compiled by the Department of Agriculture, this proposal is determined to be non-major. The proposed rule will not have a significant effect on the economy and will not result in a major increase in costs or prices for consumers, individual industries, Federal, State, or local government agencies, or geographic regions; or significant adverse effects on competition, employment, investment, productivity, innovation or on the ability of United States-based enterprises to compete with foreign-based enterprises in domestic or export markets.

Regulatory Impact Analysis of Proposed Regulations for Swine Health Protection Summary Statement

The proposed regulations would reduce the risk of the introduction and dissemination of infectious or communicable foreign diseases of swine and reduce the spread of domestic swine diseases. These proposed regulations would affect the swine industry. The segments of the swine industry that would incur costs are the segment affected by current State laws and regulations and the segments of the industry in the U.S. territories and possessions that are currently unregulated.

Benefits of the proposed regulations would include:

- Improved effectiveness of APHIS programs designed to minimize the introduction and spread of animal diseases.
- Providing swine producers a means to safely utilize an alternate feed source.
- Improved public health by reducing the risk of disease transmission from animals to humans.
- Reduction in the amount of solid waste going into sewage plants, natural water systems and landfills.

Initial Regulatory Flexibility Analysis Summary

For purposes of the regulatory flexibility analysis, the impacted sector is defined as the entire swine industry. It is estimated that 95 to 99 percent of the industry are small entities. The economic impact of these proposd regulations will be incurred by only 1.4 percent of the swine industry, which is that segment of the industry that feeds untreated garbage or treated garbage to swine and which would not qualify for exemption from the regulations under the definition of "garbage." Garbage is defined in the Act and proposed regulations to include material except that "* * * from ordinary household operations which is fed directly to swine on the same premises where such household is located."

As of November 1981, a reported 8,229 premises were already regulated under State and Commonwealth laws similar to these proposed regulations, and persons feeding garbage to swine in these jurisdictions incur costs comparable to those that would result from these proposed regulations. However, costs would rise in some areas.

It is anticipated that most licensees operating garbage treatment facilities would need to purchase a thermometer at an esimaed cost of $3 to $30, as a thermometer is not presently reuired in Puerto Rico or most States.

Garbage feeding operations on premises located in American Samoa, Guam, the Northern Mariana Islands, and the Virgins Islands are currently unregulated. Based on information available to the Department, it appears that not all swine in these areas are fed garbage. Further, an undertermined number of these garbage feeders would be exempted by the definition of garbage as explained above. However, there is no means by which an accurate estimate of affected persons in these territories can be made at this time. Cost to the affected persons in these territories would include initial set-up costs plus additional costs for labor and fuel necessary in garbage cooking.

The Department has analyzed and considered alternatives to specific proposed requirements in order to minimize the regulatory burden on small entities. The specific proposed rules relate to licensing requirements, cooking requirements, including garbage temperature verification, recordkeeping requirements and cleaning and disinfecting costs to licensees. The alternatives proposed are those that minimize the impact on the regulated small entities as much as possible without increasing the risk of introduction and spread of swine diseases. The Department has concluded that different requirements or standards or the granting of exemptions for small entities is not possible without defeating the goal of this disease-prevention program.

A copy of the Initial Regulatory Flexibility Analysis is available upon request.

In this document, all references to § 166.1 *et seq.*, refer to sections of the proposed regulations, in proposed Part 166 of 9 CFR.

Proposal

The Act specifically requires that garbage that is to be fed to swine must be treated to kill disease organisms and that such treatment must only be at a facility (7 U.S.C. 3803(b)) holding a valid permit pursuant to the Act. Facilities must meet certain requirements, including the means to keep swine away from untreated garbage (7 U.S.C. 3804).

The Act requires all operators of facilities that treat garbage that is to be fed to swine to obtain permits from the Secretary or appropriate State officials. To be consistent with USDA, APHIS, Veterinary Services and State and industry terminology, the word "license" has been defined to mean "permit" in proposed § 166.10, which would detail the licensing requirements.

Proposed § 166.2(a) would prohibit the feeding of garbage to swine unless it is treated to kill disease organisms at a facility operated by a person holding a valid license for such treatment. Section 166.2(b) would require such treatment facilities to meet requirements specified in Part 166 before the operator could be licensed, including the requirement that the treatment facility be constructed so that swine of all ages and sizes would have no access to untreated garbage or to equipment and other material coming into contact with untreated garbage, unless it has been cleaned and disinfected in accordance with § 166.13, which is discussed below. This is to ensure that no disease organisms are transmitted to the swine.

According to section 13 of the Act (7 U.S.C. 3812), nothing in the Act shall be construed to repeal or supersede State laws that prohibit garbage feeding or to prohibit any State from enforcing garbage treating or feeding requirements which are more stringent than Federal law or the regulations issued under the Act. Section 166.2(c) restates this intent and makes it clear that under no circumstances would Federal licenses for the treatment of garbage be issued in any State which by law prohibited the feeding of garbage to swine.

Not only does the Act require (7 U.S.C. 3804(a)(2)), but it is important, that treatment facilities be properly designed to keep swine from having

access to untreated garbage or to its runoff (drainage) or material coming in contact with untreated garbage. Therefore, § 166.3)(a)— and (b) would require that untreated garbage at such facilities be inaccessible to swine in order to prevent their exposure to any infectious agents that might be present in the untreated garbage.

Likewise, the effort expended in cooking would be wasted if untreated garbage were leaked or spilled where swine could have access to it. An example would be in a facility where swine were properly separated from the handling/treating area, but where the garbage to be treated was moved through the swine pens. If untreated garbage were to be spilled in the pens, the swine would be exposed to any infectious agents present. Therefore, § 166.3(b) of the regulations would specifically require that swine be kept out of areas where they could come in contact with untreated garbage or its runoff.

In general, untreated garbage needs to be kept in covered, leak-proof and spill-proof containers to avoid leaks and spills that would result in unsanitary conditions, and, as explained previously, to prevent possible disease transmission. This would be required by proposed § 166.4(a).

In addition, proposed § 166.4(a) and (b) would require separate containers for transporting and storage of untreated garbage and treated garbage to prevent disease agent carryover. Once garbage has been properly cooked, the resultant product should be transported to the feeding area in either: (1) containers used only for treated garbage, (2) containers previously used for untreated garbage that have been cleaned and disinfected, or (3) containers in which the untreated garbage was cooked. The slightest amount of residue of untreated garbage remaining in a container is sufficient to transmit disease because infectious agents are microscopic in size and well protected in such garbage. Under §166.4(b)(3) of the proposed regulations, if a container was used for cooking, it could also be used as the feeding container. This would be allowed because any infectious agents present would be destroyed when the garbage in the container was properly cooked. Standards would be established in proposed § 166.5 for maintaining premises and equipment used in treatment of garbage that is to be fed to swine. These are needed to ensure that persons licensed to cook garbage will maintain clean and sanitary surroundings. Clean premises and equipment are necessary to help prevent the spread of disease organisms. One aspect of maintaining clean and sanitary surroundings is to control insects, rodents, other wildlife, and domesticated animals, including dogs and cats, which are capable of transmitting domestic and foreign animal diseases. Under the proposed standards, animal and pest control would be required (§ 166.5(a)).

A garbage treatment facility could serve as a continual source of disease if proper sanitation were not practiced. Mechanical transmission of disease agents present on an object as simple as a shovel or bucket can and does occur. An example of what would appear to be an innocent practice, but which in fact is a dangerous practice, would be to feed treated garbage to swine with the same equipment that has been used to handle untreated garbage. Unless the equipment had been cleaned and disinfected so as to kill infectious agents, this practice could spread disease. Therefore, strict limitations on the use of the equipment must be followed. The proposed regulations would require cleaning and disinfecting of equipment used in handling and treating garbage before being used for feeding purposes (§ 166.5(b)). The disinfectants allowed and the procedures to be followed in the cleaning of the premises, equipment, and garbage transporting vehicles would be specified in proposed § 166.14. This proposed section is discussed in greater detail below.

Any untreated garbage, or material associated with such garbage, could also be a source of infection. Therefore, untreated garbage and any such related material that was to be discarded on the premises of a licensed facility would have to be disposed of according to State and local environmental requirements in an area inaccessible to swine. For example, in situations where burial was appropriate, waste garbage should be buried in an area where it could not be uncovered due to the normal swine behavior of "rooting;" i.e., digging with the snout in the soil (§ 166.5(c)).

Proposed § 166.6 would require untreated garbage and any associated material or equipment to be kept away from swine until properly treated or cleaned and disinfected, as appropriate.

The cooking requirements would be specified by proposed § 166.7(a)—to heat garbage throughout at boiling (212°F or 100°C at sea level) for 30 minutes. This is the only known practical means to ensure destruction of infectious agents that are of concern while maintaining edibility of garbage for swine.

During the cooking process, temperature differences within the garbage increase in proportion to the size of the cooking container and distance of the contents from the heat source. Heat is not uniformly transmitted to the mass being cooked due to differences in density, fluidity, and size of garbage components. Therefore, agitation of the semiliquid garbage mass during cooking would be required in § 166.7(b), in order to eliminate significant temperature differences within the garbage by distributing heat more evenly between the top and bottom or the middle and ends of the cooking container. Agitation also aids in preventing the garbage from scorching and forming an insulating crust on the bottom of the cooking container. An exception to this requirement would be allowed for steam cooking equipment. The steaming process itself, when functioning properly, serves to agitate the garbage and heat it uniformly.

In order to have an ongoing evaluation of cooking sufficiency, the temperature of the garbage shall be read by the use of a functioning thermometer at prescribed locations within the cooker (§ 166.7(c)). § The locations, which are detailed in the proposed regulations, have been chosen to ensure that the required temperature is attained throughout the garbage mass. The garbage must be cooked for the required 30 minutes after the required temperature is reached.

Vehicles used to transport untreated garbage and then used to haul animals could act as mechanical carriers of disease. It has been documented that disease agents may persist in organic material. Garbage does contain organic material. Therefore, it is necessary that proposed § 166.8 would require the cleaning and disinfecting of vehicles used by a licensee to transport untreated garbage prior to their use for hauling animals. The procedures and disinfectants to use, which have all been found effective, would be detailed in proposed § 166.13. The disinfectants have all been approved by the Environmental Protection Agency for the required uses.

Proposed § 166.9(a) would require licensees to record the destinations and dates of untreated and treated garbage that have left their premises. An infectious agent might enter and exit the premises via untreated or inadequately "treated" garbage. The records would be used by veterinary medical personnel to aid in determining the source and

spread of disease. To be useful, all records would be required to be legible and indelible (§ 166.9(b). All records would have to be certified as accurate by initials or signature of the licensee or his authorized employee (§ 166.9(c)). Individual records would have to be maintained for a period of 1 (one) year for enforcement purposes and be available upon request to Department personnel for review (§ 166.9(d)). It is necessary to keep the records for one year because the clinical appearance of a garbage-borne disease of swine may not occur until some time after the infective treated garbage has been consumed by the swine. In the case of a low virulent form of a disease, this period could be quite long.

It should be noted that those situations where a household's table waste is fed directly to swine at the same location would not be subject to the license requirements. This is because section 3(2) of the Act (7 U.S.C. 3802(2)) defines "garbage" to exclude "waste from ordinary household operations when such waste is fed directly to swine on those same premises where the household is located." Each separate facility that treats garbage for feeding to swine would be licensed and judged on its individual merits. Those persons with more than one treatment facility would have to obtain a license for each facility. Any exemptions to the licensing requirements would be decided on a case-by-case basis as set forth in section 4(b) of the Act (7 U.S.C. 3803(b)). That is, an exemption could be granted by the Deputy Administrator if he determined that there would not be a risk to the swine industry in the United States.

Under the proposed licensing procedures, each license applicant would be given a copy of the Act and regulations. At the time of the required prelicensing inspection, the applicant would sign an acknowledgement that he has received copies of the Act and regulations, that he understands, them, and that he will comply with the Act and regulations (§ 166.10(b)).

Prelicensing inspections of garbage-treating facilities would be required under proposed § 166.10(c) to ensure that the applicant's facility meets the provisions of the Act and regulations. Under the proposed regulations, Veterinary Services policy would be to license only those facilities that comply with the Act and regulations. Licensed facilities in operation, but not meeting the Act or regulations, as well as unlicensed garbage treatment facilities, would be in violation of the Act and the regulations.

In the case of applicants for licensing that are suspected of violating or having violated the Act or regulations where the issue has not been resolved in an administrative proceeding, proposed § 166.10(d) would authorize the Deputy Administrator to institute administrative proceedings to determine if the application should be denied. If the application is denied, the applicant would be precluded from again applying for a license for a period of one year.

Under proposed § 166.11 in addition to imposing civil penalties and issuing cease and desist orders under the Act, the license of any facility may be suspended or revoked for any violation of the Act or regulations. Before such action is taken, the licensee would be notified in writing of such proposed action and the reasons therefor and afforded, upon request, an opportunity for a hearing with respect to the merits or validity of such action in accordance with rules of practice which shall be adopted for the proceeding.

Under proposed § 166.11(b), the Deputy Administrator could summarily suspend a license when he has reason to believe a Federal licensee has not or is not complying with any provision of the Act or regulations issued thereunder when he deems such action to be necessary to protect the public health, interest or safety, pending the final determination of a formal proceeding and any judicial review thereof. The suspension would be effective immediately upon oral or written notification, whichever is earlier, to the operator or licensee of the facility. In the event of oral notification, written confirmation would be provided. The suspension would remain in effect pending a final determination in formal proceedings and judicial review thereof, unless otherwise ordered by the Deputy Administrator.

In addition, automatic revocation of a license which is mandated by section 5(c) of the Act, after a licensee has been convicted twice under the criminal provisions of the Act, would be provided for in § 166.11(d). Employees of licensees with suspended or revoked licenses would not be allowed to become licensed for the purpose of continuing the business of the facility when still owned and/or operated by the licensee whose license has been suspended or revoked while the order of suspension or revocation is in effect. This action is necessary to prevent circumvention of the regulations or the intent of the Act (§ 166.11(e)).

Inspections of garbage-treatment facilities of licensees, as set forth in § 166.12(a), are necessary to assure that garbage is being properly cooked at all times and that there is compliance with the Act and regulations. Licensees would be required to allow personnel authorized by the Secretary to take samples of treated and untreated garbage, so that cooking effectiveness could be checked by laboratory tests.

In addition, because any unusual illness or death of any animal species on a licensed facility's premises, not normally associated with its operation, may indicate the start of a disease problem, licensees would be required by proposed § 166.12(b) to call such illnesses or death losses to the attention of an inspector to evaluate the situation. All species would be included because domestic animals, including dogs and cats, and all forms of wildlife may show symptoms of certain illnesses prior to swine becoming affected. Not only would prompt action serve the public interest in disease control, but the producer would also benefit from early disease diagnosis.

The Department needs to be informed of any change in the ownership or management of the treatment facility by the licensee in order to maintain an effective and efficient program and to prevent circumvention of the regulations or the intent of the Act. Under proposed § 166.12(c) licensees would be required to notify the Department of such changes within 30 days of making the change.

The licensees would be required to supply garbage source information when requested by an authorized representative of the Department to do so. This would assist Department and State personnel in determining the source and spread of disease. Information required would include the source of garbage and the date of pickup (§ 166.12(e)).

Enforcement of the Act and regulations is the responsibility of States which have "primary responsibility" as determined by the Secretary under section 10 of the Act (7 U.S.C. 3809). However, pursuant to the Act, the proposed regulations provide that Federal officials would assume enforcement responsibility in those States that do not have adequate laws and regulations or those States that are not effectively enforcing such laws or regulations as determined by the Deputy Administrator (who is delegated authority to take such action), and after proper notification pursuant to Section 10 of the Act. These designations, along with the information on which States prohibit the feeding of untreated garbage to swine and addresses of State and Federal offices in each State which

the public may contact for information, would appear in proposed § 166.14.

Cleaning and disinfecting procedures would be placed in a separate section (§ 166.13) because of their importance. The types of disinfectants which could be used and the procedures to be followed in the cleaning of premises, equipment, and garbage transporting vehicles would be specifically addressed in proposed § 166.13 (a), (b), and (c). The disinfectants prescribed in § 166.13(a) are further described in Part 71 of Title 9, Code of Federal Regulations. The instructions for the cleaning and disinfecting of facilities (§ 166.13(b)) and vehicles (§ 166.13(c)) prescribed have been proven effective through use in the successful vesicular exanthema and hog cholera eradication programs. No deviation from the stated requirements would be allowed, unless specified by the Deputy Administrator. Exemptions to the requirements, granted by the Deputy Administrator, would be based on disease risk factors. Cleaning and disinfecting would be the responsibility of the licensee, who would have to bear its cost (§ 166.13(d)).

List of Subjects in 9 CFR Part 166

African swine fever, Animal diseases, Foot and mouth disease, Garbage, Hogs, Hog cholera, Swine vesicular disease, Vesicular exanthema of swine.

Accordingly, in Title 9, Code of Federal Regulations, a new Subchapter K and Part 166 would be added to read:

PART 166—SWINE HEALTH PROTECTION

General Provisions

Sec.

Authority: Sec. 511, Pub. L. 96–592, 94 Stat. 3451 (7 U.S.C 3802); Secs. 4, 5, 9, 12, Pub. L. 96–468, 94 Stat. 2229 (7 U.S.C. 3803, 3804, 3808, 3811); 45 FR 85696, 46 FR 7266

§ 166.1 Definitions in alphabetical order.

For the purposes of this Part, the following terms shall have the meanings assigned them in this Section. Unless otherwise required by the context, the singular form shall also import the plural and the masculine form shall also import the feminine, and vice versa. Words undefined in the following paragraphs shall have the meaning attributed to them in general usage as reflected by definitions in a standard dictionary.

(a) *Act.* The Swine Health Protection Act (Pub. L. 96–468) as amended by the Farm Credit Act Amendments of 1980 (Pub. L. 96–592).

(b) *Administrator.* The Administrator of the Animal and Plant Health Inspection Service (APHIS), United States Department of Agriculture (USDA), or any other official to whom authority has heretofore been delegated or to whom authority may hereafter be delegated to act in his stead.

(c) *Animal and Plant Health Inspection Service (APHIS).* Animal and Plant Health Inspection Service, United States Department of Agriculture.

(d) *Animals.* All domesticated and wild mammalian, poultry, and fish species, including pets such as cats and dogs.

(e) *Area Veterinarian in Charge.* The veterinarian of Veterinary Services who is assigned by the Deputy Administrator to supervise and perform the official work of Veterinary Services in a State or States or any other official to whom authority has heretofore been delegated or to whom authority may hereafter be delegated to act in his stead.

(f) *Birds.* All domesticated and wild avian species.

(g) *Department.* The United States Department of Agriculture (USDA).

(h) *Deputy Administrator.* The Deputy Administrator for Veterinary Services or any other official to whom authority has heretofore been delegated or to whom authority may hereafter be delegated to act in his stead.

(i) *Garbage.* All waste material derived in whole or in part from the meat of any animal (including fish and poultry) or other animal material, and other refuse of any character whatsoever that has been associated with any such material, resulting from the handling, preparation, cooking or consumption of food, except that such term shall not include waste from ordinary household operations which is fed directly to swine on the same premises where such household is located.

(j) *Inspector.* Any inspector or veterinarian employed by the Department or by the State for the purposes of enforcing the Act and this Part.

(k) *License.* A permit issued to a person for the purpose of allowing such person to operate a facility to treat garbage that is to be fed to swine.

(l) *Licensee.* Any person licensed pursuant to the Act and regulations.

(m) *Person.* Any individual, corporation, company, association, firm, partnership, society or joint stock company or other legal entity.

(n) *State.* The fifty States, the District of Columbia, Guam, Puerto Rico, the Virgin Islands of the United States, American Samoa, the Commonwealth of the Northern Mariana Islands, and the territories and possessions of the United States.

(o) *State animal health official.* The State animal health official responsible for livestock and poultry disease control and eradication programs or any other official to whom authority has heretofore been delegated or to whom authority may hereafter be delegated to act in his stead.

(p) *Treated garbage.* Edible waste for animal consumption derived from garbage (as defined in this section) that has been heated throughout at boiling or equivalent temperature (212°F or 100°C at sea level) for 30 (thirty) minutes under the supervision of a licensee, or otherwise treated according to a method approved by the Deputy Administrator.

(q) *Treatment.* The heating of garbage to specifications as set forth in this part, or any other method of treating garbage approved by the Deputy Administrator.

(r) *Untreated garbage.* Garbage that has not been treated in accordance with the Act and these regulations.

(s) *Veterinary Services.* The unit of the Animal and Plant Health Inspection Service which is assigned responsibility for the performance of functions under the Act.

§ 166.2 General restrictions.

(a) No person shall feed or permit the feeding of garbage to swine unless it is treated to kill disease organisms, pursuant to the regulations, at a facility operated by a person holding a valid license for the treatment of garbage.

(b) No person operating such a facility may be licensed to treat garbage unless he or she meets the requirements of this Part designed to prevent the introduction or dissemination of any infectious or communicable disease of animals and unless the facility is so constructed that swine are unable to have access to untreated garbage or equipment and material coming in contact with untreated garbage.

(c) The regulations of this Part shall not be construed to repeal or supersede State laws that prohibit feeding of garbage to swine or to prohibit any State from enforcing requirements relating to the treatment of garbage that is to be fed to swine or the feeding

thereof which are more stringent than the requirements contained in this Part. In a State which prohibits the feeding of garbage to swine, a Federal license under the Act will not be issued to any applicant.

§ 166.3 Separation of swine from the garbage handling and treatment areas.

(a) Access by swine to garbage handling and treatment areas shall be prevented by construction of facilities to exclude all ages and sizes of swine.

(b) All areas, and drainage therefrom, used for the handling and treatment of untreated garbage shall be inaccessible to swine on the premises. This shall include the roads and areas used to transport and unload untreated garbage on the premises.

§ 166.4 Storage of garbage.

(a) Untreated garbage at a treating facility shall be stored in covered, leak-proof and spill-proof containers until treated.

(b) Treated garbage shall be transported to the feeding area at the treatment facility only in (1) containers used only for such treated garbage; (2) containers previously used for garbage which have been cleaned and disinfected in accordance with § 166.13; or (3) containers in which the garbage was treated.

§ 166.5 Licensed garbage-treatment premises and equipment standards.

Garbage-treatment premises, and all associated equipment, shall be maintained as set forth in this section.

(a) Insects and animals shall be controlled. Accumulation of any material on the premises where insects and rodents may breed is prohibited.

(b) Equipment used for garbage handling, except for the containers in which the garbage has been treated, may not be subsequently used in the feeding of swine unless first cleaned and disinfected as set forth in § 166.13(b).

(c) Garbage that is not to be fed to swine and materials in association with such garbage shall be disposed of in a manner consistent with State and local environmental requirements and in an area inaccessbile to swine.

§ 166.6 Swine feeding area standards.

Untreated garbage shall not be allowed into swine feeding areas. Any equipment or material associated with garbage, except for containers holding treated garbage which was treated in such containers, shall not be allowed into swine feeding areas at treatment facilities until properly cleaned and disinfected as set forth in § 166.13(b).

§ 166.7 Cooking standards.

(a) Garbage shall be heated throughout at boiling (212°F or 100°C at sea level) for 30 minutes.

(b) Garbage shall be agitated during cooking, except in steam cooking equipment, to ensure that the prescribed cooking temperature is maintained throughout the cooking container for the prescribed length of time.

(c) A thermometer shall be inserted at the following prescribed locations within the cooking container to determine garbage temperature during each cooking: (1) 1 (one) inch above the bottom of the cooking container, (2) 1 (one) inch below the surface of the garbage, and (3) at the approximate midpoint of a line between the points described in (c) (1) and (2) of this paragraph. The temperature readings of (c) (1), (2), and (3) of this paragraph shall be taken in vertical line at the location within the cooking container that is the greatest distance from the heat source. After 212°F or 100°C at sea level is reached at all three points, the garbage must be cooked at that temperature or higher for a full 30 (thirty) minutes.

§ 166.8 Vehicles used to transport garbage.

Vehicles used by a licensee to transport untreated garbage shall not be used for hauling animals until cleaned and disinfected as set forth in § 166.14(c).

§ 166.9 Recordkeeping.

(a) Each licensee shall record the destination and date of removal of all treated or untreated garbage removed from the licensee's premises.

(b) Such records shall be legible and indelible.

(c) Each entry in a record shall be certified as correct by initials or signature of the licensee or an authorized agent or employee of the licensee.

(d) Such records shall be maintained by the licensee for a period of 1 (one) year from the date made and shall be made avilable to inspectors upon request during normal business hours at that treatment facility.

§ 166.10 Licensing.

(a) *Application.* Any person operating or desiring to operate a treatment facility for garbage that is to be treated and fed to swine shall apply for a license on a form which will be furnished, upon request, by the Area Veterinarian in Charge or, in States with primary enforcement responsibility, by the State animal health official in the State in which the person operates or intends to operate. When a person operates more than one treatment facility, a separate application to be licensed shall be made for each facility. Exemptions to the requirements of this paragraph may be granted in States other than those with primary enforcement responsibility by the Deputy Administrator, if he finds that there would not be a risk to the swine industry in the United States.

(b) *Acknowledgment of Act and regulations.* A copy of the Act and regulations shall be supplied to the applicant at the time the applicant is given a license application. The applicant shall sign a receipt at the time of the prelicensing inspection acknowledging that the applicant has received a copy of the Act and regulations, that the applicant understands them, and agrees to comply with the Act and regulations.

(c) *Demonstration of compliance with the regulations.* (1) Prior to licensing, each applicant shall demonstrate during an inspection of his premises, facilities, and equipment that the premises, facilities, and equipment to be used in the treatment of garbage comply with these regulations. If the applicant's premises, facilities, or equipment do not meet the standards established by the regulations, the applicant shall not be licensed and shall be advised of the deficiencies and the measures that must be taken to comply with the regulations.

(2) The licensee shall make his premises, facilities, and equipment available during normal business hours for inspections by an authorized representative of the Secretary to determine continuing compliance with the Act and regulations.

(3) The premises, facilities, and equipment of an applicant for a license shall be in compliance with all applicable State and Federal environmental regulations before the applicant will be licensed.

(d) *Issuance of License.* A license will be issued to an applicant when the requirements of paragraphs (a), (b), and (c) of this section have been met, provided that such facility is not located in a State which prohibits the feeding of garbage to swine; and further, that if the Deputy Administrator has reason to believe that the applicant for a Federal license is unfit to engage in the activity for which application has been made by reason of the fact that the applicant is engaging in or has, in the past, engaged in any activity in apparent violation of the Act or the regulations which has not been the subject of an administrative proceeding under the Act, an administrative proceeding shall be promptly instituted in which the

applicant will be afforded an opportunity for a hearing in accordance with the rules of practice under the Act, for the purpose of giving the applicant an opportunity to show cause why the application for license should not be denied. In the event it is determined that the application should be denied, the applicant shall be precluded from reapplying for a license for 1 (one) year from the date of the order denying the application.

§ 166.11 Suspension and revocation of licenses.

(a) *Suspension or revocation after notice.* In addition to imposing civil penalties and issuing cease and desist orders under the Act, the license of any facility may be suspended or revoked for any violation of the Act or the regulations in this Part. Before such action is taken, the licensee of the facility will be informed in writing of the reasons for proposed action and, upon request, shall be afforded an opportunity for a hearing with respect to the merits or validity of such action, in accordance with the rules of practice which shall be adopted for the proceeding.

(b) *Summary suspension.* If the Deputy Administrator has reason to believe that any Federal licensee has not complied or is not complying with any provisions of the Act or regulations in this Part and he deems such action necessary in order to protest the public health, interest, or safety, the Deputy Administrator may summarily suspend the license of such persons pending a final determination in formal proceedings and any judicial review thereof, effective upon verbal or written notice of such suspension and the reasons therefor. In the event of verbal notification, written confirmation shall follow as soon as circumstances permit. This summary suspension shall continue in effect pending the completion of the proceeding and any judicial review thereof, unless otherwise ordered by the Deputy Administrator.

(c) The license of a person shall be automatically revoked, without action of the Deputy Administrator, upon the final effective date of the second criminal conviction of such person, as is stated in Section 5(c) of the Act. The licensee will be notified in writing of such revocation by the Area Veterinarian in Charge or, in States having primary enforcement responsibility, by the State animal health official.

(d) Any person whose license has been suspended or revoked for any reason shall not be licensed in his own name or in any other manner, nor shall any of his employees be licensed for the purpose of operating the facility owned or operated by said licensee while the order of suspension or revocation is in effect. Any person whose license has been revoked shall not be eligible to apply for a new license for a period of 1 (one) hear from the effective date of such revocation. Any person who desires the reinstatement of a license that has been revoked must follow the procedure for new licensees set forth in § 166.10.

§ 166.12 Licensee responsibilities.

(a) A licensed facility shall be subject to inspections. Each inspector will be furnished with an official badge or numbered identification card, either of which shall be sufficient identification to entitle access during normal business hours to the facility premises for the purposes of inspection. At such time the inspector is duly authorized to:

(1) inspect premises and equipment, including cooker function;

(2) take samples of garbage;

(3) observe and physically inspect the health status of all species of animals on the premises;

(4) review records and make copies of such records; and

(5) take photographs.

(b) A licensee shall notify an inspector immediately upon detection of illness or death not normally associated with the licensee's operation in any animal species on the premises.

(c) A licensee shall notify an inspector or the State Animal Health Official or the Area Veterinarian in Charge, as appropriate, of any change in the name, address, management or substantial control or ownership of his business or operation within 30 (thirty) days after making such change.

(d) A licensee shall supply, upon request by an authorized representative of the Department, information concerning sources of garbage. Such information shall include the dates of supply and the names and addresses of the person and/or organization from which the garbage was received.

§ 166.13 Cleaning and disinfecting.

(a) *Disinfectants to be used.* Disinfection required under the regulations in this Part shall be performed with one of the following:

(1) a permitted brand of sodium orthophenylphenate that is used in accordance with directions on the Environmental Protection Agency (EPA) approval label.

(2) a permitted cresylic disinfectant that is used in accordance with directions on the EPA-approved label, provided such disinfectant also meets the requirements set forth in §§ 71.10(b) and 71.11 of Title 9, Code of Federal Regulations.

(3) disinfectants which are registered under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 135 *et seq.*), with tuberculocidal claims and labeled as efficacious against any species within the viral genus *Herpes*, that are used for purposes of this Part in accordance with directions on the EPA-approved labels.

(b) All licensed facilities at which garbage has been fed to swine in violation of the Act or regulations in this Part shall, prior to continued use for swine feeding purposes, be cleaned and disinfected under the supervision of an inspector or an accredited veterinarian as follows: Empty all troughs and other feeding and watering appliances, remove all litter, garbage, manure, and other organic material from the floors, posts, or other parts of such equipment, and handle such litter, garbage, manure, and other organic material in such manner as not to expose livestock to any disease that might be contained therein; clean all surfaces with water and detergent and saturate the entire surface of the equipment, fencing, troughs, chutes, floors, walls, and all other parts of the facilities, with a disinfectant prescribed in § 166.13(a). An exemption to the requirements of this paragraph may be given by the Deputy Administrator or in States with primary enforcement responsibility by the State Animal Health Official, when it is determined that a threat to the swine industry does not exist or that less encompassing corrective measures would be sufficient to remedy the situation.

(c) Any vehicle or other means of conveyance and its associated equipment which has been used by the licensee to move garbage shall, prior to use for livestock-related purposes, be cleaned and disinfected as follows: Remove all litter, garbage, manure, and other organic material from all portions of each means of conveyance, including all ledges and framework inside and outside, and handle such litter, garbage, manure, and other organic material in such manner as not to expose livestock to any disease that might be contained therein; clean the interior and the exterior of such vehicle or other means of conveyance and its associated equipment with water and detergent; and saturate the entire interior surface, including all doors, endgates, portable chutes, and similar equipment with a disinfectant prescribed in § 166.13(a).

(d) The owner of such facilities and vehicles shall be responsible for cleaning and disinfecting as required

under this Section, and the cleaning and disinfecting shall be done without expense to the Department of Agriculture.

§ 166.14 State status.

(a) The following States prohibit the feeding of garbage to swine: [1]

(b) The following States permit the feeding of treated garbage to swine. The public may contact the following State and Federal offices concerning the feeding of garbage to swine in these States: [1]

(c) The following States have primary enforcement responsibility under the Act:[1]

All written submissions made pursuant to this notice will be made available for public inspection at the Federal Building, 6505 Belcrest Road, Room 870, Hyattsville, MD during regular hours of business (8 a.m. to 4:30 p.m., Monday to Friday, except holidays) in a manner convenient to the public business (7 CFR 1.27(b)).

Comments submitted should bear a reference to the date and page number of this issue in the **Federal Register**.

Done at Washington, D.C., this thirteenth day of April 1982.

J. K. Atwell,

Deputy Administrator, Veterinary Services.

[FR Doc. 82-10426 Filed 4-13-82; 4:13 pm]

BILLING CODE 3410-34-M

[1] The lists of States will appear in the final rule.

federal register

Friday
April 16, 1982

Part VI

Environmental Protection Agency

Standards Applicable to Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities: Liability Requirements

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 123, 264 and 265

[SWH-FRL-2091-8]

Standards Applicable to Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities: Liability Requirements

AGENCY: Environmental Protection Agency.

ACTION: Revised interim final rule.

SUMMARY: The Environmental Protection Agency is today revising regulations of January 12, 1981, on liability coverage requirements for hazardous waste facility owners or operators. Under these requirements, owners or operators must demonstrate liability coverage for bodily injury and property damage to third parties resulting from facility operations. The major revisions are: addition of the option of a financial test as a means of demonstrating liability coverage to satisfy the requirements; addition of the option of submitting a certificate of insurance as evidence of insurance; and changes in the requirements for the endorsement and certificate. In a future document, EPA will propose to delete two provisions of the January 12, 1981 regulations. These provisions are: the procedure to obtain a variance for liability coverage requirements; and the provision allowing an owner or operator to use State assumption of legal responsibility for liability coverage to satisfy the liability requirements. The January 12, 1981, regulations were issued under an accelerated schedule imposed by a court order. The revisions that are being made today are necessary to eliminate unworkable aspects of the previous regulations, improve their effectiveness, and allow reasonable flexibility in satisfying the requirements.

States applying for Phase II interim authorization to carry out State hazardous waste programs in lieu of EPA must include liability requirements substantially equivalent to those of Parts 264 and 265 as a condition of such authorization. EPA is amending its State program authorization requirements to provide that States which have already submitted draft applications for Phase II to EPA and which do not have liability coverage requirements must establish them as quickly as practicable but may in the meantime receive Phase II interim authorization.

DATES: Effective Date for 40 CFR 264.147 and 265.147: July 15, 1982; except for §§ 264.147(a)(1)(i), (b)(1)(i), (b)(5), (c), (d) and (f)(3)–(6); 264.151(g), (i), and (j); and 265.147(a)(1)(i), (b)(1)(i), (b)(5), (c), (d) and (f)(3)–(6), which contain information collection requirements under review by OMB.

Effective date for 40 CFR 123.129: April 16, 1982.

Comment date: EPA will accept public comments on the revised regulation until June 15, 1982.

ADDRESSES: Comments should be sent to Docket Clerk (Docket No. 3004), Office of Solid Waste (WH-562), U.S. Environmental Protection Agency, 401 M St., SW., Washington, D.C. 20460.

Public Docket: The public docket for these regulations is located in Room S269-C, U.S. Environmental Protection Agency, 401 M St., SW., Washington, D.C., which is open to the public from 9:00 a.m. to 4:00 p.m., Monday through Friday, excluding holidays.

Submissions and Correspondence to the Regional Administrator: All documents and correspondence to be submitted to the Regional Administrator regarding these financial requirements should be marked "Attention: RCRA Financial Requirements" as part of the address.

Copies of Regulations: Single copies of these regulations will be available while the supply lasts from the RCRA Hotline, at the numbers given below.

FOR FURTHER INFORMATION CONTACT: For general information call the RCRA Hotline at (800) 424-9346 (toll-free) or (202) 382-3000 or write to Emily Sano, Desk Officer, State Programs and Resource Recovery Division, Office of Solid Waste (WH-563), U.S. Environmental Protection Agency, 401 M St., SW., Washington, D.C. 20460.

For information on implementation of these regulations, contact the EPA regional offices below:

Region I

Gary Gosbee, Waste Management Branch, John F. Kennedy Building, Boston, Massachusetts 02203, (617) 223-1591

Region II

Helen S. Beggun, Chief, Grants Administration Branch, 26 Federal Plaza, New York, New York 10007, (212) 264-9860

Region III

Anthony Donatoni, Hazardous Materials Branch, 6th and Walnut Streets, Philadelphia, Pennsylvania 19106, (215) 597-7937

Region IV

Dan Thoman, Residuals Management Branch, 345 Courtland Street, N.E., Atlanta, Georgia 30308, (404) 881-306

Region V

Thomas Golz, Waste Management Branch, 230 South Dearborn Street, Chicago, Illinois 60604, (312) 886-4023

Region VI

Henry Onsgard, Attention: RCRA Financial Requirements, 1201 Elm Street, First International Building, Dallas, Texas 75270, (214) 767-3274

Region VII

Robert L. Morby, Chief, Hazardous Materials Branch, 324 E. 11th Street, Kansas City, Missouri 64106, (816) 374-3307

Region VIII

Carol Lee, Waste Management Branch, 1860 Lincoln Street, Denver, Colorado 80203, (303) 837-6258

Region IX

Richard Procunier, Hazardous Materials Branch, 215 Fremont Street, San Francisco, California 94105, (415) 974-8165

Region X

Kenneth D. Feigner, Chief, Waste Management Branch, 1200 6th Avenue, Seattle, Washington 98101, (206) 442-1260.

SUPPLEMENTARY INFORMATION:

I. Authority

These regulations are issued under the authority of Sections 1006, 2002(a), 3004, 3005, 3006 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976 (RCRA), as amended, 42 U.S.C. 6901, 6905, 6912(a), and 6924.

II. Background

Section 3004(6) of RCRA requires EPA to establish financial responsibility standards for owners or operators of hazardous waste management facilities as may be necessary or desirable to protect human health and the environment. On January 12, 1981, EPA promulgated regulations requiring owners or operators to demonstrate liability coverage for bodily injury and property damage to third parties resulting from facility operations. These regulations were promulgated on an accelerated schedule imposed by a court order, *State of Illinois v. Costle*, No. 78-1689 *et al.* (D.D.C., December 18, 1979). On October 1, 1981, EPA deferred the effective date of these regulations and announced its intent to publish a proposal to eliminate the liability requirements (46 FR 48197). The Agency questioned whether these requirements were necessary or desirable to meet the

requirements of RCRA. In response to this announcement EPA received considerable comment from the public, regulated industries, insurance companies, members of Congress, and State agencies. These comments indicated fairly wide-scale support for a Federal liability coverage requirement for hazardous waste management facilities. There was virtually no opposition to such a requirement.

Some commenters stated that the liability requirements are important to assure that funds will be available for third parties seeking compensation for bodily injury and property damage arising from operation of the facilities. They felt that without such requirements, funds might not be available to compensate injured parties for damages, including payment for medical care and environmental restoration.

Other commenters argued that without a Federal liability coverage requirement there would be lessened public confidence in and greater opposition to proposed and existing hazardous waste facilities. They saw the liability requirements as an important factor facilitating the establishment of new and improved hazardous waste facilities.

Commenters also expected liability requirements to result in other potential benefits for public health and the environment. These include the potential for improved design and operation of the facility resulting from the incentive of lower insurance premiums and the oversight that insurers might provide over facility operations.

Based upon these comments the Agency has concluded that the liability requirements, although not "necessary" requirements are viewed by the public and therefore by the Agency as a desirable part of the RCRA regulatory program. Therefore EPA is placing these requirements in effect 90 days from today's date.

The financial responsibility standards promulgated January 12, 1981, included requirements for both liability insurance and for financial assurance for closure and post-closure care. The amendments promulgated today are limited to the liability requirements; amendments to the requirements for financial assurance for closure and post-closure care were issued April 7, 1982 (47 FR 15032–15074).

A. Proposed Rules

Financial responsibility standards for inclusion in Part 264 (standards to be used in issuing permits) and Part 265 (interim status standards for existing facilities awaiting final disposition of permit applications) were first proposed on December 18, 1978 (43 FR 58995, 59006–07). The proposed regulations included requirements for liability coverage as Part 264 permit standards. Insurance, self-insurance, or other evidence of financial responsibility were allowed as means of demonstrating liability coverage. Facilities in interim status were not required to have coverage because it was questionable whether insurance would be made available to facilities without permits.

In its reproposal of financial requirements on May 19, 1980 (45 FR 33260–78), the Agency added a requirement for coverage of sudden accidental occurrences for facilities in interim status. This was done because there was evidence that many owners or operators already possessed liability insurance covering sudden accidental occurrences as part of their comprehensive general liability policies and that other owners or operators should easily be able to obtain such insurance. For nonsudden accidental occurrences, however, availability of coverage still seemed doubtful for facilities without permits.

B. Interim Final Rule of January 12, 1981

Under the liability requirements (§§ 264.147 and 265.147) promulgated January 12, 1981, an owner or operator of a hazardous waste treatment, storage, or disposal facility was required to have liability insurance for sudden accidental occurrences arising from operations of the facilities (minimum amount: $1 million per occurrence, $2 million annual aggregate). If a facility was a surface impoundment, landfill, or land treatment facility, an owner or operator was required to have insurance also for claims resulting from nonsudden accidental occurrences ($3 million per occurrence, $6 million annual aggregate). These requirements applied to both interim status and permitted facilities. Under variance provisions of the regulations, the Regional Administrator could adjust the amounts of coverage required of an owner or operator, and he could require coverage for nonsudden accidental occurrences for facilities other than land disposal facilities, depending on determinations of risk at the particular facilities.

Because availability of insurance for nonsudden accidental occurrences was, and still is, limited (although increasing), the nonsudden accidental coverage requirement was phased in over 3 years. Owners or operators with the largest sales (sales of $10 million or more) were required to have the insurance 6 months after the effective date; those with sales between $5 and $10 million were required to have the insurance a year later, and the remaining owners or operators were required to have it a year after that.

As evidence of insurance coverage, the January 12, 1981, regulation required the owner or operator to submit a copy of the insurance policy to the Regional Administrator. Each policy had to have an endorsement attached which related to the regulatory requirement.

The preamble to the January 12, 1981, regulation stated that EPA was considering whether an owner or operator should be allowed to satisfy the liability requirements by passing a financial test, and requested comments on whether such a provision should be adopted.

C. Effective Date

The effective date for the January 12, 1981, regulations was deferred to April 13, 1982 (notice published October 1, 1981, 46 FR 48197), because the Agency was considering whether to propose withdrawal of the liability requirements and because amendments to the closure and post-closure financial assurance requirements were still in preparation. For reasons stated above, EPA has decided to proceed with liability coverage requirements.

The new effective date for the liability requirements is July 15, 1982. Owners or operators are required to submit evidence of coverage for sudden accidental occurrences by this date. This extension is necessary to allow owners or operators time to review today's revisions in the requirements and arrange to establish evidence of sudden accidental occurrence coverage that conforms to these revised requirements. Under the phase-in schedule for the requirement for nonsudden accidental occurrence coverage, owners or operators with annual sales or revenues of $10 million or more will be required to submit evidence of this coverage by January 16, 1983; those with annual sales or revenues of $5 million to $10 million, by January 16, 1984 and all others by January 16, 1985.

Section 3010(b) of RCRA provides that EPA's hazardous waste regulations and revisions thereto take effect 6 months after promulgation. A primary purpose of the provision is to allow persons affected by the rulemaking sufficient lead time to prepare for compliance with major new regulatory requirements. The Agency has set the effective date of today's revised rule at 3 months rather than 6 months from the date of promulgation because the previous requirements are not substantially

changed except in ways that add greater flexibility and feasibility regarding compliance (i.e., addition of the financial test as a means of satisfying the requirements, the addition of the option of submitting a certificate of insurance as evidence of insurance, and changes in the language of the endorsement to the insurance policy).

III. Revisions and Responses to Comments

Because the January 12, 1981, regulations were promulgated on an accelerated schedule, substantial revisions were necessary. Revisions included in today's regulations are as follows:

- A financial test has been added as a means of demonstrating liability coverage to satisfy the requirements. In order to demonstrate that he meets the financial test, the owner or operator must submit to EPA statements from his chief financial officer and from an independent certified public accountant.
- In order to demonstrate that he has obtained insurance, the owner or operator can submit to EPA a certificate of insurance instead of an endorsement to the insurance policy.
- Changes have been made in the Hazardous Waste Facility Liability Endorsement. Essentially the same language is specified for the new certificate of insurance. The changes are:

Language referring to the extent of an insurer's liability has been revised;

The provisions concerning cancellation of the policy have been revised, but a requirement for 60 days' notice of cancellation to EPA has been retained; and

A requirement that insurers must give EPA at least 30 days's notice of any other termination of the policy, including nonrenewal, has been added.

- Minimum qualifications for insurers whose policies are used to satisfy the requirements have been added and proposals for additional qualifications for insurers have been made.
- A requirement that liability coverage must be maintained until certifications of closure are received by EPA has been added.
- Provisions relating to the phasing in of the requirement for coverage of nonsudden accidental occurrences have been clarified.
- A notification requirement has been added for those owners or operators of surface impoundments, landfills, or land treatment facilities who are not required to obtain coverage of nonsudden accidental occurrences until 18 or 30 months after the effective date.
- A proposal has been made to eliminate two provisions of the January 12, 1981 regulation: the procedure to obtain a variance for liability coverage requirements; and the provision allowing an owner or operator to use State assumption of legal responsibility for liability coverage to satisfy the liability requirements.

The required minimum amounts of coverage are unchanged: for sudden accidental occurrences, $1 million per occurrence with a $2 million annual aggregate; for nonsudden accidental occurrences, $3 million per occurrence with a $6 million annual aggregate. Liability insurance is required on an owner or operator basis rather than a facility basis because the use of an annual aggregate coverage requirement takes into account the risk of multiple occurrences among facilities belonging to one owner or operator.

The changes to the regulations are discussed below, together with the comments received from the public.

A. The Financial Test for Liability Coverage

1. *Proposal of December 1978.* Under the December 18, 1978, proposed regulation, an owner or operator could provide the required liability coverage by self-insuring for an amount not to exceed 10 percent of equity (43 FR 59007). Many commenters recommended that the Agency allow use of self-insurance to satisfy the liability requirements. Some commenters suggested that the Agency should limit self-insurance to percentages of equity other than the 10 percent that was proposed, and others suggested criteria other than a percentage of a firm's equity. Several commenters said that the criteria should parallel those in EPA's financial test for closure and post-closure financial responsibility (§§ 264.143, 264.145, 265.143, and 265.145).

The Agency gave these comments extensive consideration. Based on its analyses the Agency concluded that the 10-percent-of-equity measure was inappropriate for several reasons: the Agency's analysis found that equity amounting to 6 times the amount of liability covered, rather than 10 times, was sufficient; the equity percentage by itself does not measure liquidity; and it does not account for the significantly higher failure rates of smaller owners or operators. The Agency has developed a financial test for liability coverage which is more appropriate than the one that was proposed.

2. *The Financial Test for Liability Coverage as Promulgated Today.* An owner or operator may pass the financial test for liability coverage by demonstrating that he meets either of two sets of criteria.

Alternative I:

(A) Tangible net worth of at least $10 million; and

(B) Net working capital and tangible net worth each at least six times the amount of liability coverage to be demonstrated by this test; and

(C) Assets in the United States amounting to either: (1) at least 90 percent of total assets, or (2) at least six times the amount of liability coverage to be demonstrated by this test.

Alternative II:

(A) A current rating for its most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's, or Aaa, Aa, A, or Baa as issued by Moody's; and

(B) Tangible net worth of at least $10 million; and

(C) Tangible net worth at least six times the amount of liability coverage to be demonstrated by this test; and

(D) Assets in the United States amounting to either: (1) At least 90 percent of total assets, or (2) at least six times the amount of liability coverage to be demonstrated by this test.

Alternative I was developed for testing owners or operators in manufacturing industries likely to be involved in hazardous waste management. Alternative II allows financially sound owners or operators in industries that typically do not maintain high net working capital (such as electric utilities) to use the financial test. By meeting the test, owners or operators demonstrate that they are capable of using their current assets to pay for damages up to the amounts of annual aggregate coverage required by the regulations. Therefore the public is still afforded reasonable assurance that funds will be available to compensate for damages which might result from the operation of their hazardous waste management facilities. Hence, the main objective of the liability requirements is satisfied. When an owner or operator demonstrates that he passes the test for only a portion of the required amounts of coverage, he must obtain liability insurance for the remainder.

A bond rating is required in Alternative II. An analysis of available data on the performance of the two major bond rating services (Moody's and Standard Poor's) showed that the four highest ratings (investment-grade bonds) demonstrate financial viability at least equal to that indicated by meeting the criteria of the first test option. Other elements are included with the bond rating in the second set of criteria in

order to assure that the owners or operators have adequate assets for the amounts of liability coverage to be demonstrated. The Agency will initially accept bond ratings issued only by Moody's or Standard and Poor's. However, in order to determine whether there are other bond rating services that could also be used, EPA request information establishing how well the ratings assigned by other bondrating services have performed over time.

The Agency analyzed many potential tests for liability coverage in conjunction with its analysis of tests for financial assurance for closure and post-closure care. The analysis of tests for both purposes is presented in detail in background documents for the financial tests, and the differences between the two tests are explained.

3. *Reporting Requirements.* To establish that he meets the financial test for liability coverage, an owner or operator uses the same procedures specified for the financial test to assure funds for closure and post-closure care. As evidence of satisfying the financial test, an owner or operator must submit:

(1) A letter to the Regional Administrator signed by his chief financial officer that includes the required data from the owner's or operator's independently audited, year-end financial statements, and

(2) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year; and

(3) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating that the accountant has compared the data which the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements and, in connection with this procedure, no matters came to his attention which caused him to believe that the specified data should be adjusted.

If an owner or operator is using the financial test to demonstrate both liability coverage and financial assurance for closure and post-closure care, the same letter from the chief financial officer setting forth the required data must be used for both purposes; the wording of the letter is specified in § 264.151(g).

As in the case of the financial test for closure and post-closure care, if the auditor's opinion that is included in his report on examination of the owner's or operator's financial statements is an adverse opinion or contains a disclaimer of opinion, the owner or operator may not use the financial test to satisfy the financial requirements. An adverse opinion states that the financial statements do not present fairly the financial condition of the owner or operator in conformity with generally accepted accounting principles. A disclaimer of opinion states that the auditor does not express an opinion on the financial statements.

The Regional Administrator may disallow use of the financial test based on other qualifications expressed in the auditor's opinion of the owner's or operator's financial statements. For example, if the Regional Administrator determines that the opinion raises questions as to whether the owner or operator will continue as a "going concern," the financial test will be disallowed. Other qualified opinions will be evaluated on a case-by-case basis. The owner or operator must provide evidence of insurance for the entire required amount of coverage within 30 days after disallowance.

After the initial submission of the letter from the chief financial officer and the accountant's reports, a new letter and new reports for each subsequent fiscal year must be submitted to the Regional Administrator within 90 days after the end of the firm's fiscal year. Alternatively, by the end of this 90 day period the owner or operator must provide evidence of third-party liability insurance coverage to the Regional Administrator.

In some cases the effective date of the regulations may come too soon after the end of an owner's or operator's fiscal year to allow adequate time to prepare the required documents based on data for the just-completed fiscal year. To resolve this problem, the financial test provisions allow a one-time extension if an owner's or operator's fiscal year ends during the 90 days before the effective date and if the owner's or operator's financial statements are being independently audited. The extension may last up to the date 90 days after the end of the fiscal year. To obtain the extension the chief financial officer must send a letter to the Regional Administrator by the effective date of these regulations. In the letter he must request the extension; certify that he has grounds to believe that the owner or operator meets the financial test criteria; identify the facilities to be covered and the amounts of liability coverage to be demonstrated by the test; specify the date when the owner's or operator's fiscal year ended; specify the date no more than 90 days after the end of the fiscal year when he will submit the documents required; and certify that the owner's or operator's year-end financial statements are being independently audited.

4. *Use of Both the Financial Test and Insurance.* The financial test may be applied to satisfy a portion of the required amount of liability coverage. In such cases, the owner or operator must obtain liability insurance for the remainder. This enables the owner or operator to be responsible for the first dollars of liability coverage, which are the most expensive to cover through an insurance policy. Use of such "self-retention", or deductibles, is common practice. The amount of self-retention has a signficant effect on the amount of premium charged. In using the test for part of the required amount of coverage, the owner or operator must use that portion of the annual aggregate amount ($2 million for sudden accidental occurrences and $6 million for nonsudden accidental occurrences), that is not covered by insurance as the base for the multiples in the financial test.

5. *Guarantees by Parent Corporations To Enable Subsidiaries To Satisfy Liability Requirements.* The Agency considered permitting subsidiary corporations to rely on the assets of their parent corporations to demonstrate financial responsibility for the required liability coverage. However, there are major questions concerning the validity and enforceability of such an arrangement, especially as it may be affected by State insurance laws. Therefore guarantees by parent corporations are not included in today's regulations.

B. The Certificate of Insurance

The January 12, 1981, regulation required owners or operators of hazardous waste management facilities to obtain insurance policies containing a Hazardous Waste Facility Liability Endorsement. The purpose of this endorsement, which was to be worded as specified in the regulations, was to demonstrate that the owner or operator had liability insurance coverage required by the regulations.

The Agency received several significant comments in response to the interim final regulation which suggested that a certificate of insurance, like the endorsement, was a reasonable mechanism by which liability coverage could be demonstrated. A certificate is a statement obtained from the insurer certifying that it has issued insurance as described in the certificate. Unlike the endorsement, the certificate is not part of the insurance policy itself. Insurers suggested that the certificate of

insurance would enable them to develop policies and endorsements that serve broader needs of the insured rather than just the need for the insured to comply with the requirements of this regulation. In reviewing the practices of several other Federal agencies, EPA has found that those agencies require various forms of evidence of liability insurance: endorsements; certificates; endorsements *and* certificates; and "insurance forms" which are in effect certificates in that they do not include language that directly amends the policy.

The Agency concluded from its analysis of the issue that the certificate is a reasonable mechanism by which owners or operators can demonstrate liability coverage. Therefore under this revised interim final regulation the owner or operator is allowed the option of submitting a certificate of insurance that has the same provisions as the endorsement to demonstrate liability coverage. As with the endorsement, if a question arises about the adequacy of an owner's or operator's coverage, EPA can obtain and review the insurance policy. In addition the Agency intends to review a sample of policies to confirm their adequacy in satisfying the purpose of the regulation. Under the regulation, owners or operators must provide a copy of the policy to EPA upon request.

Allowing use of a certificate of insurance as evidence of insurance coverage was not part of the January 12, 1981, interim final regulation. However, the Agency believes this option should be available in the revised interim final rule because it provides adequate assurance of coverage and allows additional flexibility.

C. Changes In The Endorsement

This section describes revisions made to the January 12, 1981, endorsement following evaluation of comments. The new certificate of insurance has the same provisions as the endorsement and incorporates the changes described below.

1. *Extent of Coverage.* Some commenters said the wording of the endorsement raised major problems with respect to the extent of coverage required by the regulations. The January 12, 1981, regulations did not completely define the scope, conditions, and terms of coverage. However, the wording of the endorsement required the insurer to certify that the policy to which the endorsement was attached provides liability insurance "to the extent" such coverage was required by EPA's regulations. Commenters argued that since the regulations did not define precisely the extent of coverage required, the insurer was exposed to an uncertain extent of liability. This would, they said, seriously impair the insurance industry's willingness to provide the insurance coverage required by EPA's regulations.

The Agency recognizes the problems cited by the commenters and, in response, has revised the endorsement to read that the insurer certifies that the policy to which the endorsement is attached provides liability insurance "in connection with" an owner's or operator's obligations under EPA's regulations. The Agency did not intend to modify the contractual obligations arising from the insurance policies used to satisfy the liability requirement. This rewording eliminates the problem noted by the commenters.

Other commenters suggested that EPA adopt a set of specific standards for insurance, precisely defining the extent of coverage required for all hazardous waste management facilities. In response, the Agency has adopoted a more specific definition of the extent of coverage required by this regulation. The regulation now defines the bodily injury and property damage coverage required by this regulation to be the meaning given those terms by applicable State law. However, the terms do not include those liabilities which, consistent with standard industry practice, are excluded from coverage in liability policies for bodily injury and property damage. For example, the insurance policy need not cover injuries or damage caused by war, injuries covered by worker's compensation or disability benefits, or intentional injuries. This action not only provides a more precise definition of the extent of coverage required but also establishes a limitation on the exclusions which may be in a policy used to satisfy the liability requirement.

2. *Coverage of Deductibles.* A second major issue raised by commenters regarding the endorsement was its language relating to deductibles. The language was intended to ensure that the insurer would satisfy liabilities from accidents at a hazardous waste management facility on a first-dollar basis. This certification reduces the burden on the Agency of reviewing the level of the deductible in every policy and determining whether the insured is financially capable of paying claims within the deductible. The commenters suggested that this language could be construed to possibly negate normal policy provisions which defined the level and conditions of the risks assumed by the insurer under the policy. After reevaluating the endorsement, the Agency has eliminated wording that those commenters suggested would negate conditions, limitations, and exclusions contained in the policy. However, the owner or operator still must have insurance coverage on a first-dollar basis. The policy may allow reimbursement by the insured for any such payment within the deductible limits. This provision does not apply with respect to the amount of any deductible for which coverage is demonstrated through the financial test for liability coverage.

3. *Cancellation.* The Agency has been concerned that some insurance companies might cancel claims-made insurance policies upon discovery of an accidental occurrence at a policyholder's facility. (Claims-made policies provide coverage only for claims that are filed during the active life of the policy.) That could leave owners or operators without adequate coverage. To remedy this potential problem the January 12, 1981, regulations contained two provisions: (1) A requirement that coverage under a claims-made policy could not be cancelled or terminated for at least 120 days following an accidental occurrence covered by the policy and (2) a requirement that EPA be given 60 days' advance notice prior to any cancellation. The major problem associated with the 120-day requirement, according to the commenters, was that it effectively converted claims-made policies (commonly used for pollution liability insurance) into "occurrence-based" policies. The commenters contended that an insurer could not be certain that its exposure to liability under a claims-made policy would end on the policy's termination date and that if a new accident occurred during the 120-day period, a new period of 120 days could be triggered.

After reexamining the issue, the Agency agrees that the 120-day requirement creates the potential for open-ended liabilities on the part of the insurers. Such coverage would likely be very expensive if available at all. Because this could adversely affect the availability of insurance, the 120-day requirement has been eliminated. However, the requirement for 60 days' notice prior to cancellation has been retained. Even if an insurance company were to cancel its claims-made policy upon learning of an accidental occurrence at its insured's facility, injured parties would still have at least 60 days in which to make claims.

Some commenters urged EPA to allow cancellation upon a 10-day notice for nonpayment of premium, bankruptcy, or

debtor relief proceedings brought by or against an insured, or for failure to comply with applicable rules governing facility operations. The Agency recognizes the interest of insurers in limiting their exposure, but believes that 60 days' notice can be provided by most insurers and is necessary for adequate coverage of claims.

The original endorsement contained a cancellation provision which required that the policy be canceled when the endorsement was canceled. A commenter stated that this could cause cancellation of policy coverages other than those connected with the endorsement. The Agency decided to eliminate the requirement to avoid such cancellation. Under the revised cancellation provisions, the insurer may cancel the policy or only the endorsement after 60 days' notice to the Regional Administrator.

4. *Other Termination.* The Agency added a provision to the endorsement that the insurer agrees to notify the Agency at least 30 days prior to termination of the policy (for reasons other than cancellation). The notice will serve to alert the Regional Administrator of a potential gap in liability coverage.

D. Other Liability Issues

1. *Qualifications of Insurers.* The proposed liability requirements of May 19, 1980 (45 FR 33273), provided that owners or operators must obtain insurance from insurers licensed or eligible to insure in the jurisdiction where any of the owner's or operator's facilities are located. The Agency received comments to the effect that participation of insurers should not be so restricted. The Agency evaluated the issue and at that time concluded that is was preferable to leave out qualifications for insurers in order not to restrict the market and availability of insurance. The January 12, 1981, regulations, therefore, did not include qualifications for insurers. Several commenters on those regulations urged EPA to establish insurer qualifications.

Minimum qualifications would help assure the integrity of insurers whose policies are used by owners or operators to meet the liability requirements. Therefore today's regulations require owners or operators to obtain insurance from insurers licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States. These qualifications will assure that insurers are subject to some regulatory oversight by State insurance departments but will still permit broad participation in providing the insurance.

EPA invites public comment on additional or different qualifications for insurers. Qualifications for insurers have been recommended by the National Association of Insurance Commissioners. The NAIC recommended that the Agency adopt the following requirement:

"The Regional Administrator shall not accept insurance policies as complying with this section unless such policies are underwritten by an insurance institution which:

"(1) Is domiciled in the United States and authorized to transact the business of insurance as an admitted or nonadmitted insurer in the state where the insured facility is located, or

"(2) Is a captive insurer licensed under a state law authorizing the formation and operation of captive insurers, or

"(3) Is an alien insurer in good standing on the Non-Admitted Insurers Quarterly List published by the Non-Admitted Insurers Information Office of the National Association of Insurance Commissioners."

One commenter said that policies issued by "captive" insurance companies, which often provide necessary supplemental liability coverage for large, financially capable companies, should be accepted as conforming with the requirement. Another commenter urged EPA to accept policies issued by captive insurers domiciled outside the United States if the captive has a parent corporation in the United States to assume its liabilities. The qualifications adopted in today's regulation will not exclude captive insurance companies, whether domestic or foreign-based. Under these requirements, captive insurers may qualify by obtaining a license in one of the several States which currently license captive insurers or by becoming eligible or authorized as a surplus lines or excess insurer in States with standards for nonadmitted insurers.

One commenter said that the Agency should permit only those insurers with a rating of at least "A" in *Best's Insurance Reports* and a Best's financial size rating to issue policies used to satisfy the liability requirements.

EPA invites public comment on the qualifications suggested by the NAIC; on whether specific standards for captive insurers should be included; whether ratings by Best's should be used and, if so, what they should be; and any other aspect of qualifications for insurers.

2. *Availability of Insurance for Nonsudden Accidental Occurrences.* Many commenters were concerned that insurance for nonsudden, or gradual, accidental occurrences will either not be available or, if available, be too expensive, especially for smaller firms. As noted above, coverage for nonsudden accidental occurrences poses special problems to the insurance industry because of the magnitude of the potential risks and its lack of experience with those risks. Therefore the regulation provides for a 3-year phase-in period of the requirement for coverage of nonsudden accidental occurrences. Owners or operators with total sales or revenues of $10 million or more in the fiscal year preceding the effective date of the regulations will have to establish the coverage 6 months after the effective date; those with annual sales or revenues over $5 million but less than $10 million must have the coverage 18 months after the effective date; and all others have up to 30 months after the effective date to obtain nonsudden accidental coverage. The purpose of this phase-in is to encourage development of a broad market for such liability insurance by requiring larger firms which can more readily obtain the insurance to comply first. Smaller owners or operators have an additional 1 to 2 years to comply, during which availability of this insurance should increase further.

The insurance market for coverage of nonsudden accidental occurrences has recently responded to increasing demand and there are good indications that this market can be expected to expand considerably in the near-future. After carefully considering this issue, the Agency has concluded that insurance for nonsudden accidental occurrences as required by these regulations will be available in a competitive market. However, this conclusion is based upon an expected expansion in the number of firms providing insurance for nonsudden accidental occurrences. Consequently, EPA will continue to monitor the development of the market to ensure that the requirements of this regulation can be met.

Several details of the phase-in of the required coverage of nonsudden accidental occurrences have been changed or added since the January 12, 1981, regulations. Since some owners or operators may use the term "revenues" rather than "sales" on their income statements, both terms are now used in the regulations. To avoid confusion about whose sales or revenues are to be used when the owner and operator are different parties or if there is more than one owner or operator, the regulation now says the sales or revenues of the owner or operator with the largest sales or revenues in the fiscal year preceding

the effective date of the regulations will determine which of the three dates applies. This is consistent with the policy that the largest owners or operators should be required to have nonsudden coverage first in order to encourage market development. Compliance for a large owner or operator should not be delayed because it is associated with a smaller one. The revised regulations also specify that the total sales or revenues of the owner or operator must be considered, not only sales or revenues from hazardous waste management or particular locations.

The January 12, 1981, regulations did not contain a requirement that the owners or operators of surface impoundments, landfills, and land treatment facilities report to the Regional Administrator when they will be required to obtain coverage for nonsudden accidental occurrences. This information is not only important for monitoring compliance but also for obtaining a more accurate measure of the numbers of owners or operators that will be needing insurance coverage during each phase, in case adjustments need to be made in the phase-in schedule. A provision has therefore been added which requires owners or operators in the second two phases ($5 million to $10 million and "all others") to send a letter to the Regional Administrator, within 6 months of the effective date of this regulation, which states when they intend to obtain the required coverage.

One commenter said that not enough time was allowed for the owners or operators in the first phase to obtain coverage for nonsudden accidental occurrences. The commenter said the problem arises because 3 to 4 months are necessary to conduct engineering and underwriting surveys and because the accepted insurance industry practice is to complete assessments for new risks at least 60 days before the normal January or July renewal dates for many insurance policies. The 9-month period between promulgation of the revised requirements and the date by which the first group must have coverage for nonsudden accidental occurrences should be sufficient time to obtain these policies. As noted earlier, the market for this coverage is expanding. Also, several insurance companies have stated that policies covering nonsudden accidental occurrences are presently being written in only 4 to 8 weeks. Furthermore, a number of owners or operators in the first phase will be able to employ the financial test as a means of demonstrating all or part of the required coverage. The pressure on market capacity will therefore be mitigated by the availability of this alternative mechanism.

One commenter suggested that the phase-in requirement should be reversed because smaller owners or operators are more likely to need insurance policies to be able to adequately cover liabilities. However, in view of the limited availability of the insurance at present and the need to encourage market growth, it would be counter-productive to begin with those who may have the most difficulty in obtaining liability coverage.

3. *Required Amounts of Coverage and Variances.* Some commenters stated the minimum amounts of required coverage were unusually high for government mandated insurance and hence may cause some small owners or operators that are unable to afford the associated premium to close their facilities. Others commented that the $1 million/$2 million minimums for sudden accidental occurrences were too low. Other commenters suggested that the liability coverage be tailored to the degree and duration of risk at a facility and that the required minimum amounts of coverage be the same for sudden and nonsudden accidental coverage because claims for sudden accidental occurrences are not always less than those for nonsudden accidental occurrences.

Selecting the appropriate level of insurance coverage is a difficult task in the absence of actuarial data or experience with a regulated hazardous waste industry. EPA has compiled a record of many of the hazardous waste damage incidents that have occurred around the country. The quality of information on these incidents varies from complete reports of on-site investigations to abbreviated newspaper reports. The data on third-party damages is sparse, but that which is available shows that the coverage requirements of this regulation are adequate.

Despite the lack of significant third party damage awards in the past, a growing number of court suits are being filed and some request damages at levels much higher than those required by these regulations. If any of these suits are successful the potential third party damage costs associated with operating hazardous waste facilities could become much larger than currently available data shows. EPA will continue to monitor this situation and requests data pertaining to changing needs for liability coverage.

The January 12, 1981, regulations included a variance procedure whereby an owner or operator who demonstrated that the required liability coverage was inconsistent with the degree and duration of risks associated with his facility or facilities, could obtain a variance. Also, the Regional Administrator could increase the amounts of required coverage where risks warrant higher levels of coverage than that provided by the owner or operator. The Regional Administrator could also impose requirements for coverage of nonsudden accidental occurrences for facilities that are not surface impoundments, landfills, or land treatment facilities if such facilities were determined to pose risks of nonsudden accidental occurrences.

There was significant public comment on the variance procedures. Most commenters stated that the procedures were inadequate as they were too general and too discretionary. While there was support for the concept of a variance, commenters stated that the regulation should list specific criteria to be used by the Regional Administrator in making such decisions. Commenters said that in the absence of such criteria the variance was arbitrary and could result in inequitable treatment of owners or operators.

The Agency is simply not able at this time to establish specific standards for variances. Risk assessment of hazardous waste management facilities is a fairly new practice for insurers. There is not an extensive body of actuarial data on this subject. At this time it is not possible to establish standard criteria that could be relied on to account for the many diverse factors that need to be considered on a case-by-case basis.

Data is not available that would enable EPA to set forth in a national regulation the relationship between liability coverage requirements and factors such as type of waste, size of operation, method of treatment, storage or disposal, and proximity to population centers and groundwater and surface water supplies.

EPA agrees with the commenters' concerns that the variance procedure in its January 12, 1981, regulation is unworkable. Therefore, in a future document, EPA will propose to delete that procedure from the regulation. EPA will request comments on the proposal at that time and more importantly will request data and information that could be used to establish specific criteria for a workable variance procedure.

In the absence of a variance procedure all owners or operators will have to obtain liability coverage at the levels prescribed in the regulation. However, differences in risk at different

facilities should be reflected in the premiums for insurance policies with lower risk facilities paying less for the required coverage.

4. *Legal defense costs.* In the January 12, 1981, regulations, EPA required owners or operators to obtain liability insurance in specified amounts exclusive of legal defense costs. This was done because allowing defense costs to be included within the policy limits ("defense in limits") might severely restrict the amount of insurance coverage available to compensate third parties. Unusually large legal defense costs could result in a significant erosion in the compensation available. This is a special problem for liability suits arising out of the operation of hazardous waste management facilities, as this is an area opf expanding liability involving potentially complex issues related to causation and damage.

Some commenters objected to the requirement that the liability coverage exclude legal defense costs for several reasons. Some said that excluding legal defense costs is contrary to insurance industry practice. Others said that excluding legal defense costs from liability coverage would force premiums up, and discourage insurers from offering the required coverage. One commenter emphasized that the Agency should allow insurers to issue policies with defense in limits in order to increase the number of insurers willing to issue policies to hazardous waste management facilities. Another commenter suggested that the Agency require owners or operators to obtain insurance policies with liability coverage 25 percent greater than the amounts otherwise applicable in order to cover defense costs, but allow those policies to be written with defense in limits.

At the heart of the issue is the fact that because hazardous waste management facility insurance is a relatively new market with little claims history, it is not possible to estimate with a reasonable degree of certainty the legal defense costs associated with these policies. This is precisely why the current regulations retain the requirement that insurance policy limits exclude legal defense costs. High defense costs can erode the coverage amounts to the point where funds would not be available to pay third party damage costs.

EPA obtained comments from insurers that indicated they would be in a position to write policies which exclude legal defense costs. Others stated that this requirement is consistent with standard comprehensive general liability policies. Some expressed a preference for exclusion of legal defense costs in order to keep these policies consistent with other types of insurance on the market. Therefore the required coverage amounts are exclusive of defense costs.

5. *Period of Required Coverage.* The regulations of January 12, 1981, and the preceding proposals did not specify when an owner or operator was no longer required to assure liability coverage. Coverage in these regulations was for claims "arising from the operations" of facilities, but the period for which coverage was required was not clearly defined. Coverage should extend until closure because closure activities could give rise to an accident at the site. The present regulations therefore require that the owner or operator maintain liability coverage until certifications of closure, as specified in §§ 264.115 and 265.115, are received by the Regional Administrator.

6. *Submission of Policies.* The January 12, 1981, regulation required that owners or operators send copies of insurance policies used to comply with the liability requirements to the Regional Administrator. The purpose of this was to give EPA an opportunity to review the exclusions, terms, and conditions in these policies.

Several commenters pointed out that a review of all insurance policies would impose a substantial burden on the Agency, and requiring submission of policies would be burdensome to insurance companies and to owners or operators. The current regulations only require an owner or operator to submit a policy if requested to do so by EPA. The regulations now state that by the compliance date an owner or operator must only send a signed duplicate original of either the endorsement or certificate of insurance to EPA. The owner or operator must also send the policy at a later date if requested to do so by the Agency. In the endorsement and the certificate the insurer also agrees to submit a copy of the policy and all endorsements to EPA if requested.

7. *Definitions and Usage.* One commenter stated that the definitions of liability and insurance terms in §§ 264.141 and 265.141 are vague and do not correspond to conventional insurance definitions. Hence, this commenter recommended that EPA delete the definitions of these terms from the regulations.

Today's regulations provide general definitions of the coverage required of policies which can be used to satisfy these requirements. New definitions of "bodily injury" and "property damage" have been included to more explicitly define required coverage (see previous discussion on extent of coverage). The other definitions are intended to be consistent with common meanings. This is so stated in the regulations. The Agency will continue to consider specific suggestions on how the definitions can be improved.

Another commenter recommended that the Agency's intended meaning of the term "insurance policy" as used in the regulations should be in accordance with standard industry usage of the term. The regulations are intended to follow standard industry usage.

Another commenter stated that the regulations should not use the term "occurrence" as in "nonsudden accidental occurrence" because it implies that the policy covering the event must be an occurrence-based policy. In using the word "occurrence" the regulations did not intend to limit policies to occurrence-based policies. As indicated by the definition given for "accidental occurrence" in §§ 264.141 and 265.141, the term means "an accident, including continuous or repeated exposure to conditions, which results in bodily injury or property damage neither expected nor intended from the standpoint of the insured."

8. *Other Provisions of Subpart H Financial Requirements.* The liability coverage requirements are referred to in §§ 264.148 and 265.148 (Incapacity of Owners or Operators, Guarantors, or Financial Institutions), §§ 264,149 and 265.149 (Use of State-Required Mechanisms); and §§ 264.150 and 265.150 (State Assumption of Responsibility). These sections have relevance to the liability requirements as follows:

- Under §§ 264.148 and 265.148, if the insurer for the policy used to satisfy the liability requirements enters bankruptcy or has its authority to issue the policy revoked or suspended, the owner or operator will have to establish alternative liability coverage within 60 days after such an event.
- Under §§ 264.149 and 265.149, for a facility located in a State where EPA is administering the financial requirements but where the State has hazardous waste regulations that include requirements for liability coverage, an owner or operator may use State-required financial mechanisms to satisfy requirements of §§ 264.147 and 265.147 if the Regional Administrator determines that the State mechanisms are at least equivalent to mechanisms specified in these regulations.

Sections 264.150 and 265.150 provide that if a State assumes legal

responsibility for an owner's or operator's compliance with the liability requirements of these regulations or assures that funds will be available from State sources to cover the requirements, such assurances may be used to satisfy the liability requirements of §§ 264.147 or 265.147. EPA is not aware of any instance where this is being done or considered and therefore will propose in a future document to delete this provision as it applies to liability requirements. The Agency will request comments on the proposal at that time.

9. *Relation to CERCLA Provisions.* The Agency received comments on the relation between the liability requirements during operating life under RCRA and post-closure liability provisions of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, Pub. L. 96–510 (CERCLA). One commenter pointed out that a 5-year gap in liability coverage may exist after a facility has closed but before the Post Closure Liability Trust Fund to be established under CERCLA assumes liability coverage.

EPA is not requiring liability coverage after closure because the availability of post-closure liability insurance is very limited at this time. The problem of liability coverage during the post-closure period is currently being examined in studies required by CERCLA. The Treasury Department is studying approaches based on private insurance. EPA is studying the adequacy of the Post-Closure Liability Trust Fund as specified in the present provisions of CERCLA.

Another commenter was concerned that the "strict liability" concept in CERCLA might adversely affect the development of an insurance market providing pollution liability coverage. EPA has not observed a specific effect on the pollution insurance market. As noted earlier, the market is currently expanding. This is probably due to a number of factors including anticipation of the RCRA liability requirements, current economic conditions, and demand resulting from increased concern about pollution risks. The CERCLA liability provisions as well as numerous damage incidents have probably contributed to this concern.

IV. Amendment to the State Program Authorization Requirements

A. Amendment to 40 CFR 123.129

Section 3006 of RCRA provides that States with "substantially equivalent" hazardous waste programs can be granted interim authorization to carry out their State programs "in lieu of" the Federal program in those States. Interim authorization is being granted in two phases: Phase I (corresponding to the Federal program promulgated on May 19, 1980) and Phase II (consisting of the procedures and standards for permitting hazardous waste management facilities). See 40 CFR Part 123, Subpart F as amended. 46 FR 8298 (January 26, 1981). Phase II will consist of several components, two of which have been announced to date. Component A covers storage facilities and Component B covers incinerators. EPA will announce a component for land disposal facilities in the future. In its January 26, 1981, notice of the content of Components A and B (46 FR 7964), EPA explained that States applying for Phase II Components A and B authorization must demonstrate substantial equivalence to certain Federal regulations, including the financial requirements in Subpart H of 40 CFR Parts 264 and 265.

On October 1, 1981, EPA announced that it was considering withdrawing the Federal liability insurance requirements and deferred the effective date of those requirements (see 46 FR 48197). Subsequentlly, a few States submitted draft applications to EPA for authorization of Components A and B without liability requirements. Because EPA was considering whether or not to withdraw the Federal liability insurance requirements, EPA informed such States that they could receive interim authorization for Components A and B without State liability insurance requirements. These States have relied on the Agency's representation and are developing final applications for such authorization. Therefore, EPA today is amending 40 CFR 123.129 to allow interim authorization of those States which have submitted draft applications to EPA prior to today's date without State liability requirements. However, such States must commit in their Memorandum of Agreement to adopt State liability coverage requirements substantially equivalent to those in Subpart H of 40 CFR Parts 264 and 265 as quickly as practicable but in no case later than the State's application for an additonal Component of Phase II interim authorization.

The liability coverage requirements are an important part of the assurance provided to the public by the RCRA regulator program. In view of their importance, EPA was reluctant to grant this exemption to any States since the liability requirements would not be in effect within those States. However, requiring those States which relied on the Agency's comments on their draft applications to make statutory or regulatory amendments at this time would cause substantial and unnecessary disruption in the authorization process. For that reason, EPA decided to limit this exemption to those States which have submitted their draft Phase II interim authorization applications to EPA by today's date.

B. Interim Final Promulgation

EPA believes that use of advance notice and comment procedures for the amendment to § 123.129 would be impracticable and contrary to the public interest, and therefore finds that good cause exists for adopting this change in interim final form (see 5 U.S.C 553(b)(B)). Delay in promulgating this amendment could cause significant harm to States which are applying for interim authorization. As noted above, because EPA was considering withdrawing its liability insurance requirements, EPA told a few States that they could receive interim authorization for Components A and B without State liability insurance requirements. Because those States have relied on EPA's statements, the Agency is amending the State authorization requirements to allow them to receive interim authorization in an orderly fashion. If today's amendment to § 123.129 were not promulgated as an interim final rule, those States which have proceeded expeditiously toward obtaining Phase II authorization and which in good faith relied on EPA representations about State program authorization requirements would be severely penalized. They would be forced to make statutory or regulatory amendments prior to receiving Phase II authorization and thus their authorizations could be delayed for many months.

Today's amendment to § 123.129 provides an exception for those States which requires them to adopt liability coverage requirements as quickly as possible, but allows them to receive interim authorization if they meet all of the other requirements of Part 123, Subpart F.

C. Effective Date

Section 3010(b) of RCRA provides that EPA's hazardous waste regulations and revisions thereto take effect six months after their promulgation. In addition, 5 U.S.C. 553(d) of the Administrative Procedure Act requires that substantive rules not become effective until at least 30 days after promulgation. A primary purpose of these requirements is to allow persons affected by the rulemaking sufficient lead time to prepare to comply with major new regulatory requirements. However, for

the amendment promulgated today, the Agency believes that delaying the effective date for any period of time would cause substantial and unnecessary disruption in the implementation of the State authorization process and thus would be contrary to the public interest.

As discussed above in the section on interim final promulgation, today's amendments relieve a restriction on certain States. Thus the affected States do not need lead time to comply with these amendments. Indeed, significant hardship to the affected States could result if the effective date of today's amendments were delayed. Consequently, the Agency finds good cause for making these amendments effective immediately upon promulgation.

V. Executive Order 12291

Executive Order 12291 (46 FR 13193, February 19, 1981) requires that EPA prepare a Regulatory Impact Analysis for each major rule. The Order defines a "major rule" as any regulation that is likely to result in:

- An annual effect on the economy of $100 million or more;
- A major increase in costs or prices for consumers, individual industries, Federal, State, or local government agencies or geographic regions; or
- Significant adverse effects on competition, employment, productivity, innovation, or on the ability of United States-based enterprises to compete with foreign-based enterprises in domestic or export markets.

These revised regulations are not "major" in themselves; rather, they are changes to existing regulations that will result in lower costs. Nevertheless, a Regulatory Impact Analysis of these requirements will be performed because they constitute a significant component of the body of RCRA regulations. The final analysis is scheduled to be completed in the spring of 1983, after the Agency determines how it will comply with Executive Order 12291 and publishes that guidance in the Federal Register.

Preliminary estimates of costs are as follows:

The annual cost of liability insurance for sudden accidental occurrences is estimated to average $1,500 per site for storage facilities and $3,000 per site for other types of facilities. The average annual cost of liability insurance for nonsudden accidental occurrences is estimated at $16,500 per site for landfills, surface impoundments, and land treatment facilities. These estimates are in pre-tax dollars. Some of the costs of liability insurance will be incurred in the absence of the regulations. For example, many existing facilities already have coverage for sudden accidental occurrences. At least half of total premium payments will go to compensating injured third parties; this portion of the insurance costs may be seen as transfer payments rather than as costs to society.

The annual cost of the financial test is estimated at $75–$100 per facility. This is the cost of preparing the required letter reporting financial data and the cost of the auditor's report. It is assumed that the user of the financial test will have several sites.

Of approximately 11,000 hazardous waste management facilities, about 2,600 are land disposal facilities that will ultimately be required to demonstrate liability coverage for nonsudden accidental occurrences under State or Federal RCRA program.

VI. Paperwork Reduction Act

Under the Federal Reports Act of 1942, as amended by the Paperwork Reduction Act of 1980, the Office of Management and Budget (OMB) reviews reporting requirements in regulations in order to minimize the reporting burden on respondents and the cost to government. EPA submitted an information collection report to OMB in March 1981 covering the financial responsibility mechanisms promulgated as interim final regulations on January 12, 1981.

The revised regulation promulgated today substantially reduces the reporting burden by requiring the owner or operator to submit only the endorsement or certificate of insurance rather than the entire policy. The revised regulation adds a requirement that owners or operators of surface impoundments, landfills, and land treatment facilities who have less than $10 million in sales or revenues must notify the Regional Administrator within 6 months after the effective date (to enable monitoring of the phase-in of the requirement for coverage of nonsudden accidental occurrences). However, this is a requirement for one-time reporting by the owner or operator. Under the Paperwork Reduction Act the information provisions in this rule will be submitted for approval to the Office of Management and Budget (OMB). They are not effective until OMB approves them. A notice of that approval will be published in the Federal Register.

VII. Regulatory Flexibility Act

Under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*), Federal agencies must, in developing regulations, analyze their impact on small entities (small businesses, small government jurisdictions, and small organizations). This requirement applies to Federal regulations proposed after January 1, 1981. Such an analysis will be conducted in conjunction with the Regulatory Impact Analysis.

VIII. Supporting Documents

A background document was prepared for the regulations as promulgated January 12, 1981. The most significant issues raised by commenters on the January 12 regulations are discussed in this preamble. Responses to other comments are presented in a summary that has been included in the docket for these regulations. The financial test for liability coverage is the subject of a separate background document. The background documents are available for review in the EPA regional office libraries and at the EPA headquarters library, Room 2404 Waterside Mall, 401 M Street, S.W., Washington, D.C. 20460.

EPA is also preparing guidance manuals on the financial requirements to assist owners or operators and regulatory officials and will make them available from EPA headquarters and the regional offices.

This regulation was submitted to the Office of Management and Budget for review as required by Executive Order 12291.

List of Subjects in 40 CFR Part 264

Hazardous materials, Packaging and containers, Reporting and recordkeeping requirements, Security measures, Surety bonds, Waste treatment and disposal.

List of Subjects in 40 CFR Part 265

Hazardous materials, Packaging and containers, Reporting and recordkeeping requirements, Security measures, Surety bonds, Waste treatment and disposal, Waste supply.

List of Subjects in 40 CFR Part 123

Hazardous materials, Indians—lands, Reporting and recordkeeping requirements, Waste treatment and disposal, Water pollution control, Water supply, Intergovernmental relations, Penalties, Confidential business information.

Dated: April 9, 1982.

Anne M. Gorsuch,

Administrator.

For the reasons set out in the preamble, Title 40 CFR Parts 264, 265, and 123 are amended as set forth below:

PART 264—STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

Subpart H—Financial Requirements

a. Section 264.141 is revised to read as follows:

§ 264.141 Definitions of terms as used in this subpart.

(a) "Closure plan" means the plan for closure prepared in accordance with the requirements of § 264.112.

(b) "Current closure cost estimate" means the most recent of the estimates prepared in accordance with §§ 264.142 (a), (b), and (c).

(c) "Current post-closure cost estimate" means the most recent of the estimates prepared in accordance with §§ 264.144 (a), (b), and (c).

(d) "Parent corporation" means a corporation which directly owns at least 50 percent of the voting stock of the corporation which is the facility owner or operator; the latter corporation is deemed a "subsidiary" of the parent corporation.

(e) "Post-closure plan" means the plan for post-closure care prepared in accordance with the requirements of §§ 264.117–264.120.

(f) The following terms are used in the specifications for the financial tests for closure, post-closure care, and liability coverage. The definitions are intended to assist in the understanding of these regulations and are not intended to limit the meanings of terms in a way that conflicts with generally accepted accounting practices.

"Assets" means all existing and all probable future economic benefits obtained or controlled by a particular entity.

"Current assets" means cash or other assets or resources commonly identified as those which are reasonably expected to be realized in cash or sold or consumed during the normal operating cycle of the business.

"Current liabilities" means obligations whose liquidation is reasonably expected to require the use of existing resources properly classifiable as current assets or the creation of other current liabilities.

"Independently audited" refers to an audit performed by an independent certified public accountant in accordance with generally accepted auditing standards.

"Liabilities" means probable future sacrifices of economic benefits arising from present obligations to transfer assets or provide services to other entities in the future as a result of past transactions or events.

"Net working capital" means current assets minus current liabilities.

"Net worth" means total assets minus total liabilities and is equivalent to owner's equity.

"Tangible net worth" means the tangible assets that remain after deducting liabilities; such assets would not include intangibles such as goodwill and rights to patents or royalties.

(g) In the liability insurance requirements the terms "bodily injury" and "property damage" shall have the meanings given these terms by applicable State law. However, these terms do not include those liabilities which, consistent with standard industry practices, are excluded from coverage in liability policies for bodily injury and property damage. The Agency intends the meanings of other terms used in the liability insurance requirements to be consistent with their common meanings within the insurance industry. The definitions given below of several of the terms are intended to assist in the understanding of these regulations and are not intended to limit their meanings in a way that conflicts with general insurance industry usage.

"Accidental occurrence" means an accident, including continuous or repeated exposure to conditions, which results in bodily injury or property damage neither expected nor intended from the standpoint of the insured.

"Legal defense costs" means any expenses that an insurer incurs in defending against claims of third parties brought under the terms and conditions of an insurance policy.

"Nonsudden accidental occurrence" means an occurrence which takes place over time and involves continuous or repeated exposure.

"Sudden accidental occurrence" means an occurrence which is not continuous or repeated in nature.

b. Section 264.147 is revised to read as follows:

§ 264.147 Liability requirements.

(a) *Coverage for sudden accidental occurrences.* An owner or operator of a hazardous waste treatment, storage, or disposal facility, or a group of such facilities, must demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator must have and maintain liability coverage for sudden accidental occurrences in the amount of at least $1 million per occurrence with an annual aggregate of at least $2 million, exclusive of legal defense costs. This liability coverage may be demonstrated in one of three ways, as specified in paragraphs (a)(1), (a)(2), and (a)(3) of this section:

(1) An owner or operator may demonstrate the required liability coverage by having liability insurance as specified in this paragraph.

(i) Each insurance policy must be amended by attachment of the Hazardous Waste Facility Liability Endorsement or evidenced by a Certificate of Liability Insurance. The wording of the endorsement must be identical to the wording specified in § 264.151(i). The wording of the certificate of insurance must be identical to the wording specified in § 264.151(j). The owner or operator must submit a signed duplicate original of the endorsement or the certificate of insurance to the Regional Administrator, or Regional Administrators if the facilities are located in more than one Region. If requested by a Regional Administrator, the owner or operator must provide a signed duplicate original of the insurance policy. An owner or operator of a new facility must submit the signed duplicate original of the Hazardous Waste Facility Liability Endorsement or the Certificate of Liability Insurance to the Regional Administrator at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The insurance must be effective before this initial receipt of hazardous waste.

(ii) Each insurance policy must be issued by an insurer which, at a minimum, is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

(2) An owner or operator may meet the requirements of this section by passing a financial test for liability coverage as specified in paragraph (f) of this section.

(3) An owner or operator may demonstrate the required liability coverage through use of both the financial test and insurance as these mechanisms are specified in this section. The amounts of coverage demonstrated must total at least the minimum amounts required by this paragraph.

(b) *Coverage for nonsudden accidental occurrences.* An owner or operator of a surface impoundment, landfill, or land treatment facility which is used to manage hazardous waste, or a group of such facilities, must demonstrate financial responsibility for

bodily injury and property damage to third parties caused by nonsudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator must have and maintain liability coverage for nonsudden accidental occurrences in the amount of at least $3 million per occurrence with an annual aggregate of at least $6 million, exclusive of legal defense costs. This liability coverage may be demonstrated in one of three ways, as specified in paragraphs (b)(1), (b)(2), and (b)(3) of this section:

(1) An owner or operator may demonstrate the required liability coverage by having liability insurance as specified in this paragraph.

(i) Each insurance policy must be amended by attachment of the Hazardous Waste Facility Liability Endorsement or evidenced by a Certificate of Liability Insurance. The wording of the endorsement must be identical to the wording specified in § 264.151(i). The wording of the certificate of insurance must be identical to the wording specified in § 264.151(j). The owner or operator must submit a signed duplicate original of the endorsement or the certificate of insurance to the Regional Administrator, or Regional Administrators if the facilities are located in more than one Region. If requested by a Regional Administrator, the owner or operator must provide a signed duplicate original of the insurance policy. An owner or operator of a new facility must submit the signed duplicate original of the Hazardous Waste Facility Liability Endorsement or the Certificate of Liability Insurance to the Regional Administrator at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The insurance must be effective before this initial receipt of hazardous waste.

(ii) Each insurance policy must be issued by an insurer which, at a minimum, is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

(2) An owner or operator may meet the requirements of this section by passing a financial test for liability coverage as specified in paragraph (f) of this section.

(3) An owner or operator may demonstrate the required liability coverage through use of both the financial test and insurance as these mechanisms are specified in this section. The amounts of coverage must total at least the minimum amounts required by this paragraph.

(4) For existing facilities, the required liability coverage for nonsudden accidental occurrences must be demonstrated by the dates listed below. The total sales or revenues of the owner or operator in all lines of business, in the fiscal year preceding the effective date of these regulations, will determine which of the dates applies. If the owner and operator of a facility are two different parties, or if there is more than one owner or operator, the sales or revenues of the owner or operator with the largest sales or revenues will determine the date by which the coverage must be demonstrated. The dates are as follows:

(i) For an owner or operator with sales or revenues totalling $10 million or more, 6 months after the effective date of these regulations.

(ii) For an owner or operator with sales or revenues greater than $5 million but less than $10 million, 18 months after the effective date of these regulations.

(iii) All other owners or operators, 30 months after the effective date of these regulations.

(c) *Request for variance.* If an owner or operator can demonstrate to the satisfaction of the Regional Administrator that the levels of financial responsibility required by paragraphs (a) or (b) of this section are not consistent with the degree and duration of risk associated with treatment, storage, or disposal at the facility or group of facilities, the owner or operator may obtain a variance from the Regional Administrator. The request for a variance must be submitted to the Regional Administrator as part of the application under § 122.25 of this Chapter for a facility that does not have a permit, or pursuant to the procedures for permit modification under § 124.5 of this Chapter for a facility that has a permit. If granted, the variance will take the form of an adjusted level of required liability coverage, such level to be based on the Regional Administrator's assessment of the degree and duration of risk associated with the ownership or operation of the facility or group of facilities. The Regional Administrator may require an owner or operator who requests a variance to provide such technical and engineering information as is deemed necessary by the Regional Administrator to determine a level of financial responsibility other than that required by paragraph (a) or (b) of this section. Any request for a variance for a permitted facility will be treated as a request for a permit modification under §§ 122.15(a)(7)(iii) and § 124.5 of this Chapter.

(d) *Adjustments by the Regional Administrator.* If the Regional Administrator determines that the levels of financial responsibility required by paragraph (a) or (b) of this section are not consistent with the degree and duration of risk associated with treatment, storage, or disposal at the facility or group of facilities, the Regional Administrator may adjust the level of financial responsibility required under paragraph (a) or (b) of this section as may be necessary to protect human health and the environment. This adjusted level will be based on the Regional Administrator's assessment of the degree and duration of risk associated with the ownership or operation of the facility or group of facilities. In addition, if the Regional Administrator determines that there is a significant risk to human health and the environment from nonsudden accidental occurrences resulting from the operations of a facility that is not a surface impoundment, landfill, or land treatment facility, he may require that an owner or operator of the facility comply with paragraph (b) of this section. An owner or operator must furnish to the Regional Administrator, within a reasonable time, any information which the Regional Administrator requests to determine whether cause exists for such adjustments of level or type of coverage. Any adjustment of the level or type of coverage for a facility that has a permit will be treated as a permit modification under §§ 122.15(a)(7)(iii) and 124.5 of this Chapter.

(e) *Period of coverage.* An owner or operator must continuously provide liability coverage for a facility as required by this section until certifications of closure of the facility, as specified in § 264.115, are received by the Regional Administrator.

(f) *Financial test for liability coverage.* (1) An owner or operator may satisfy the requirements of this section by demonstrating that he passes a financial test as specified in this paragraph. To pass this test the owner or operator must meet the criteria of paragraph (f)(1)(i) or (f)(1)(ii):

(i) The owner or operator must have:

(A) Net working capital and tangible net worth each at least six times the amount of liability coverage to be demonstrated by this test; and

(B) Tangible net worth of at least $10 million; and

(C) Assets in the United States amounting to either: (*1*) at least 90 percent of his total assets; or (*2*) at least six times the amount of liability coverage to be demonstrated by this test.

(ii) The owner or operator must have:

(A) A current rating for his most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's, or Aaa, Aa, A, or Baa as issued by Moody's; and

(B) Tangible net worth of at least $10 million; and

(C) Tangible net worth at least six times the amount of liability coverage to be demonstrated by this test; and

(D) Assets in the United States amounting to either: (*1*) at least 90 percent of his total assets; or (*2*) at least six times the amount of liability coverage to be demonstrated by this test.

(2) The phrase "amount of liability coverage" as used in paragraph (f)(1) of this section refers to the annual aggregate amounts for which coverage is required under paragraphs (a) and (b) of this section.

(3) To demonstrate that he meets this test, the owner or operator must submit the following three items to the Regional Administrator:

(i) A letter signed by the owner's or operator's chief financial officer and worded as specified in § 264.151(g). If an owner or operator is using the financial test to demonstrate both assurance for closure or post-closure care, as specified by §§ 264.143(f), 264.145(f), 265.143(e), and 265.145(e), and liability coverage, he must submit the letter specified in § 264.151(g) to cover both forms of financial responsibility; a separate letter as specified in § 264.151(f) is not required.

(ii) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year.

(iii) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating that:

(A) He has compared the data which the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and

(B) In connection with that procedure, no matters came to his attention which caused him to believe that the specified data should be adjusted.

(4) An owner or operator of a new facility must submit the items specified in paragraph (f)(3) of this section to the Regional Administrator at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal.

(5) After the initial submission of items specified in paragraph (f)(3) of this section, the owner or operator must send updated information to the Regional Administrator within 90 days after the close of each succeeding fiscal year. This information must consist of all three items specified in paragraph (f)(3) of this section.

(6) If the owner or operator no longer meets the requirements of paragraph (f)(1) of this section, he must obtain insurance for the entire amount of required liability coverage as specified in this section. Evidence of insurance must be submitted to the Regional Administrator within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the test requirements.

(7) The Regional Administrator may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in his report on examination of the owner's or operator's financial statements (see paragraph (f)(3)(ii) of this section). An adverse opinion or a disclaimer of opinion will be cause for disallowance. The Regional Administrator will evaluate other qualifications on an individual basis. The owner or operator must provide evidence of insurance for the entire amount of required liability coverage as specified in this section within 30 days after notification of disallowance.

c. Section 264.151 is amended by revising paragraph (g) and adding paragraphs (i) and (j) to read as follows:

§ 264.151 Wording of the instruments.

* * * * *

(g) A letter from the chief financial officer, as specified in §§ 264.147(f) or 265.147(f) of this chapter, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

Letter from Chief Financial Officer (to demonstrate liability coverage or to demonstrate both liability coverage and assurance of closure or post-closure care).

[Address to Regional Administrator of every Region in which facilities for which financial responsibility is to be demonstrated through the financial test are located.]

I am the chief financial officer of [owner's or operator's name and address]. This letter is in support of the use of the financial test to demonstrate financial responsibility for liability coverage [insert "and closure and/or post-closure care" if applicable] as specified in Subpart H of 40 CFR Parts 264 and 265.

[Fill out the following paragraph regarding facilities and liability coverage. For each facility, include its EPA Identification Number, name, and address.]

The owner or operator identified above is the owner or operator of the following facilities for which liability coverage is being demonstrated through the financial test specified in Subpart H of 40 CFR Parts 264 and 265: ————.

[If you are using the financial test to demonstrate coverage of both liability and closure and post-closure care, fill in the following four paragraphs regarding facilities and associated closure and post-closure cost estimates. If there are no facilities that belong in a particular paragraph, write "None" in the space indicated. For each facility, include its EPA Identification Number, name, address, and current closure and/or post-closure cost estimates. Identify each cost estimate as to whether it is for closure or post-closure care.]

1. The owner or operator identified above owns or operates the following facilities for which financial assurance for closure or post-closure care is demonstrated through the financial test specified in Subpart H of 40 CFR Parts 264 and 265. The current closure and/or post-closure cost estimates covered by the test are shown for each facility: ————.

2. The owner or operator identified above guarantees, through the corporate guarantee specified in Subpart H of 40 CFR Parts 264 and 265, the closure and post-closure care of the following facilities owned or operated by its subsidiaries. The current cost estimates for the closure or post-closure care so guaranteed are shown for each facility: ————.

3. In States where EPA is not administering the financial requirements of Subpart H of 40 CFR Parts 264 and 265, this owner or operator is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in Subpart H of 40 CFR Parts 264 and 265. The current closure and/or post-closure cost estimates covered by such a test are shown for each facility: ————.

4. The owner or operator identified above owns or operates the following hazardous waste management facilities for which financial assurance for closure or, if a disposal facility, post-closure care, is *not* demonstrated either to EPA or a State through the financial test or any other financial assurance mechanism specified in Subpart H of 40 CFR Parts 264 and 265 or equivalent or substantially equivalent State mechanisms. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility: ————.

This owner or operator [insert "is required" or "is not required"] to file a Form 10K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this owner or operator ends on [month, day]. The figures for the following items marked with an asterisk are derived from this owner's or operator's independently audited, year-end financial statements for the latest completed fiscal year, ended [date].

[Fill in part A if you are using the financial test to demonstrate coverage *only* for the liability requirements.]

Part A. Liability Coverage for Accidental Occurrences

[Fill in Alternative I if the criteria of paragraph (f)(1)(i) of §§ 264.147 or 265.147 are used. Fill in Alternative II if the criteria of paragraph (f)(1)(ii) of §§ 264.147 or 265.147 are used.]

ALTERNATIVE I

1. Amount of annual aggregate liability coverage to be demonstrated	$————
*2. Current assets	$————
*3. Current liabilities	$————
4. Net working capital (line 2 minus line 3)	$————
*5. Tangible net worth	$————
*6. If less than 90% of assets are located in the U.S., give total U.S. assets	$————

	YES	NO
7. Is line 5 at least $10 million?	——	——
8. Is line 4 at least 6 times line 1?	——	——
9. Is line 5 at least 6 times line 1?	——	——
*10. Are at least 90% of assets located in the U.S.? If not, complete line 11.	——	——
11. Is line 6 at least 6 times line 1?	——	——

ALTERNATIVE II

1. Amount of annual aggregate liability coverage to be demonstrated	$————
2. Current bond rating of most recent issuance and name of rating service	$————
3. Date of issuance of bond	$————
4. Date of maturity of bond	$————
*5. Tangible net worth	$————
*6. Total assets in U.S. (required only if less than 90% of assets are located in the U.S.)	$————

	YES	NO
7. Is line 5 at least $10 million?	——	——
8. Is line 5 at least 6 times line 1?	——	——
*9. Are at least 90% of assets located in the U.S.? If not, complete line 10.	——	——
10. Is line 6 at least 6 times line 1?	——	——

[Fill in part B if you are using the financial test to demonstrate assurance of both liability coverage *and* closure or post-closure care.]

Part B. Closure or Post-Closure Care and Liability Coverage

[Fill in Alternative I if the criteria of paragraphs (f)(1)(i) of §§ 264.143 or 264.145 and (f)(1)(i) of § 264.147 are used or if the criteria of paragraphs (e)(1)(i) of §§ 265.143 or 265.145 and (f)(1)(i) of § 265.147 are used. Fill in Alternative II if the criteria of paragraphs (f)(1)(ii) of §§ 264.143 or 264.145 and (f)(1)(ii) of § 264.147 are used or if the criteria of paragraphs (e)(1)(ii) of §§ 265.143 or 265.145 and (f)(1)(ii) of § 265.147 are used.]

ALTERNATIVE I

1. Sum of current closure and post-closure cost estimates (total of *all* cost estimates listed above)	$————
2. Amount of annual aggregate liability coverage to be demonstrated	$————
3. Sum of lines 1 and 2	$————
*4. Total liabilities (if any portion of your closure or post-closure cost estimates is included in your total liabilities, you may deduct that portion from this line and add that amount to lines 5 and 6)	$————

ALTERNATIVE I—Continued

*5. Tangible net worth	$————
*6. Net worth	$————
*7. Current assets	$————
*8. Current liabilities	$————
9. Net working capital (line 7 minus line 8)	$————
*10. The sum of net income plus depreciation, depletion, and amortization	$————
*11. Total assets in U.S. (required only if less than 90% of assets are located in the U.S.)	$————

	YES	NO
12. Is line 5 at least $10 million?	——	——
13. Is line 5 at least 6 times line 3?	——	——
14. Is line 9 at least 6 times line 3?	——	——
*15. Are at least 90% of assets located in the U.S.? If not, complete line 16	——	——
16. Is line 11 at least 6 times line 3?	——	——
17. Is line 4 divided by line 6 less than 2.0?	——	——
18. Is line 10 divided by line 4 greater than 0.1?	——	——
19. Is line 7 divided by line 8 greater than 1.5?	——	——

ALTERNATIVE II

1. Sum or current closure and post-closure cost estimates (total of *all* cost estimates listed above)	$————
2. Amount of annual aggregate liability coverage to be demonstrated	$————
3. Sum of lines 1 and 2	$————
4. Current bond rating of most recent issuance and name of rating service	$————
5. Date of issuance of bond	$————
6. Date of maturity of bond	$————
*7. Tangible net worth (if any portion of the closure or post-closure cost estimates is included in "total liabilities" on your financial statements you may add that portion to this line)	$————
*8 Total assets in the U.S. (required only if less than 90% of assets are located in the U.S.)	$————

	YES	NO
9. Is line 7 at least $10 million?	——	——
10. Is line 7 at least 6 times line 3?	——	——
*11. Are at least 90% of assets located in the U.S.? If not, complete line 12	——	——
12. Is line 8 at least 6 times line 3?	——	——

I hereby certify that the wording of this letter is identical to the wording specified in 40 CFR 264.151(g) as such regulations were constituted on the date shown immediately below.

[Signature]

[Name]

[Title]

[Date]

* * * * *

(i) A hazardous waste facility liability endorsement as required in §§ 264.147 or 265.147 must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

Hazardous Waste Facility Liability Endorsement

1. This endorsement certifies that the policy to which the endorsement is attached provides liability insurance covering bodily injury and property damage in connection with the insured's obligation to demonstrate financial responsibility under 40 CFR 264.147 or 265.147. The coverage applies at [list EPA Identification Number, name, and address for each facility] for [insert "sudden accidental occurrences," "nonsudden accidental occurrences," or "sudden and nonsudden accidental occurrences"; if coverage is for multiple facilities and the coverage is different for different facilities, indicate which facilities are insured for sudden accidental occurrences, which are insured for nonsudden accidental occurrences, and which are insured for both]. The limits of liability are [insert the dollar amount of the "each occurrence" and "annual aggregate" limits of the Insurer's liability], exclusive of legal defense costs.

2. The insurance afforded with respect to such occurrences is subject to all of the terms and conditions of the policy; provided, however, that any provisions of the policy inconsistent with subsections (a) through (e) of this Paragraph 2 are hereby amended to conform with subsections (a) through (e):

(a) Bankruptcy or insolvency of the insured shall not relieve the Insurer of its obligations under the policy to which this endorsement is attached.

(b) The Insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the insured for any such payment made by the Insurer. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated as specified in 40 CFR 264.147(f) or 265.147(f).

(c) Whenever requested by a Regional Administrator of the U.S. Environmental Protection Agency (EPA), the Insurer agrees to furnish to the Regional Administrator a signed duplicate original of the policy and all endorsements.

(d) Cancellation of this endorsement, whether by the Insurer or the insured, will be effective only upon written notice and only after the expiration of sixty (60) days after a copy of such written notice is received by the Regional Administrator(s) of the EPA Region(s) in which the facility(ies) is (are) located.

(e) Any other termination of this endorsement will be effective only upon written notice and only after the expiration of thirty (30) days after a copy of such written notice is received by the Regional Administrator(s) of the EPA Region(s) in which the facility(ies) is (are) located.

Attached to and forming part of policy No. ——— issued by [name of Insurer], herein called the Insurer, of [address of Insurer] to [name of insured] of [address] this — day of ———, 19—. The effective date of said policy is — day of ———, 19—.

I hereby certify that the wording of this endorsement is identical to the wording specified in 40 CFR 264.151(i) as such regulation was constituted on the date first above written, and that the Insurer is

licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

[Signature of Authorized Representative of Insurer]
[Type name]
[Title], Authorized Representive of [name of Insurer]
[Address of Representative]

(j) A certificate of liability insurance as required in §§ 264.147 or 265.147 must be worded as follows, except that the instructions in brackets are to be replaced with the relevant information and the brackets deleted:

Hazardous Waste Facility Certificate of Liability Insurance

1. [Name of Insurer], (the "Insurer"), of [address of Insurer] hereby certifies that it has issued liability insurance covering bodily injury and property damage to [name of insured], (the "insured"), of [address of insured] in connection with the insured's obligation to demonstrate financial responsibility under 40 CFR 264.147 or 265.147. The coverage applies at [list EPA Identification Number, name, and address for each facility] for [insert "sudden accidental occurrences," "nonsudden accidental occurrences," or "sudden and nonsudden accidental occurrences"; if coverage is for multiple facilities and the coverage is different for different facilities, indicate which facilities are insured for sudden accidental occurrences, which are insured for nonsudden accidental occurrences, and which are insured for both]. The limits of liability are [insert the dollar amount of the "each occurrence" and "annual aggregate" limits of the Insurer's liability], exclusive of legal defense costs. The coverage is provided under policy number ———, issued on [date]. The effective date of said policy is [date].

2. The Insurer further certifies the following with respect to the insurance described in Paragraph 1:

(a) Bankruptcy or insolvency of the insured shall not relieve the Insurer of its obligations under the policy.

(b) The Insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the insured for any such payment made by the Insurer. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated as specified in 40 CFR 264.147(f) or 265.147(f).

(c) Whenever requested by a Regional Administrator of the U.S. Environmental Protection Agency (EPA), the Insurer agrees to furnish to the Regional Administrator a signed duplicate original of the policy and all endorsements.

(d) Cancellation of the insurance, whether by the Insurer or the insured, will be effective only upon written notice and only after the expiration of sixty (60) days after a copy of such written notice is received by the Regional Administrator(s) of the EPA Region(s) in which the facility(ies) is (are) located.

(e) Any other termination of the insurance will be effective only upon written notice and only after the expiration of thirty (30) days after a copy of such written notice is received by the Regional Administrator(s) of the EPA Region(s) in which the facility(ies) is (are) located.

I hereby certify that the wording of this instrument is identical to the wording specified in 40 CFR 264.151(j) as such regulation was constituted on the date first above written, and that the Insurer is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

[Signature of authorized representative of Insurer]
[Type name]
[Title], Authorized Representative of [name of Insurer]
[Address of Representative]

PART 265—INTERIM STATUS STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

Subpart H—Financial Requirements

a. Section 265.141 is revised to read as follows:

§ 265.141 Definitions of terms as used in this subpart.

(a) "Closure plan" means the plan for closure prepared in accordance with the requirements of § 265.112.

(b) "Current closure cost estimate" means the most recent of the estimates prepared in accordance with §§ 265.142 (a), (b), and (c).

(c) "Current post-closure cost estimate" means the most recent of the estimates prepared in accordance with §§ 265.144 (a), (b), and (c).

(d) "Parent corporation" means a corporation which directly owns at least 50 percent of the voting stock of the corporation which is the facility owner or operator; the latter corporation is deemed a "subsidiary" of the parent corporation.

(e) "Post-closure plan" means the plan for post-closure care prepared in accordance with the requirements of §§ 265.117–265.120.

(f) The following terms are used in the specifications for the financial tests for closure, post-closure care, and liability coverage. The definitions are intended to assist in the understanding of these regulations and are not intended to limit the meanings of terms in a way that conflicts with generally accepted accounting practices.

"Assets" means all existing and all probable future economic benefits obtained or controlled by a particular entity.

"Current assets" means cash or other assets or resources commonly identified as those which are reasonably expected to be realized in cash or sold or consumed during the normal operating cycle of the business.

"Current liabilities" means obligations whose liquidation is reasonably expected to require the use of existing resources properly classifiable as current assets or the creation of other current liabilities.

"Independently audited' refers to an audit performed by an independent certified public accountant in accordance with generally accepted auditing standards.

"Liabilities" means probable future sacrifices of economic benefits arising from present obligations to transfer assets or provide services to other entities in the future as a result of past transactions or events.

"Net working capital" means current assets minus current liabilities.

"Net worth" means total assets minus total liabilities and is equivalent to owner's equity.

"Tangible net worth" means the tangible assets that remain after deducting liabilities; such assets would not include intangibles such as goodwill and rights to patents or royalties.

(g) In the liability insurance requirements the terms "bodily injury" and "property damage" shall have the meanings given these terms by applicable State law. However, these terms do not include those liabilities which, consistent with standard industry practice, are excluded from coverage in liability policies for bodily injury and property damage. The Agency intends the meanings of other terms used in the liability insurance requirements to be consistent with their common meanings within the insurance industry. The definitions given below of several of the terms are intended to assist in the understanding of these regulations and are not intended to limit their meanings in a way that conflicts with general insurance industry usage.

"Accidental occurrence" means an accident, including continuous or repeated exposure to conditions, which results in bodily injury or property damage neither expected nor intended from the standpoint of the insured.

"Legal defense costs" means any expenses that an insurer incurs in defending against claims of third parties brought under the terms and conditions of an insurance policy.

"Nonsudden accidental occurrence" means an occurrence which takes place over time and involves continuous or repeated exposure.

"Sudden accidental occurrence" means an occurrence which is not continuous or repeated in nature.

b. Section 265.147 is revised to read as follows:

§ 265.147 Liability requirements.

(a) *Coverage for sudden accidental occurrences.* By the effective date of these regulations, an owner or operator of a hazardous waste treatment, storage, or disposal facility, or a group of such facilities, must demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator must have and maintain liability coverage for sudden accidental occurrences in the amount of at least $1 million per occurrence with an annual aggregate of at least $2 million, exclusive of legal defense costs. This liability coverage may be demonstrated in one of three ways, as specified in paragraphs (a)(1), (a)(2), and (a)(3) of this section:

(1) An owner or operator may demonstrate the required liability coverage by having liability insurance as specified in this paragraph.

(i) Each insurance policy must be amended by attachment of the Hazardous Waste Facility Liability Endorsement or evidenced by a Certificate of Liability Insurance. The wording of the endorsement must be identical to the wording specified in § 264.151(i). The wording of the certificate of insurance must be identical to the wording specified in § 264.151(j). The owner or operator must submit a signed duplicate original of the endorsement or the certificate of insurance to the Regional Administrator, or Regional Administrator if the facilities are located in more than one Region. If requested by a Regional Administrator, the owner or operator must provide a signed duplicate original of the insurance policy.

(ii) Each insurance policy must be issued by an insurer which, at a minimum, is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

(2) An owner or operator may meet the requirements of this section by passing a financial test for liability coverage as specified in paragraph (f) of this section.

(3) An owner or operator may demonstrate the required liability coverage through use of both the financial test and insurance as these mechanisms are specified in this section. The amounts of coverage demonstrated must total at least the minimum amounts required by this paragraph.

(b) *Coverage for nonsudden accidental occurrences.* An owner or operator of a surface impoundment, landfill, or land treatment facility which is used to manage hazardous waste, or a group of such facilities, must demonstrate financial responsibility for bodily damage and property damage to third parties caused by nonsudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator must have and maintain liability coverage for nonsudden accidental occurrences in the amount of at least $3 million per occurrence with an annual aggregate of at least $6 million, exclusive of legal defense costs. This liability coverage may be demonstrated in one of three ways, as specified in paragraphs (b)(1), (b)(2), and (b)(3) of this section:

(1) An owner or operator may demonstrate the required liability coverage by having liability insurance as specified in this paragraph.

(i) Each insurance policy must be amended by attachment of the Hazardous Waste Facility Liability Endorsement or evidenced by a Certificate of Liability Insurance. The wording of the endorsement must be identical to the wording specified in § 264.151(i). The wording of the certificate of insurance must be identical to the wording specified in § 264.151(j). The owner or operator must submit a signed duplicate original of the endorsement or the certificate of insurance to the Regional Administrator, or Regional Administrators if the facilities are located in more than one Region. If requested by a Regional Administrator, the owner or operator must provide a signed duplicate original of the insurance policy.

(ii) Each insurance policy must be issued by an insurer which, at a minimum, is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

(2) An owner or operator may meet the requirements of this section by passing a financial test for liability coverage as specified in paragraph (f) of this section.

(3) An owner or operator may demonstrate the required liability coverage through use of both the financial test and insurance as these mechanisms are specified in this section. The amounts of coverage must total at least the minimum amounts required by this paragraph.

(4) The required liability coverage for nonsudden accidental occurrences must be demonstrated by the dates listed below. The total sales or revenues of the owner or operator in all lines of business, in the fiscal year preceding the effective date of these regulations, will determine which of the dates applies. If the owner and operator of a facility are two different parties, or if there is more than one owner or operator, the sales or revenues of the owner or operator with the largest sales or revenues will determine the date by which the coverage must be demonstrated. The dates are as follows:

(i) For an owner or operator with sales or revenues totalling $10 million or more, 6 months after the effective date of these regulations.

(ii) For an owner or operator with sales or revenues greater than $5 million but less than $10 million, 18 months after the effective date of these regulations.

(iii) All other owners or operators, 30 months after the effective date of these regulations.

(5) By the date 6 months after the effective date of these regulations an owner or operator who is within either of the last two categories (paragraphs (b)(4)(ii) or (b)(4)(iii) of this section) must, unless he has demonstrated liability coverage for nonsudden accidental occurrences, send a letter to the Regional Administrator stating the date by which he plans to establish such coverage.

(c) *Request for variance.* If an owner or operator can demonstrate to the satisfaction of the Regional Administrator that the levels of financial responsibility required by paragraphs (a) or (b) of this section are not consistent with the degree and duration of risk associated with treatment, storage, or disposal at the facility or group of facilities, the owner or operator may obtain a variance from the Regional Administrator. The request for a variance must be submitted in writing to the Regional Administrator. If granted, the variance will take the form of an adjusted level of required liability coverage, such level to be based on the Regional Administrator's assessment of the degree and duration of risk associated with the ownership or operation of the facility or group of facilities. The Regional Administrator may require an owner or operator who requests a variance to provide such technical and engineering information as is deemed necessary by the Regional Administrator to determine a level of financial responsibility other than that required by paragraphs (a) or (b) of this section. The Regional Administrator will process a variance request as if it were a permit modification request under

§ 122.15(a)(7)(iii) of this Chapter and subject to the procedures of § 124.5 of this Chapter. Notwithstanding any other provision, the Regional Administrator may hold a public hearing at his discretion or whenever he finds, on the basis of requests for a public hearing, a significant degree of pubic interest in a tentative decision to grant a variance.

(d) *Adjustments by the Regional Administrator.* If the Regional Administrator determines that the levels of financial responsibility required by paragraphs (a) or (b) of this section are not consistent with the degree and duration of risk associated with treatment, storage, or disposal at the facility or group of facilities, the Regional Administrator may adjust the level of financial responsibility required under paragraphs (a) or (b) of this section as may be necessary to protect human health and the environment. This adjusted level will be based on the Regional Administrator's assessment of the degree and duration of risk associated with the ownership or operation of the facility or group of facilities. In addition, if the Regional Administrator determines that there is a significant risk to human health and the environment from nonsudden accidental occurrences resulting from the operations of a facility that is not a surface impoundment, landfill, or land treatment facility, he may require that an owner or operator of the facility comply with paragraph (b) of this section. An owner or operator must furnish to the Regional Administrator, within a reasonable time, any information which the Regional Administrator requests to determine whether cause exists for such adjustments of level or type of coverage. The Regional Administrator will process an adjustment of the level of required coverage as if it were a permit modification under § 122.15(a)(7)(iii) of this Chapter and subject to the procedures of § 124.5 of this Chapter. Notwithstanding any other provision, the Regional Administrator may hold a public hearing at his discretion or whenever he finds, on the basis of requests for a public hearing, a significant degree of public interest in a tentative decision to adjust the level or type of required coverage.

(e) *Period of coverage.* An owner or operator must continuously provide liability coverage for a facility as required by this section until certifications of closure of the facility, as specified in § 265.115, are received by the Regional Administrator.

(f) *Financial test for liability coverage.* (1) An owner or operator may satisfy the requirements of this section by demonstrating that he passes a financial test as specified in this paragraph. To pass this test the owner or operator must meet the criteria of paragraph (f)(1)(i) or (f)(1)(ii):

(i) The owner or operator must have:

(A) Net working capital and tangible net worth each at least six times the amount of liability coverage to be demonstrated by this test; and

(B) Tangible net worth of at least $10 million; and

(C) Assets in the United States amounting to either: (*1*) At least 90 percent of his total assets; or (*2*) at least six times the amount of liability coverage to be demonstrated by this test.

(ii) The owner or operator must have:

(A) A current rating for his most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's, or Aaa, Aa, A, or Baa as issued by Moody's; and

(B) Tangible net worth of at least $10 million; and

(C) Tangible net worth at least six times the amount of liability coverage to be demonstrated by this test; and

(D) Assets in the United States amounting to either: (*1*) at least 90 percent of his total assets; or (*2*) at least six times the amount of liability coverage to be demonstrated by this test.

(2) The phrase "amount of liability coverage" as used in paragraph (f)(1) of this section refers to the annual aggregate amounts for which coverage is required under paragraphs (a) and (b) of this section.

(3) To demonstrate that he meets this test, the owner or operator must submit the following three items to the Regional Administrator:

(i) A letter signed by the owner's or operator's chief financial officer and worded as specified in § 264.151(g). If an owner or operator is using the financial test to demonstrate both assurance for closure or post-closure care, as specified by §§ 264.143(f), 264.145(f), 265.143(e), and 265.145(e), *and* liability coverage, he must submit the letter specified in § 264.151(g) to cover both forms of financial responsibility; a separate letter as specified in § 264.151(f) is not required.

(ii) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year.

(iii) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating that:

(A) He has compared the data which the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and

(B) In connection with that procedure, no matters came to his attention which caused him to believe that the specified data should be adjusted.

(4) The owner or operator may obtain a one-time extension of the time allowed for submission of the documents specified in paragraph (f)(3) of this section if the fiscal year of the owner or operator ends during the 90 days prior to the effective date of these regulations and if the year-end financial statements for that fiscal year will be audited by an independent certified public accountant. The extension will end no later than 90 days after the end of the owner's or operator's fiscal year. To obtain the extension, the owner's or operator's chief financial officer must send, by the effective date of these regulations, a letter to the Regional Administrator of each Region in which the owner's or operator's facilities to be covered by the financial test are located. This letter from the chief financial officer must:

(i) Request the extension;

(ii) Certify that he has grounds to believe that the owner or operator meets the criteria of the financial test;

(iii) Specify for each facility to be covered by the test the EPA Identification Number, name, address, the amount of liability coverage and, when applicable, current closure and post-closure cost estimates to be covered by the test;

(iv) Specify the date ending the owner's or operator's last complete fiscal year before the effective date of these regulations;

(v) Specify the date, no later than 90 days after the end of such fiscal year, when he will submit the documents specified in paragraph (f)(3) of this section; and

(vi) Certify that the year-end financial statements of the owner-or operator for such fiscal year will be audited by an independent certified public accountant.

(5) After the initial submission of items specified in paragraph (f)(3) of this section, the owner or operator must send updated information to the Regional Administrator within 90 days after the close of each succeeding fiscal year. This information must consist of all three items specified in paragraph (f)(3) of this section.

(6) If the owner or operator no longer meets the requirements of paragraph (f)(1) of this section, he must obtain

insurance for the entire amount of required liability coverage as specified in this section. Evidence of insurance must be submitted to the Regional Administrator within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the test requirements.

(7) The Regional Administrator may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in his report on examination of the owner's or operator's financial statements (see paragraph (f)(3)(ii) of this section). An adverse opinion or a disclaimer of opinion will be cause for disallowance. The Regional Administrator will evaluate other qualifications on an individual basis. The owner or operator must provide evidence of insurance for the entire amount of required liability coverage as specified in this section within 30 days after notification of disallowance.

PART 123—STATE PROGRAM REQUIREMENTS

1. The authority citation for Part 123 reads as follows:

Authority: Resource Conservation and Recovery Act, as amended, 42 U.S.C. 6901 *et seq.;* Safe Drinking Water Act, 42 U.S.C. 300 (f) *et seq.;* Clean Water Act, 33 U.S.C. 1251 *et seq.*

2. In § 123.129, paragraph (a) is amended by designating existing paragraph (a) as (a)(1) and adding new paragraphs (a)(2) and (a)(3) to read as follows:

§ 123.129 Additional program requirements for interim authorization for phase II.

(a)(1) * * *

(2) The Administrator may authorize a State program for Phase II Components A or B, or both, even though the State program does not include liability coverage requirements, if (i) the State submitted a draft application for the component or components of Phase II interim authorization to EPA prior to [insert date of publication in the **Federal Register**], and (ii) the State commits in its Memorandum of Agreement to adopt State liability coverage requirements as quickly as practicable, but in no case later than the State's application for an additional component of Phase II interim authorization.

(3) Any State which receives interim authorization for Components A or B or both without liability coverage requirements, pursuant to paragraph (a)(2) of this section, may not receive an additional component of Phase II interim authorization unless it has liability coverage requirements in effect.

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Friday
April 16, 1982

Part VII

Environmental Protection Agency

Standards of Performance for New Stationary Sources; Lead-Acid Battery Manufacture

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 60

[AD-FRL 1718-2]

Standards of Performance for New Stationary Sources; Lead-Acid Battery Manufacture

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This rule establishes standards of performance which limit atmospheric emissions of lead from new, modified, and reconstructed facilities at lead-acid battery plants. The standards implement Section 111 of the Clean Air Act, and are based on the Administrator's determination that lead-acid battery manufacturing facilities contribute significantly to air pollution, which may reasonably be anticipated to endanger public health or welfare. The intended effect of this regulation is to require new, modified, and reconstructed lead-acid battery manufacturing facilities to control lead emissions within the specified limits, which can be achieved through the use of the best demonstrated system of continuous emission reduction. A new reference method for determining compliance with lead standards is also promulgated.

EFFECTIVE DATE: April 16, 1982.

Under Section 307(b)(1) of the Clean Air Act, judicial review of this new source performance standard is available *only* by the filing of a petition for review in the United States Court of Appeals for the District of Columbia Circuit within 60 days of today's publication of this rule. Under Section 307(b)(2) of the Clean Air Act, the requirements that are the subject of today's notice may not be challenged later in civil or criminal proceedings brought by EPA to enforce these requirements.

ADDRESSES:

Background Information Document. The Background Information Document (BID) for the promulgated standards may be obtained from the U.S. EPA Library (MD-35), Research Triangle Park, North Carolina 27711, telephone number (919) 541-2777. Please refer to "Lead-Acid Battery Manufacture, Background Information for Promulgated Standards," EPA-450/3-79-028b.

Docket. Docket No. OAQPS-79-1, containing supporting information used in developing the promulgated standards, is available for public inspection and copying between 8:00 a.m. and 4:00 p.m., Monday through Friday, at EPA's Central Docket Section, West Tower Lobby, Gallery 1, Waterside Mall, 401 M Street SW., Washington, D.C. 20460. A reaonable fee may be charged for copying.

FOR FURTHER INFORMATION CONTACT: Mr. Gene W. Smith, Standards Development Branch, Emission Standards and Engineering Division (MD-13), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, telephone number (919) 541-5624.

SUPPLEMENTARY INFORMATION:

The Standards

The promulgated standards will limit atmospheric lead emissions from new, modified, or reconstructed facilities at any lead-acid battery manufacturing plant which has the design capacity to produce in one day batteries which would contain, in total, an amount of lead equal to or greater than 5.9 Mg (6.5 tons). The facilities which are affected by the standards and the emission limits for these facilities are listed below:

Facility	Lead emission limit
Lead oxide production	5.0 mg/kg (0.010 lb/ton).
Grid casting	0.40 mg/dscm (0.00018 gr/dscf).
Paste mixing	1.00 mg/dscm (0.00044 gr/dscf).
Three-process operation	1.00 mg/dscm (0.00044 gr/dscf).
Lead reclamation	4.50 mg/dscm (0.00196 gr/dscf).
Other lead emitting operations.	1.00 mg/dscm (0.00044 gr/dscf).

The emission limit for lead oxide production is expressed in terms of lead emissions per kilogram of lead processed, while the limits for other facilities are expressed in terms of lead concentrations in exhaust air.

A standard of 0 percent opacity is promulgated for emissions from lead oxide production, grid casting, paste mixing, three process operation, and "other lead-emitting" facilities. A standard of 5 percent opacity is promulgated for lead reclamation facilities. The promulgated standards also require continuous monitoring of the pressure drop across any scrubber used to control emissions from an affected facility to help insure proper operation of the scrubber. Performance tests are required to determine compliance with the promulgated standards. A new reference method, Method 12, is to be used to measure the amount of lead in exhaust gases, and Method 9 is to be used to measure opacity. Process monitoring is required during all tests.

In the preamble to the proposed regulation, the decision by the Administrator not to propose standards for sulfuric acid mist emissions from the formation process was discussed. The public was specifically invited to submit comments with supporting data on this issue. Only one comment addressing this issue was received and, while the commenter suggested that acid mist emissions need EPA attention, no specific information was provided to refute the basis for the Administrator's decision not to regulate. Therefore, the Administrator does not plan to take any further action regarding acid mist emissions from lead-acid battery manufacture at this time. EPA is required to review new source performance standards four years from the date of promulgation, and if appropriate, revise them. The decision not to regulate acid mist emissions may be reconsidered at that time.

Summary of Environmental, Energy, and Economic Impacts

There are approximately 190 lead-acid battery manufacturing plants in the United States, of which about 100 have been estimated to have capacities above the small size cutoff. These plants are scattered throughout the country and are generally located in urban areas near the market for their batteries. Projections of the growth rate of the lead-acid battery manufacturing industry range from 3 to 5 percent per year over the next 5 years. Most of the projected increase in manufacturing capacity is expected to take place by the expansion of large plants (producing over 2000 batteries per day).

In general, States do not currently regulate atmospheric lead emissions from lead-acid battery plants. However, State implementation plan (SIP) particulate regulations generally require some control of these emissions. The average degree of control required by SIP regulations was used as a baseline for the assessment of the environmental and economic impacts of the new source performance standards for lead-acid battery manufacture. At some existing plants, emissions are controlled to a greater extent than is required by typical State particulate regulations. In addition, States are developing implementation plans to insure the attainment and maintenance of the national ambient air quality standard (NAAQS) for lead, which was promulgated in December 1977 (42 FR 63076). The State implementation plans for lead are expected to include regulations which will require more control of atmospheric lead emissions

than is currently required under typical State particulate regulations.

New facilities and facilities undergoing modification and reconstruction in the United States over the next 5 years would emit about 95 Mg (104 tons) of lead to the atmosphere in the fifth year, if their emissions were controlled only to the extent required by current State particulate regulations. The promulgated standards will reduce potential lead emissions from new, modified, and reconstructed facilities to about 3.1 Mg (3.4 tons) in the fifth year. The promulgated standards will also result in decreased nonlead particulate emissions from affected facilities, since equipment installed for the purpose of controlling lead-bearing particulate emissions will also control nonlead-bearing particulate emissions.

For a new or completely reconstructed plant using impingement scrubbing to control lead emissions from the grid casting and lead reclamation facilities and fabric filtration to control emissions from all other affected facilities, the fractional increase in the lead content of plant wastewater attributable to the standards will be about 0.6 percent. It is anticipated that, in early 1981, EPA's Office of Water and Waste Management will propose a regulation which would require zero lead discharge in the wastewater from grid casting and lead reclamation facilities. In order to achieve zero discharge from these facilities, scrubber effluent would have to be clarified and recycled. Although not directly attributable to the promulgated NSPS for air emissions, the costs of clarifying and recycling blowdown from scrubbers controlling grid casting and lead reclamation emissions has been considered in the development of the promulgated NSPS. The annualized cost of controlling water emissions from grid casting and lead reclamation facility scrubbers would be less than 1 percent of the costs attributable to the promulgated standards for a completely modified or reconstructed 2000 battery-per-day plant. The promulgated NSPS will not have a significant impact on emissions of solid waste.

The energy needed to operate control equipment required to meet the promulgated standards at a new plant will be approximately 2.7 percent of the total energy needed to run the plant. The incremental energy demand resulting from the application of the promulgated standards to new, modified, and reconstructed facilities over the next five years will be about 2.8 gigawatt hours of electricity in the fifth year. The fifth-year increase in demand for heat energy resulting from the promulgated standards will be about 50 PJ/yr (48×10^9 BTU/yr), or the equivalent of about 8.1 thousand barrels of oil per year.

The capital cost of the installed emission control equipment necessary to meet the promulgated standards on all new, modified, and reconstructed facilities during the first five years of the standards will be approximately $8.2 million. The total annualized cost of operating this equipment in the fifth year of the standards will be about $3.9 million.

These costs and energy and environmental impacts are considered reasonable, and are not expected to prevent or hinder expansion on the lead-acid battery manufacturing industry. Economic analysis indicates that, for plants with capacities larger than the small size cutoff, the costs attributable to the standards can be passed on with little effect on sales. The average incremental cost associated with the promulgated standards will be about 30¢ per battery. This is about 1.6 percent of the wholesale price of a battery.

Public Participation

Prior to proposal of the standards, interested parties were advised by public notice in the **Federal Register** of a meeting of the National Air Pollution Control Techniques Advisory Committee to discuss the standards recommended for proposal. This meeting was held September 27–28, 1977. The meeting was open to the public and each attendee was given ample opportunity to comment on the standards recommended for proposal. The standards were proposed in the **Federal Register** on January 14, 1980 (45 FR 2790). Public comments were solicited at that time and, when requested, copies of the Background Information Document (BID) were distributed to interested parties. To provide interested persons the opportunity for oral presentation of data, views, or arguments concerning the proposed standards, a public hearing was held on February 13, 1980, at Research Triangle Park, North Carolina. The hearing was open to the public and each attendee was given an opportunity to comment on the proposed standards. The public comment period extended from January 14, 1980 to March 14, 1980.

Twenty-one comment letters were received on the proposed standards of performance. These comments have been carefully considered and, where determined to be appropriate by the Administrator, changes have been made in the standards which were proposed.

Significant Comments and Changes to the Proposed Regulation

Comments on the proposed standards were received from industry representatives, State air pollution control agencies, and two Federal agencies. Detailed discussion of these comments can be found in Volume II of the Background Information Document (BID). The major comments can be combined into the following areas: general, emission control technology, economic impact, legal considerations, test methods and monitoring, reporting and recordkeeping, and other considerations.

General

Facilities at any plant with a production capacity of less than 500 batteries per day (bpd) were exempted under the proposed standards. Some commenters felt that the number of batteries which can be produced at a plant was not the appropriate criterion on which to base the size cutoff. It was pointed out that lead-acid batteries are produced in a variety of sizes, and that emissions from battery production are probably related more to the amount of lead used to produce batteries than to the number of batteries produced.

These are considered to be reasonable comments. Economic impacts of standards as well as emissions are expected to be related to the amount of lead used in a particular battery production operation rather than to the number of batteries produced. At the time of proposal, it was estimated that odd-sized lead-acid batteries represented a very small share of the lead-acid battery market; however, the comments received on the proposed standards indicated that a significant number of odd-sized batteries are produced. Industrial lead-acid batteries, which can be as much as 50 times larger than automobile batteries, are estimated to represent about 7 percent of total U.S. lead-acid battery production.

Therefore, the small size cutoff for the promulgated regulation is expressed in terms of lead throughput. The promulgated standards will affect new, modified, and reconstructed facilities at any plant with the capacity to produce in one day batteries which would contain, in total, an amount of lead greater than or equal to 5.9 Mg (6.5 tons). This cutoff is equivalent to the 500 bpd cutoff for plants producing typical automobile batteries. The level is based on an average battery lead content of 11.8 kg (26 lb) of lead per battery.

One commenter questioned whether plant capacity is to be determined based

on the maximum demonstrated production rate or the estimated maximum production rate, for the purposes of the small size cutoff.

For the purposes of the small size cutoff, the parameter to be used to determine the production capacity of a plant is its design capacity. The design capacity is the maximum production capability of the plant and can be determined using the design specifications of the plant's component facililties, taking into account the facility with the smallest rated production capacity. The design capacity of a plant can be confirmed by checking production records. The figure cited as a plant's production capacity should not be less than the maximum production rate in the plant's records.

Several commenters felt that the 500 bpd cutoff should be raised to 2000 bpd. This contention was based on the fact that the Federal regulations which set minimum standards for State implementation plans (SIPs) for the lead national ambient air quality standard do not require ambient air quality monitoring or atmospheric dispersion analyses for plants smaller than 2000 bpd [40 CFR 51.80(a)(1) and 51.84(a)]. The commenters considered these cutoffs to be indicative of a decision by EPA that battery plants smaller than 2000 bpd are not material contributors to lead air pollution.

It should be noted that the Federal regulations to which the commenters referred only set minimum standards for a lead SIP. Also, as discussed in the Legal Considerations section of this preamble, the regulatory approach for NAAQS regulations promulgated under Section 109 of the Clean Air Act differs from that for standards of performance promulgated under Section 111 of the Act. The small size cutoff for the standards of performance for lead-acid battery manufacture is based on a thorough analysis of the economic impacts of these standards. The analysis indicated that the economic impact of standards on plants smaller than about 250 bpd could be severe, but showed that the economic impact would be reasonable for plants with capacities greater than or equal to 500 bpd. None of the commenters submitted information indicating that the ecomomic impact of standards might be severe for plants in the 500 to 2000 bpd size range. Therefore, although the small size cutoff is now expressed in terms of lead throughput rather than battery production, the level of the cutoff remains at the lead throughput capacity which corresponds to a production capacity of 500 bpd.

Several commenters contended that the proposal of a 0 percent opacity standard for all affected facilities was impractical. These commenters were concerned that emissions from facilities which emit fine particles would exceed 0 percent opacity. Also, some were concerned that emissions from facilities controlled by fabric filters would exceed 0 percent opacity during fabric filter cleaning. However, one commenter stated that the 0 percent opacity standard appears achievable for all affected facilities.

The 0 percent opacity standard for lead oxide manufacturing, grid casting, paste mixing, three-process operation and "other lead-emitting" facilities is considered reasonable. Lead oxide manufacturing, grid casting, paste mixing, and three-process operation facilities were observed by EPA to have emissions with 0 percent opacity for periods of 3 hours and 19 minutes, 7 hours and 16 minutes, 1 hour and 30 minutes, and 3 hours and 51 minutes, respectively. Under the promulgated standards, compliance with the opacity standard is to be determined by taking the average opacity over a 6-minute period, according to EPA Test Method 9, and rounding the average to the nearest whole percentage. The rounding procedure is specified in order to allow occasional brief emissions with opacities greater than 0 percent, which may occur during fabric filter cleaning. For grid casting, the observations were made at a facility controlled by an impingement scrubber. For lead oxide production and three-process operation facilities, the observation periods included fabric filter cleaning phases.

The opacity standard for lead reclamation has been changed to 5 percent in the promulgated standards. A standard of 0 percent opacity was originally proposed for lead reclamation, although emissions with opacities greater than 0 percent were observed from the facility tested by EPA. The 0 percent opacity standard was considered reasonable, because the facility tested by EPA was controlled by an impingement scrubber and the proposed emission limit for lead reclamation was based on transfer of fabric filtration technology. As noted in the CONTROL TECHNOLOGY discussion, the final emission limit for lead reclamation is based on the demonstrated emission reduction capabilities of the impingement scrubber on the facility tested by EPA. The final opacity standard of 5 percent is based on observations at this facility. Emissions from this facility were observed for 3 hours and 22 minutes. The highest 6-minute average opacity during the 3 hour 22 minute observation period was 4.8 percent. Therefore, the 5 percent opacity standard for lead reclamation is considered achievable.

Under the general provisions applicable to all new source performance standards, the operator of an affected facility may request the Administrator to determine the opacity of emissions from the affected facility during the initial performance test (40 CFR 60.11). If the Administrator finds that the affected facility is in compliance with the applicable standards for which performance tests are conducted, but fails to meet an applicable opacity standard, the operator of the facility may petition the Administrator to make an appropriate adjustment to the opacity standard for the facility.

Some commenters stated that EPA should establish a relationship between opacity and emissions before setting opacity standards.

Opacity limits are being promulgated in addition to mass emission limits because the Administrator believes that opacity limits provide the most effective and practical method for determining whether emission control equipment, necessary for a source to meet the mass emission limits, is continuously maintained and operated properly. It has not been the Administrator's position that a single, constantly invariant and precise correlation between opacity and mass emissions must be identified for each source under all conditions of operation. Such a correlation is unnecessary to the opacity standard, because the opacity standard is set at a level such that if the opacity standard is exceeded for a particular facility, one would expect that the applicable emission limitation will also be exceeded. Furthermore, as noted above, a mechanism is provided in the general provisions whereby the operator of a facility can request that a separate opacity standard be set for that facility if, during the initial performance test, the Administrator finds that the facility is in compliance with all other applicable standards but fails to meet the respective opacity standard.

One commenter felt that additional testing should be conducted before standards are promulgated. The commenter contended that the EPA data base is narrow, and that tests should be conducted to determine the variability of the efficiency of emission control devices.

The Administrator has determined that the data base developed by EPA provides adequate support for the

promulgated new source performance standards. The promulgated standards are based on tests of a total of eight facilities which have been determined by EPA to be well controlled and typical of facilities used in the industry. As noted by some commenters, EPA has not tested emissions from facilities producing maintenance-free or low-maintenance batteries or Barton lead oxide production facilities. Differences between such facilities and the facilities tested by EPA are discussed in detail below and in the Emission Control Technology section. These differences are not expected to have a significant effect on the controlled lead concentrations achievable using the emission control techniques tested by EPA. Commenters did not refer to nor is EPA aware of any other specific process variations which might influence emissions. The Agency has set the promulgated lead emission limits above the levels achieved in the EPA tests to allow solely for variations caused by factors that the Agency cannot identify at this time.

Some commenters stated that changes have occurred in the lead-acid battery manufacturing industry, which may influence emissions, since the EPA tests were conducted. The changes cited by the commenters were the production of maintenance-free and low-maintenance batteries, and the increasing of volumes of air ventilated from facilities in order to meet more stringent OSHA standards regulating in-plant lead levels.

The commenters briefly described the difference between maintenance-free or low-maintenance batteries and normal-maintenance batteries. The only substantial difference is that a calcium-lead alloy is used to make low-maintenance and maintenance-free batteries, while standard batteries are made using an antimonial lead alloy. This difference influences the grid casting and lead reclamation facilities, where molten lead is processed. The major change is in the makeup of the dross which must be removed from molten lead in these facilities. For grid casting, the calcium alloy also requires the use of soot as a mold release agent. For the antimonial lead alloy used in standard batteries, either soot or sodium silicate can be used.

The different makeup of dross in grid casting and lead reclamation facilities producing maintenance-free and low-maintenance batteries is not expected by EPA to cause noticeable differences in lead emissions between these facilities and facilities producing standard lead-acid batteries. The commenters did not give reasons why this difference might be expected to affect emissions and EPA is not aware of any. Dross consists of contaminants in the molten lead alloy which float to the surface and must periodically be removed. The presence of a dross layer has an impact on emissions, in that the dross layer serves to reduce fuming from the molten lead. However, this will occur regardless of the composition of the dross layer. Also, because the dross layer is made up chiefly of contaminants from the lead, the entrainment of dross particles in air exhausted from grid casting or lead reclamation facilities will not significiantly affect lead emissions. Thus, the effect of the dross layer composition on emissions is expected to be much less than the effects of process operation parameters, such as the frequency of dross removal and the temperature of the molten lead alloy.

The use of soot rather than sodium silicate as a mold release agent in grid casting will not affect uncontrolled lead emissions from this facility. However, the presence of entrained soot in uncontrolled grid casting emissions may require the use of scrubbers rather than fabric filters to control these emissions. This problem is discussed in detail in the EMISSION CONTROL TECHNOLOGY section.

The commenters stated that exhaust volumes for lead-acid battery facilities have been increased as a result of the revised OSHA standards. One commenter contended that this change will increase the concentration of uncontrolled emissions.

It is acknowledged that the exhaust volumes at the facilities tested by EPA may not have been sufficient for attainment of the 50 $\mu g/m^3$ OSHA in-plant lead concentration standard. At the time of the tests conducted by EPA the OSHA standard was 200 $\mu g/m^3$. Among the practices that plants can employ to meet the new standard are general plant maintenance, employee care, and local ventilation of in-plant lead emission sources. EPA recognizes that if ventilation rates significantly higher than those used at the facilities tested by EPA are used to meet the new OSHA standard, additional lead particles will be drawn into the exhaust streams. However, the exhaust volume increase will be greater than the lead weight increase by a margin sufficient not only to prevent an increase in the lead concentration in the exhaust, but actually to decrease that concentration. Also, the additional lead particles captured as a result of the higher exhaust volumes will consist mainly of large particles which are readily captured by control systems.

One commenter stated that there is a trend in the lead-acid battery manufacturing industry to the use of finer lead oxide in battery pastes in order to increase battery efficiency. The commenter also contended that this particle size change will influence the collection efficiency attainable with fabric filters.

Lead emissions from lead-acid battery manufacture are generated by two mechanisms. Lead oxide fumes are produced in welding, casting, and reclaiming operations, and to a certain extent in lead oxide production. Agglomerates of lead and lead oxide particles are emitted from operations involving the handling of lead oxide, lead oxide paste, and lead grids. The particles which are most difficult to capture are the fume particles. The emission rate and characteristics of the fume particles are not dependent on the size of the lead oxide particles used in battery pastes, but on the temperature of the lead during the operations from which they are emitted. For these reasons, trends in the industry to the use of smaller lead oxide particles are not expected to change the particle size distributions of emissions in such a way that collector performance will be affected.

Emission Control Technology

Some commenters thought that the proposed standards would have required the use of fabric filtration to control emissions.

The proposed standards would not have required that specific control technology be used for any affected facility, nor will the promulgated standards require specific control techniques. Rather, the standards set emissions limits which have been demonstrated to be achievable by the use of the best control systems considering costs, energy impacts, and nonair quality environmental impacts. The standards do not preclude the use of alternative control techniques, as long as the emissions limits are achieved.

The selection of fabric filtration as the best system of emission reduction for grid casting and lead reclamation facilities was criticized by a number of commenters. These facilities are normally uncontrolled or controlled by impingement scrubbers at existing plants. The commenters pointed out that only one grid casting facility in the United States is controlled by a fabric filtration system and that this system has been plagued by fires. They explained that the surfaces of exhaust ducts for grid casting and lead reclamation operations become coated

with hydrocarbons and other flammable materials. For grid casting, these include bits of cork from the molds, oils used for lubrication, and soot, which is often used as a mold release agent. For lead reclamation, hydrocarbons from plastic and other contaminants charged with lead scrap become entrained in exhaust gases and deposit on the walls of exhaust ducts. These materials are readily ignited by sparks which, the commenters contended, are unavoidable.

The commenters stated that fires started in the exhaust ducts will generally propagate to the control system. One commenter indicated that problems caused by such fires are not generally severe for scrubbers, but fires would cause serious damage and emissions excursions if fabric filters were used. The commenters stated that spark arresters would not solve the fire problem, because they too would become coated with flammable materials which would be ignited by sparks.

Apart from the problem of fires, commenters contended that contaminants present in the exhaust gases from grid casting and lead reclamation would cause frequent bag blinding if fabric filters were applied to these facilities. In addition to the materials listed above, sodium silicate, which is often used as a mold release agent for grid casting, was cited by the commenters as an extremely hygroscopic compound which would cause bag blinding. Commenters also felt that the EPA particle size and emissions test data did not support the contention made by EPA that a fabric filter could achieve 99 percent emission reduction for emissions from grid casting and lead reclamation.

The standards for grid casting and lead reclamation have been changed. Based on the information available when standards for lead-acid battery manufacture were proposed, EPA had concluded that fabric filtration could be used to control emissions from grid casting and lead reclamation, and that 99 percent collection efficiency could be attained. The proposed standards for grid casting and lead reclamation were based on tests of uncontrolled emissions from these facilities, and on fabric filter efficiencies demonstrated for the three-process operations facility and for other industries with emissions of similar character to those from lead-acid battery manufacture. The problem of bag blinding can be avoided by keeping the exhaust gases from these facilities at temperatures above their dew points. Also, it was thought that exhaust duct fires could be prevented by the use of spark arresters. In light of the point made by commenters that spark arresters would not prevent fires, EPA has concluded that the standards for grid casting and lead reclamation facilities should not be based on fabric filters.

The proposed emission limitations for grid casting and lead reclamation might be achieved using a high energy scrubber such as a venturi; however, because of the particle size of emissions from these facilities, a scrubber pressure drop of about 7.5 kPa (30 in. W.G.) would be required. The energy requirement to overcome this pressure drop is not considered reasonable for these facilities. The emissions limits for paste mixing, three-process operation, and other lead-emitting facilities are based on the application of fabric filters with average pressure drops of about 1.25 kPa (5 in. W.G.). Thus, the electricity requirement per unit volume of exhaust gas to operate venturi scrubbers for the grid casting and lead reclamation facilities would be roughly six times the electricity requirement per unit volume to control other plant exhausts. It is estimated that standards based on the application of impingement scrubbers rather than venturi scrubbers to grid casting and lead reclamation facilities will result in a 50 percent decrease in the total electricity necessary to comply with the NSPS while having only a slight effect on the emissions reduction attributable to the NSPS (from 97 percent reduction to 96.7 percent reduction from a typical new plant).

The Administrator has therefore determined that for the lead-acid battery manufacturing industry, impingement scrubbers operating at a pressure drop of about 1.25 kPa (5 in. W.G.) represent the best system of emission reduction considering costs, nonair quality health and environmental impact and energy requirements for grid casting and lead reclamation. Therefore, in the promulgated standards, the emissions limitations for grid casting and lead reclamation have been raised to levels which have been shown to be achievable in tests of impingement scrubbers controlling these facilities. This change represents a change from the regulatory alternative chosen for the proposed standards. The environmental, economic, and energy impacts of the alternative which has been chosen for the promulgated standards are discussed in both Volumes I and II of the BID.

EPA measured lead emissions from two grid casting facilities. One of these facilities was uncontrolled, and the other was controlled by an impingement scrubber. Average uncontrolled and controlled lead emissions from the scrubber controlled facility were 2.65 mg/dscm (11.6×10^{-4} gr/dscf) and 0.32 mg/dscm (1.4×10^{-4} gr/dscf), respectively. The promulgated standard for grid casting, 0.4 mg/dscm (1.76×10^{-4} gr/dscf), is based on the controlled lead emission rate for this facility. The facility is considered typical of grid casting facilities used in the lead-acid battery manufacturing industry. EPA is not aware of any process variations which would result in a significant increase in the emission concentration achievable using a scrubber control system. The Agency has set the promulgated lead emission limit above the level achieved in the EPA test to allow solely for variations caused by factors that the Agency cannot identify at this time.

Lead reclamation emissions were measured by EPA for a facility controlled by an impingement scrubber. Average lead concentrations in the inlet and outlet streams from the scrubber were 227 mg/dscm (990×10^{-4} gr/dscf) and 3.7 mg/dscm (16×10^{-4} gr/dscf). The standard for lead reclamation, 4.5 mg/dscm (19.8×10^{-4} gr/dscf), is based on the controlled emission rate measured for this facility. This facility is considered typical of lead reclamation facilities used in the lead-acid battery manufacturing industry. EPA is not aware of any process variations which would result in a significant increase in the emission concentration achievable using a scrubber control system. The Agency has set the promulgated lead emission limit above the level achieved in the EPA test to allow solely for variations caused by factors that the Agency cannot identify at this time.

Several commenters criticized the choice of fabric filtration as the best system of emission reduction for the entire paste mixing cycle. The paste mixing operation is a batch operation consisting of two phases: charging and mixing. The paste mixing facility is generally controlled by impingement scrubbing, although fabric filtration is often used to control exhaust from the charging phase. The commenters felt that if fabric filtration were to be used for the entire cycle, the moisture present in the exhaust during the mixing phase would cause bag blinding. Therefore, they requested that the emission limit for paste mixing be raised to a level achievable using impingement scrubbers.

If fabric filters are used to meet the emission limit, bag blinding can be

prevented by keeping paste mixer exhausts at temperatures above their dew points. The energy which would be required to heat the exhaust gases and the costs for providing insulation for ducts and fabric filters applied to paste mixing facilities were taken into consideration in the energy and economic analyses for the new source performance standards. These costs and energy requirements are considered reasonable. In addition, data submitted by one commenter show that the standard for paste mixing is achievable using impingement scrubbers. Tests were conducted of emissions from two scrubber controlled paste mixing facilities, using methods similar to Method 12. These tests indicated average controlled lead emissions of 0.04 mg/dscm (1.09×10^{-4} gr/dscf) and 0.07 mg/dscm (0.30×10^{-4} gr/dscf) for the two facilities. Both of these average concentrations are well below the 1 mg/dscm (4.4×10^{-4} gr/dscf) standard for paste mixing.

Some commenters contended that EPA test data did not adequately support the statement that 99 percent collection efficiency could be achieved for paste mixing emissions using fabric filter filtration. The commenters stated that fabric cleaning periods should be included in the calculation of fabric filter efficiency.

The standard for paste mixing is considered achievable. Emissions from a paste mixing facility were tested by EPA. The average uncontrolled lead concentration from this facility was 77.4 mg/dscm (338×10^{-4} gr/dscf). Thus, the promulgated regulation is expected to require about 98.7 percent control of lead emissions from paste mixing. EPA tests of a fabric filtration system controlling a three-process operation showed an average lead collection efficiency of 99.3 percent. This fabric filtration system underwent bag cleaning during testing. EPA tests and statements made by several commenters indicate that the particle size distribution for paste mixing emissions is similar to that for three-process operation emissions. Emissions from paste mixing are made up of lead oxide agglomerates, while emissions from three-process operation facilities are made up mainly of agglomerates with some other large particles and some fumes. Because of the absence of fumes in paste mixing emissions, emission reductions greater than those demonstrated for the three-process operation facility may be achievable for paste mixing facilities. The above data show that efficiencies greater than 98.7 percent can be achieved for paste mixing emissions.

In addition, EPA tests of a controlled paste mixing facility indicate that the 1 mg/dscm standard for paste mixing is achievable. As noted earlier, paste mixing is a batch process which can be divided into a charging phase and a mixing phase. Emission concentrations are highest during the charging phase. EPA conducted tests of a facility where paste mixing emissions were controlled by two separate systems. At this plant, paste mixing required a total of 21 to 24 minutes per batch. During the charging phase (the first 14 to 16 minutes of a cycle) exhaust from the paste mixer was ducted to a fabric filter which also controlled emissions from the grid slitting (separating) operation. During the mixing phase (the remainder of the cycle), paste mixer exhaust was ducted to an impingement scrubber which also controlled emissions from the grid casting operation. Uncontrolled or controlled emissions for the paste mixer alone were not tested. The average concentration of lead in emissions from the fabric filtration system used to control charging emissions was 1.3 mg/dscm (5.5×10^{-4} gr/dscf). The average lead content of exhaust from the scrubber used to control mixing emissions was 0.25 mg/dscm (1.1×10^{-4} gr/dscf). The minimum time specified in the standard for a test run, 60 minutes (§ 60.374(b)), exceeds the duration of a mixing cycle. Thus, the emission concentration used to determine compliance with the paste mixing standard would be the average of the emission concentrations from charging and mixing. The average lead concentration in controlled emissions from the facility discussed above was about 0.95 mg/dscm (4.2×10^{-4} gr/dscf) which is slightly below the proposed emission limit of 1 mg/dscm (4.4×10^{-4} gr/dscf). A lower average emission concentration could be achieved by using fabric filtration, generally a more efficient control technique than impingement scrubbing, to control emissions from all phases of paste mixing.

Also, as noted earlier, one commenter submitted data showing that the standard for paste mixing is achievable using impingement scrubbing to control emissions from the entire cycle.

Several commenters criticized the fact that the standard for lead oxide production is based on tests conducted at a ball mill lead oxide production facility, but will apply to Barton lead oxide production facilities as well as ball mill facilities. Some commenters stated that the particle size of the oxide to be collected depends on the type of lead oxide produced. One commenter stated that Barton facilities are more commonly used to produce lead oxide than ball mill facilities.

In both the ball mill process and the Barton process, all of the lead oxide product must be removed from an air stream. In the ball mill process, lead pigs or balls are tumbled in a mill, and the frictional heat generated by the tumbling action causes the formation of lead oxide. The lead oxide is removed from the mill by an air stream. In the Barton process, molten lead is atomized to form small droplets in an air stream. These droplets are then oxidized by the air around them.

EPA tests on a Barton process indicated that Barton and ball mill processes have similar air flow rates per unit production rate. Because these air streams carry all of the lead oxide produced, the concentrations of lead oxide in the two streams must also be similar. Data submitted by one commenter indicate that the percentage of fine particles in lead oxide produced by the Barton process is similar to the percentage of fine particles in lead oxide produced by the ball mill process. The similarities between the concentrations and particle size distributions of the oxide bearing air streams in the Barton and ball mill processes support EPA's contention that a similar level of emission control could be achieved for a Barton process as has been demonstrated for the ball mill process. It should be noted that the Agency has set the promulgated lead emission limit above the level achieved in the EPA test to allow solely for variations caused by factors that the Agency cannot identify at this time.

Some commenters felt that the standard for lead oxide production was too stringent. One commenter stated that the emission rate calculated for a lead-oxide production facility controlled by a cyclone and a fabric filter in series is higher than the standard for lead oxide production.

The emission limit for lead oxide production of 5 milligrams of lead per kilogram of lead processed is considered achievable. The limit is based on the results of a test of emissions from a ball mill lead oxide production facility with a fabric filter control system, which showed an average controlled emission rate of 4.2 mg/kg (8.4 lb/ton) for this facility. The comments on the lead oxide standard were based on calculation and not on emission testing. No reason was given why the calculations might be more reliable than the EPA test data or why the EPA test might not be

representative of the emission level achievable for a well controlled lead oxide production facility.

Several commenters stated that the emission limit for the three-process operation was not supported by the BID for the proposed standards. However, one commenter stated that the emission limit appears achievable.

The limit for the three-process operation is based on the results of EPA tests conducted at four plants where fabric filtration was used to control three-process operation emissions. Each of the sets of tests conducted by EPA showed average controlled lead concentrations below the promulgated limit. The limit was set above the levels shown to be achievable in the four EPA tests to allow solely for variations caused by factors that the agency cannot identify at this time. Therefore, the lead emission limit for the three-process operation facility is considered achievable.

Economic Impact

One commenter contended that new source performance standards would impose a substantial and burdensome cost on the lead-acid battery manufacturing industry. Another stated that battery sales have fallen by 25 percent in recent years.

The economic impacts of new source performance standards on the lead-acid battery manufacturing industry are analyzed and described in detail in Volumes I and II of the BID. These impacts are summarized in the section of this preamble entitled "SUMMARY OF ENVIRONMENTAL, ENERGY, AND ECONOMIC IMPACTS." The projected economic impacts are considered reasonable. The expected annualized cost of compliance with the promulgated standards at a typical affected plant is expected to be about 1.6 percent of the wholesale price of a battery; and the economic impact analysis indicates that this cost could be passed on with little effect on sales.

The promulgated standards are new source performance standards and will only affect new, modified, and reconstructed facilities. Existing facilities are not covered by the standards. The 25 percent drop in sales cited by the second commenter results from the recent decline in the production of domestic automobiles. The low sales, if they continue, would reduce growth in the production capacity of the industry. Hence, the number of new, modified, and reconstructed facilities would be reduced. Since the standards will affect only these facilities, the low sales should not increase the economic impact of the standards on the industry as a whole or on individual plants.

Several commenters contended that the cost of compliance with OSHA standards was not adequately addressed in Volume I of the BID. The commenters also felt that the OSHA standards would require higher ventilation rates than are currently needed, and would thus cause the costs of compliance with new source performance standards to be higher than the estimates made by EPA.

The OSHA compliance costs presented in Volume I are based on the capital and operating cost of controls which were expected to be required to meet the employee exposure standards of 200 $\mu g/m^3$ originally proposed by OSHA in 1975. The controls include employee care, general plant maintenance, and local ventilation of in-plant lead emission sources. On November 14, 1978, OSHA promulgated an employee exposure standard of 50 $\mu g/m^3$. However, the controls necessary to comply with this standard are expected to be similar to those which would have been necessary for the originally proposed 200 $\mu g/m^3$ standard. In addition, the economic impact projected for the OSHA standards in Volume I may be higher than the actual economic impact, because, in a number of cases, work practices may be used to achieve the OSHA standard in place of technological controls.

In volume I of the BID, the statement is made that a change in the OSHA standards could cause the control costs for the new source performance standards to increase substantially. However, in light of data obtained in recent investigations and discussed in Volume II of the BID, it is not expected that the change in OSHA standards will have a significant effect on the results of the economic impact analysis for the NSPS. The facility exhaust rates used to project the economic impacts of the NSPS were not based on the exhaust rates of facilities tested by EPA but were set at levels which would provide good ventilation for the facilities under consideration. These exhaust rates are higher than those which were used at typical lead-acid battery plants before the change in the OSHA standard, and are thought to be sufficient for compliance with the 50 $\mu g/m^3$ OSHA standard.

Environmental Impact

A number of commenters contended that, because lead-acid battery manufacturer accounts for a small percentage of total nationwide lead emissions, new source performance standards should not be set for this source category. One commenter cited data which indicate that lead emissions from lead-acid battery manufacturer accounted for only about 0.32 percent of industrial lead emissions or about 0.014 percent of total nationwide lead emissions in 1975.

It is acknowledged that lead-acid battery plants account for a relatively small share of total nationwide atmospheric lead emissions. In 1975, about 95 percent of U.S. lead emissions resulted from the production of alkyl lead gasoline additive, the burning of leaded gasoline, and the disposal of crankcase oil from vehicles which burn leaded gasoline. These emissions will be reduced substantially as the use of alkyl lead gasoline additives is curtailed. Another 1 percent of nationwide lead emissions is from mining and smelting operations, which are generally located in remote areas. However, lead-acid battery plants are generally located in urban areas, near the markets for their batteries. Ambient lead levels are already high in many of these places, often exceeding the NAAQS for lead. In light of the dangerous levels of lead in the ambient air surrounding many of the projected sites for new, modified, and reconstructed facilities, the Agency believes that additional emissions from lead-acid battery manufacture are significant. As a result, lead emissions from aggregated lead-acid battery manufacture, though smaller than emissions from some of the other sources, do contribute significantly to air pollution which may reasonably be anticipated to endanger public health or welfare. Therefore, the Administrator considers the development of new source performance standards for this industry to be justified.

Several commenters recommended that the grid casting facility be removed from the list of affected facilities. According to EPA estimates, grid casting accounts for about 3.2 percent of overall uncontrolled battery plant lead emissions. The commenters stated that it is unreasonable to require sources to control facilities generating such a small percentage of total plant emissions.

Lead-acid battery plants are major lead emitters, and EPA dispersion calculations show that the ambient lead standard could be exceeded in the area around a plant which controls emissions to the extent required to meet typical SIP particulate regulations. Grid casting, while accounting for only about 5 percent of emissions for a plant with such controls, can be controlled with lead reclamation by available technology at a cost which is similar to the cost of controlling larger sources in

the plant. Of the 30¢ per battery cost impact of the standards for a typical plant, approximately 4¢ per battery can be attributed to grid casting control. Therefore, grid casting emissions are regulated under the promulgated standards.

Legal Considerations

Several commenters stated that, because a national ambient air quality standard for lead has been established, new source performance standards regulating lead emissions would be redundant and unnecessary.

It should be noted that the purposes of standards of performance for new sources promulgated under Section 111 of the Clean Air Act differ from the purposes of national ambient air quality standards, which are promulgated under Section 109 of the Act. National ambient air quality standards establish ambient pollutant concentration target ceilings which are to be attained and maintained for the protection of the public health or welfare.

New source performance standards promulgated under Section 111 of the Clean Air Act are not designed to achieve any specific air quality levels. Congress clearly intended that new source performance standards regulate Section 108 pollutants in addition to other air pollutants, since a key purpose of Section 111 is to establish nationally applicable emission limits for new sources, thus preventing any state from attracting industry by adopting lenient environmental standards. Congress expressed a number of other reasons for requiring the setting of new source performance standards. Because the national ambient air quality standards create air quality ceilings which are not to be exceeded, new source performance standards enhance the potential for long term growth. Also, new source performance standards may help achieve long-term cost savings by avoiding the need for expensive retrofitting when pollution ceilings may be reduced in the future. Finally, the standard-setting process should create incentives for improved technology. Therefore, because the purposes of ambient air quality standards are different from the purposes of new source performance standards, promulgation of an NSPS to control emissions from lead-acid battery plants of a pollutant for which there exists an NAAQS is neither redundant nor unnecessary.

Test Methods and Monitoring

Reference Method 12—A number of commenters felt that Reference Method 12 was cumbersome and recommended the development of a simpler screening method. The commenters stated that a battery plant may have as many as two dozen stacks and that, at an average cost of $6000 per stack test, the cost of testing an entire plant could be extremely high.

Because controlled emission levels for most facilities are expected to be near the emission limits for facilities affected by the regulation, a screening method less accurate than Method 12 would generally not be suitable for determining compliance with the lead-acid battery manufacture regulation. The cost of compliance testing using Method 12 was discussed in the BID for the proposed standards and is considered reasonable. For plants where a number of stacks must be tested, the per plant costs of conducting performance tests using Method 12 are not expected to be as high as the commenters anticipated. Although existing plants often have a large number of stacks, it is expected that for newly constructed, modified, or reconstructed plants or facilities emissions will be ducted to a small number of stacks. The estimate of $6,000 per stack for a compliance test applies only for plants where a small number of stacks are to be tested. For plants with a large number of stacks, the cost per stack could decrease significantly. In addition, the general provisions applicable to all new source performance standards allow for the use of an alternative method where the Administrator determines that the results would be adequate for indicating whether a specific source is in compliance [40 CFR 60.8(b)].

One commenter recommended that the minimum sampling time for Method 12 be extended. Another stated that the minimum sampling time for grid casting in the proposed regulation was too long.

For tests with Method 12, the mimimum amount of lead needed for good sample recovery and analysis is 100 μg. The mimimum sampling rates and times insure that enough lead will be collected. For grid casting, the minimum sampling time has been changed from 180 minutes, in the proposed regulation, to 60 minutes, in the promulgated action. The change reflects the alteration in the standard for grid casting.

Reference Method 9—Two commenters expressed concern that Method 9 is not accurate enough to be used to enforce a standard of 0 percent opacity. One commenter stated that it is difficult to discern the difference between 0 percent opacity and 1 percent opacity for a given reading.

No single reading is made to the nearest percent; rather, readings are to be recorded to the nearest 5 percent opacity and averaged over a period of 6 minutes (24 readings). For this regulation, the 6-minute average opacity figure is to be rounded to the nearest whole number. The opacity standard for lead-acid battery manufacture is based on opacity data taken for operating facilities.

Reporting and Recordkeeping

A number of commenters contended that the proposed pressure drop monitoring and recording requirement for control systems would not serve to insure proper operation and maintenance of fabric filters. The commenters pointed out that a leak in a fabric filter would not result in a measurable difference in the pressure drop across the filter. One commenter suggested that the pressure drop monitoring requirement be replaced by an opacity monitoring requirement. Another commenter suggested that the pressure drop requirement be replaced by a requirement of visible inspection of bags for leaks.

Based on the arguments presented by these commenters, it is agreed that proposed pressure monitoring requirement for fabric filters would not serve its intended purpose. This requirement has been eliminated. However, pressure drop is considered to be a good indicator of proper operation and maintenance for scrubbers. Therefore the pressure drop monitoring and recording requirement for scrubbers has been retained.

The pressure drop monitoring requirement for fabric filters has not been replaced by another monitoring requirement. The cost of opacity monitoring equipment may in some cases be comparable to the cost of emission control systems for lead-acid battery manufacturing facilities. This cost is considered unreasonable. Although periodic visual inspection of bags would provide an indication of bag integrity, visual inspection records would not be useful to the EPA in the enforcement of the promulgated standards.

A number of commenters stated that while pressure drop monitoring is useful for scrubbers, continuous recording of pressure drop would be unnecessary and expensive. Some commenters questioned whether a device which cyclically monitors the pressure drop across several emission control systems would be considered a continuous recorder for the systems. These commenters also asked how often such a recorder would have to monitor the pressure drop across a particular control

device to be considered a continuous recorder for that device. One commenter suggested the substitution of periodic manual recording of pressure drop for the continuous pressure drop recording requirement. Another commenter questioned the purpose of requiring pressure drop monitoring and recording without a requirement that action be taken at certain pressure drop levels.

The purpose of pressure drop recording requirements is to allow the verification by EPA that emission control systems are properly operated and maintained. The costs of pressure drop recording devices were analyzed and are considered reasonable. The sort of device that would satisfy the recording requirement has been clarified in the promulgated standards. It has been determined that for the purposes of these standards a device which records pressure drop at least every 15 minutes would accomplish the same purposes as a continuous pressure drop recorder. Manual pressure drop recording would not insure proper operation and maintenance of a control system.

Other Considerations

A number of commenters recommended that the definition of the paste mixing facility be expanded to include operations ancillary to paste mixing, such as lead oxide storage, conveying, weighing, and metering operations; paste handling and cooling operations; and plate pasting, takeoff, cooling, and drying operations. The commenters stated that paste mixing and operations ancillary to the paste mixing operation are generally interdependent, in that one operation is not run without the others. Also, emissions from paste mixing and ancillary operations are often ducted to the same control device. The commenters were concerned that a minor change made to a paste mixing machine could cause the machine to be affected by the promulgated standards under the reconstruction provisions applicable to all new source performance standards. They stated that the recommended change would avoid this possibility.

These comments are considered reasonable. The operations ancillary to paste mixing were not intended to be considered separate facilities; and the definition recommended by the commenters for the paste mixing facility is considered an appropriate definition. Therefore, the recommendation of the commenters has been adopted in the promulgated regulation. Because the emission limit which was proposed for paste mixing is identical to that which was proposed for operations ancillary to paste mixing ("other lead-emitting operations"), this change is not expected to affect the environmental impacts of the standards.

Docket

The docket is an organized and complete file of all the information considered by EPA in the development of this rulemaking. The docket is a dynamic file, since material is added throughout the rulemaking development. The docketing system is intended to allow members of the public and industries involved to readily identify and locate documents so that they can intelligently and effectively participate in the rulemaking process. Along with the statement of basis and purpose of the promulgated standards and EPA responses to significant comments, the contents of the docket will serve as the record in case of judicial review (Section 307(d)(7)(A)).

Miscellaneous

The effective date of this regulation is April 16, 1982. Section 111 of the Clean Air Act provides that standards of performance or revisions thereof become effective upon promulgation and apply to affected facilities, construction or modification of which was commenced after the date of proposal (January 14, 1980).

As prescribed by Section 111, the promulgation of these standards was preceded by the Administrator's determination (40 CFR 60.16, 44 FR 49222, August 21, 1979) that these sources contribute significantly to air pollution which may reasonably be anticipated to endanger public health or welfare and by proposal of the standards on January 14, 1980 (45 FR 2790). In accordance with Section 117 of the Act, publication of these promulgated standards was preceded by consultation with appropriate advisory committees, independent experts, and Federal departments and agencies.

It should be noted that standards of performance for new sources established under Section 111 of the Clean Air Act reflect:

> * * * application of the best technological system of continuous emission reduction which (taking into consideration the cost of achieving such emission reduction, any nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated (Section 111(a)(1)).

Although there may be emission control technology available that can reduce emissions below those levels required to comply with standards of performance, this technology might not be selected as the basis of standards of performance because of costs associated with its use. Accordingly, standards of performance should not be viewed as the ultimate in achievable emission control. In fact, the Act requires (or has the potential for requiring) the imposition of a more stringent emission standard in several situations.

For example, applicable costs do not necessarily play as prominent a role in determining the "lowest achievable emissions rate" for new or modified sources located in nonattainment areas, i.e., those areas where statutorily mandated health and welfare standards are being violated. In this respect, Section 173 of the Act requires that a new or modified source constructed in an area which exceeds the National Ambient Air Quality Standard (NAAQS) must reduce emissions to the level which reflects the "lowest achievable emission rate" (LAER), as defined in Section 171(3), for such category of source. The statute defines LAER as that rate of emission which reflects:

> (A) The most stringent emission limitation which is contained in the implementation plan of any State for such class or category of source, unless the owner or operator of the proposed source demonstrates that such limitations are not achievable, or
>
> (B) The most stringent emission limitation which is achieved in practice by such class or category of source, whichever is more stringent.

In no event can the emission rate exceed any applicable new source performance standard (Sec. 171(3)).

A similar situation may arise under the prevention of significant deterioration of air quality provisions of the Act (Part C). These provisions require that certain sources (referred to in Section 169(1)) employ "best available control technology" (as defined in Section 169(3)) for all pollutants regulated under the Act. Best available control technology (BACT) must be determined on a case-by-case basis, taking energy, environmental and economic impacts, and other costs into account. In no event may the application of BACT result in emissions of any pollutants which will exceed the emissions allowed by any applicable standard established pursuant to Section 111 (or 112) of the Act.

In any event, State implementation plans (SIPs) approved or promulgated under Section 110 of the Act must provide for the attainment and maintenance of National Ambient Air Quality Standards designed to protect public health and welfare. For this purpose, SIPs must in some cases require greater emission reductions than

those required by standards of performance for new sources.

Finally, States are free under Section 116 of the Act to establish even more stringent emission limits than those established under Section 111 or those necessary to attain or maintain the NAAQS under Section 110. Accordingly, new sources may in some cases be subject to limitations more stringent than EPA's standards of performance under Section 111, and prospective owners and operators of new sources should be aware of this possibility in planning for such facilities.

This regulation will be reviewed 4 years from the date of promulgation as required by the Clean Air Act. This review will include an assessment of such factors as the need for integration with other programs, the existence of alternative methods, enforceability, improvements in emission control technology, and reporting requirements. The reporting requirements in the regulation will be reviewed as required under EPA's sunset policy for reporting requirements in regulations.

Under Executive Order 12291, EPA must judge whether a regulation is "Major" and therefore subject to the requirement of a Regulatory Impact Analysis. This regulation is not Major because: (1) The national annualized compliance costs, including capital charges resulting from the standards total less than $100 million; (2) the standards do not cause a major increase in prices or production costs; and (3) the standards do not cause significant adverse effects on domestic competition, employment, investment, productivity, innovation or competition in foreign markets. This regulation was submitted to the Office of Management and Budget (OMB) for review as required by Executive Order 12291.

Section 317 of the Clean Air Act requires the Administrator to prepare an economic impact assessment for any new source standard of performance promulgated under Section 111(b) of the Act. An economic impact assessment was prepared for the promulgated regulations and for other regulatory alternatives. All aspects of the assessment were considered in the formulation of the promulgated standards to insure that the standards would represent the best system of emission reduction considering costs. The economic impact assessment is included in the background information document.

List of Subjects in 40 CFR Part 60

Air pollution control, Aluminum, Ammonium sulfate plants, Cement industry, Coal, Copper, Electric power-plants, Glass and glass products, Grains, Intergovernmental relations, Iron, Lead, Metals, Motor vehicles, Nitric acid plants, Paper and paper products industry, Petroleum, Phosphate, Sewage disposal, Steel, Sulfuric acid plants, Waste treatment and disposal, Zinc.

Dated: April 9, 1982.

Note.—The regulation does not involve a "collection of information" as defined under the Paperwork Reduction Act of 1980. Therefore, the provisions of the Paperwork Reduction Act applicable to collections of information do not apply to this regulation.

Anne M. Gorsuch,

Administrator.

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

40 CFR Part 60 is amended by adding a new Subpart KK and by adding a new reference method to Appendix A as follows:

1. A new subpart is added as follows:

Subpart KK—Standards of Performance for Lead-Acid Battery Manufacturing Plants

Sec.

Authority: Sec. 111, 301(a) of the Clean Air Act as amended (42 U.S.C. 7411, 7601(a)), and additional authority as noted below.

Subpart KK—Standards of Performance for Lead-Acid Battery Manufacturing Plants

§ 60.370 Applicability and designation of affected facility.

(a) The provisions of this subpart are applicable to the affected facilities listed in paragraph (b) of this section at any lead-acid battery manufacturing plant that produces or has the design capacity to produce in one day (24 hours) batteries containing an amount of lead equal to or greater than 5.9 Mg (6.5 tons).

(b) The provisions of this subpart are applicable to the following affected facilities used in the manufacture of lead-acid storage batteries:

(1) Grid casting facility.

(2) Paste mixing facility.

(3) Three-process operation facility.

(4) Lead oxide manufacturing facility.

(5) Lead reclamation facility.

(6) Other lead-emitting operations.

(c) Any facility under paragraph (b) of this section the construction or modification of which is commenced after January 14, 1980, is subject to the requirements of this subpart.

§ 60.371 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in Subpart A of this part.

(a) "Grid casting facility" means the facility which includes all lead melting pots and machines used for casting the grid used in battery manufacturing.

(b) "Lead-acid battery manufacturing plant" means any plant that produces a storage battery using lead and lead compounds for the plates and sulfuric acid for the electrolyte.

(c) "Lead oxide manufacturing facility" means a facility that produces lead oxide from lead, including product recovery.

(d) "Lead reclamation facility" means the facility that remelts lead scrap and casts it into lead ingots for use in the battery manufacturing process, and which is not a furnace affected under Subpart L of this part.

(e) "Other lead-emitting operation" means any lead-acid battery manufacturing plant operation from which lead emissions are collected and ducted to the atmosphere and which is not part of a grid casting, lead oxide manufacturing, lead reclamation, paste mixing, or three-process operation facility, or a furnace affected under Subpart L of this part.

(f) "Paste mixing facility" means the facility including lead oxide storage, conveying, weighing, metering, and charging operations; paste blending, handling, and cooling operations; and plate pasting, takeoff, cooling, and drying operations.

(g) "Three-process operation facility" means the facility including those processes involved with plate stacking, burning or strap casting, and assembly of elements into the battery case.

§ 60.372 Standards for lead.

(a) On and after the date on which the performance test required to be conducted by § 60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere:

(1) From any grid casting facility any gases that contain lead in excess of 0.40 milligram of lead per dry standard cubic meter of exhaust (0.000176 gr/dscf).

(2) From any paste mixing facility any gases that contain in excess of 1.00 milligram of lead per dry standard cubic meter of exhaust (0.00044 gr/dscf).

(3) From any three-process operation facility any gases that contain in excess of 1.00 milligram of lead per dry

standard cubic meter of exhaust (0.00044 gr/dscf).

(4) From any lead oxide manufacturing facility any gases that contain in excess of 5.0 milligrams of lead per kilogram of lead feed (0.010 lb/ton).

(5) From any lead reclamation facility any gases that contain in excess of 4.50 milligrams of lead per dry standard cubic meter of exhaust (0.00198 gr/dscf).

(6) From any other lead-emitting operation any gases that contain in excess of 1.00 milligram per dry standard cubic meter of exhaust (0.00044 gr/dscf).

(7) From any affected facility other than a lead reclamation facility any gases with greater than 0 percent opacity (measured according to Method 9 and rounded to the nearest whole percentage).

(8) From any lead reclamation facility any gases with greater than 5 percent opacity (measured according to Method 9 and rounded to the nearest whole percentage).

(b) When two or more facilities at the same plant (except the lead oxide manufacturing facility) are ducted to a common control device, an equivalent standard for the total exhaust from the commonly controlled facilities shall be determined as follows:

$$S_e = \sum_{a=1}^{N} S_a(Q_{sd_a}/Q_{sd_T})$$

Where:

S_e = is the equivalent standard for the total exhaust stream.

S_a = is the actual standard for each exhaust stream ducted to the control device.

N = is the total number of exhaust streams ducted to the control device.

Q_{sd_a} = is the dry standard volumetric flow rate of the effluent gas stream from each facility ducted to the control device.

Q_{sd_T} = is the total dry standard volumetric flow rate of all effluent gas streams ducted to the control device.

§ 60.373 Monitoring of emissions and operations.

The owner or operator of any lead-acid battery manufacturing facility subject to the provisions of this subpart and controlled by a scrubbing system(s) shall install, calibrate, maintain, and operate a monitoring device(s) that measures and records the pressure drop across the scrubbing system(s) at least once every 15 minutes. The monitoring device shall have an accuracy of ±5 percent over its operating range.

(Sec. 114 of the Clean Air Act as amended (42 U.S.C. 7414))

§ 60.374 Test methods and procedures.

(a) Reference methods in Appendix A of this part, except as provided under § 60.8(b), shall be used to determine compliance according to § 60.8 as follows:

(1) Method 12 for the measurement of lead concentrations,

(2) Method 1 for sample and velocity traverses,

(3) Method 2 for velocity and volumetric flow rate, and

(4) Method 4 for stack gas moisture.

(b) For Method 12, the sampling time for each run shall be at least 60 minutes and the sampling rate shall be at least 0.85 dscm/h (0.53 dscf/min), except that shorter sampling times, when necessitated by process variables or other factors, may be approved by the Administrator.

(c) When different operations in a three-process operation facility are ducted to separate control devices, the lead emission concentration from the facility shall be determined using the equation:

$$C_{PbT} = \sum_{a=1}^{N} (C_{Pb_a} Q_{sd_a}/Q_{sd_T})$$

Where:

C_{Pb_T} = is the facility emission concentration for the entire facility.

N = is the number of control devices to which separate operations in the facility are ducted.

C_{Pb_a} = is the emission concentration from each control device.

Q_{sd_a} = is the dry standards volumetric flow rate of the effluent gas stream from each control device.

Q_{sd_t} = is the total dry standard volumetric flow rate from all of the control devices.

(d) For lead oxide manufacturing facilities, the average lead feed rate to a facility, expressed in kilograms per hour, shall be determined for each test run as follows:

(1) Calculate the total amount of lead charged to the facility during the run by multiplying the number of lead pigs (ingots) charged during the run by the average mass of a pig in kilograms or by another suitable method.

(2) Divide the total amount of lead charged to the facility during the run by the duration of the run in hours.

(e) Lead emissions from lead oxide manufacturing facilities, expressed in milligrams per kilogram of lead charged, shall be determined using the following equation:

$$E_{Pb} = C_{Pb} Q_{sd}/F$$

Where:

E_{Pb} = is the lead emission rate from the facility in milligrams per kilogram of lead charged.

C_{Pb} = is the concentration of lead in the exhaust stream in milligrams per dry standard cubic meter as determined according to paragraph (a)(1) of this section.

Q_{sd} = is the dry standard volumetric flow rate in dry standard cubic meters per hour as determined according to paragraph (a)(3) of this section.

F = is the lead feed rate to the facility in kilograms per hour as determined according to paragraph (d) of this section.

(Sec. 114 of the Clean Air Act as amended (42 U.S.C. 7414))

2. Appendix A to Part 60 is amended by adding new Reference Method 12 as follows:

Appendix A—Reference Methods

* * * * *

Method 12. Determination of Inorganic Lead Emissions From Stationary Sources

1. *Applicability and Principle.*

1.1 Applicability. This method applies to the determination of inorganic lead (Pb) emissions from specified stationary sources only.

1.2 Principle. Particulate and gaseous Pb emissions are withdrawn isokinetically from the source and collected on a filter and in dilute nitric acid. The collected samples are digested in acid solution and analyzed by atomic absorption spectrometry using an air acetylene flame.

2. *Range, Sensitivity, Precision, and Interferences.*

2.1 Range. For a minimum analytical accuracy of ±10 percent, the lower limit of the range is 100 μg. The upper limit can be considerably extended by dilution.

2.2 Analytical Sensitivity. Typical sensitivities for a 1-percent change in absorption (0.0044 absorbance units) are 0.2 and 0.5 μg Pb/ml for the 217.0 and 283.3 nm lines, respectively.

2.3 Precision. The within-laboratory precision, as measured by the coefficient of variation ranges from 0.2 to 9.5 percent relative to a run-mean concentration. These values were based on tests conducted at a gray iron foundry, a lead storage battery manufacturing plant, a secondary lead smelter, and a lead recovery furnace of an alkyl lead manufacturing plant. The concentrations encountered during these tests ranged from 0.61 to 123.3 mg Pb/m³.

2.4 Interferences. Sample matrix effects may interfere with the analysis for Pb by flame atomic absorption. If this interference is suspected, the analyst may confirm the presence of these matrix effects and frequently eliminate the interference by using the Method of Standard Additions.

High concentrations of copper may interfere with the analysis of Pb at 217.0 nm. This interference can be avoided by analyzing the samples at 283.3 nm.

3. *Apparatus.*

3.1 Sampling Train. A schematic of the sampling train is shown in Figure 12–1; it is similar to the Method 5 train. The sampling train consists of the following components:

3.1.1 Probe Nozzle, Probe Liner, Pitot Tube, Differential Pressure Gauge, Filter Holder, Filter Heating System, Metering System, Barometer, and Gas Density Determination Equipment. Same as Method 5, Sections 2.1.1 to 2.1.6 and 2.1.8 to 2.1.10, respectively.

3.1.2 Impingers. Four impingers connected in series with leak-free ground glass fittings or any similar leak-free noncontaminating fittings. For the first, third, and fourth impingers, use the Greenburg-Smith design, modified by replacing the tip with a 1.3 cm (½ in.) ID glass tube extending to about 1.3 cm (½ in.) from the bottom of the flask. For the second impinger, use the Greenburg-Smith design with the standard tip. Place a thermometer, capable of measuring temperature to within 1°C (2°F) at the outlet of the fourth impinger for monitoring purposes.

BILLING CODE 6560-50-M

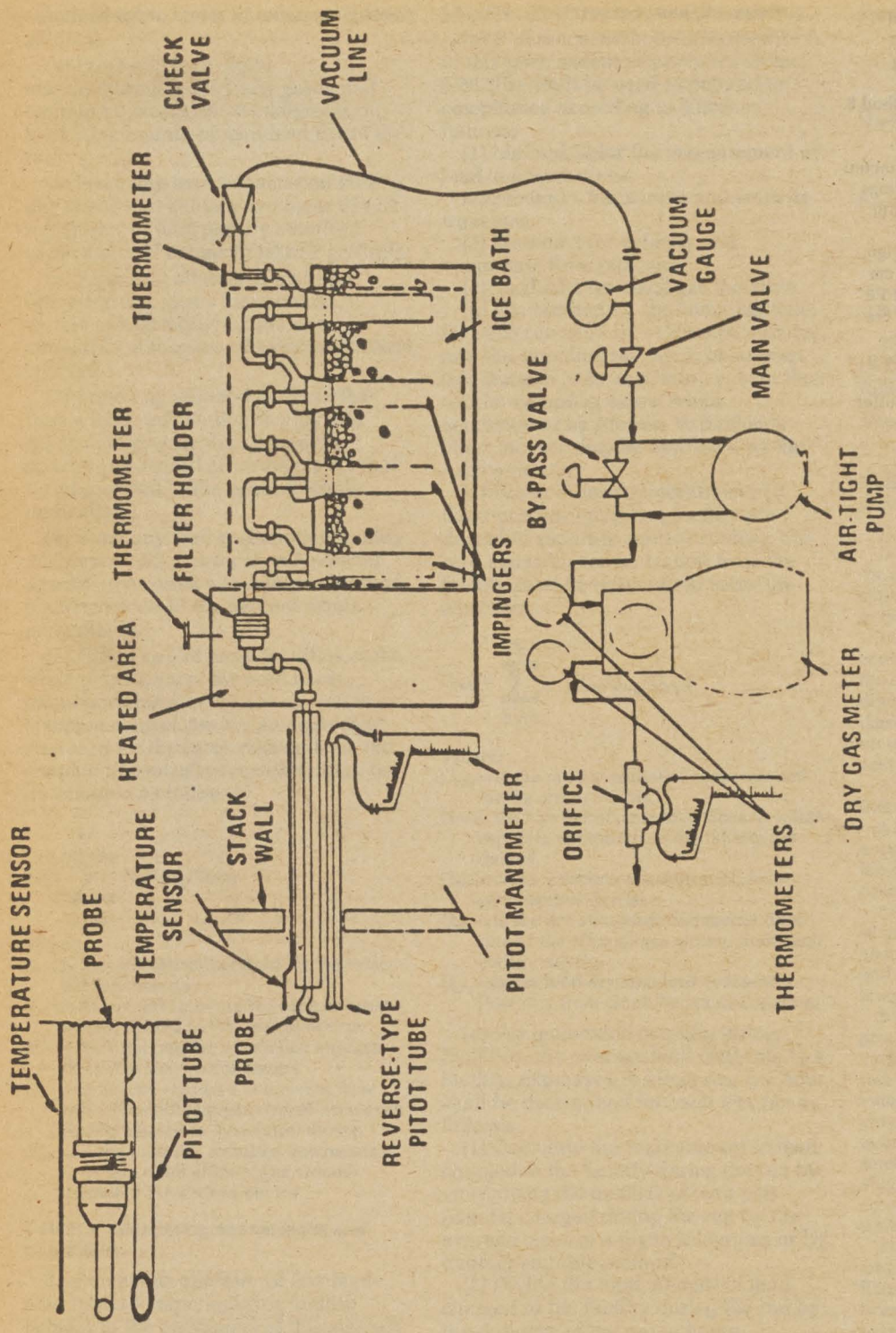

Figure 12-1. Inorganic lead sampling train.

BILLING CODE 6560-50-C

3.2 Sample Recovery. The following items are needed:

3.2.1 Probe-Liner and Probe-Nozzle Brushes, Petri Dishes, Plastic Storage Containers, and Funnel and Rubber Policeman. Same as Method 5, Sections 2.2.1, 2.2.4, 2.2.6, and 2.2.7, respectively.

3.2.2 Wash Bottles. Glass (2).

3.2.3 Sample Storage Containers. Chemically resistant, borosilicate glass bottles, for 0.1 nitric acid (HNO_3) impinger and probe solutions and washes, 1000-ml. Use screw-cap liners that are either rubber-backed Teflon* or leak-free and resistant to chemical attack by 0.1 N HNO_3. (Narrow mouth glass bottles have been found to be less prone to leakage.)

3.2.4 Graduated Cylinder and/or Balance. To measure condensed water to within 2 ml or 1 g. Use a graduated cylinder that has a minimum capacity of 500 ml, and subdivisions no greater than 5 ml. (Most laboratory balances are capable of weighing to the nearest 0.5 g or less.)

3.2.5 Funnel. Glass, to aid in sample recovery.

3.3 Analysis. The following equipment is needed:

3.3.1 Atomic Absorption Spectrophotometer. With lead hollow cathode lamp and burner for air/acetylene flame.

3.3.2 Hot Plate.

3.3.3 Erlenmeyer Flasks. 125-ml, 24/40 $.

3.3.4 Membrane Filters. Millipore SCWPO 4700 or equivalent.

3.3.5 Filtration Apparatus. Millipore vacuum filtration unit, or equivalent, for use with the above membrane filter.

3.3.6 Volumetric Flasks. 100-ml, 250-ml, and 1000-ml.

4. *Reagents.*

4.1 Sampling. The reagents used in sampling are as follows:

4.1.1 Filter. Gelman Spectro Grade, Reeve Angel 934 AH, MSA 1106 BH, all with lot assay for Pb, or other high-purity glass fiber filters, without organic binder, exhibiting at least 99.95 percent efficiency (<0.05 percent penetration) on 0.3 micron dioctyl phthalate smoke particles. Conduct the filter efficiency test using ASTM Standard Method D 2986–71 or use test data from the supplier's quality control program.

4.1.2 Silica Gel, Crushed Ice, and Stopcock Grease. Same as Method 5, Section 3.1.2, 3.1.4, and 3.1.5, respectively.

4.1.3 Water. Deionized distilled, to conform to ASTM Specification D 1193–74, Type 3. If high concentrations of organic matter are not expected to be present, the analyst may delete the potassium permanganate test for oxidizable organic matter.

4.1.4 Nitric Acid, 0.1 N. Dilute 6.5 ml of concentrated HNO_3 to 1 liter with deionized distilled water. (It may be desirable to run blanks before field use to eliminate a high blank on test samples.)

4.2 Pretest Preparation. 6 N HNO_3 is needed. Dilute 390 ml of concentrated HNO_3 to 1 liter with deionized distilled water.

*Mention of trade names or specific products does not constitute endorsement by the U.S. Environmental Protection Agency.

4.3 Sample Recovery. 0.1 N HNO_3 (same as 4.1.4 above) is needed for sample recovery.

4.4 Analysis. The following reagents are needed for analysis (use ACS reagent grade chemicals or equivalent, unless otherwise specified):

4.4.1 Water. Same as 4.1.3 above.

4.4.2 Nitric Acid. Concentrated.

4.4.3 Nitric Acid, 50 percent (V/V). Dilute 500 ml of concentrated HNO_3 to 1 liter with deionized distilled water.

4.4.4 Stock Lead Standard Solution, 1000 μg Pb/ml. Dissolve 0.1598 g of lead nitrate [$Pb(NO_3)_2$] in about 60 ml of deionized distilled water, add 2 ml concentrated HNO_3, and dilute to 100 ml with deionized distilled water.

4.4.5 Working Lead Standards. Pipet 0.0, 1.0, 2.0, 3.0, 4.0, and 5.0 ml of the stock lead standard solution (4.4.4) into 250-ml volumetric flasks. Add 5 ml of concentrated HNO_3 to each flask and dilute to volume with deionized distilled water. These working standards contain 0.0, 4.0, 8.0, 12.0, 16.0, and 20.0 μg Pb/ml, respectively. Prepare, as needed, additional standards at other concentrations in a similar manner.

4.4.6 Air. Suitable quality for atomic absorption analysis.

4.4.7 Acetylene. Suitable quality for atomic absorption analysis.

4.4.8 Hydrogen Peroxide, 3 percent (V/V). Dilute 10 ml of 30 percent H_2O_2 to 100 ml with deionized distilled water.

5. *Procedure.*

5.1 Sampling. The complexity of this method is such that, in order to obtain reliable results, testers should be trained and experienced with the test procedures.

5.1.1 Pretest Preparation. Follow the same general procedure given in Method 5, Section 4.1.1, except the filter need not be weighed.

5.1.2 Preliminary Determinations. Follow the same general procedure given in Method 5, Section 4.1.2.

5.1.3 Preparation of Collection Train. Follow the same general procedure given in Method 5, Section 4.1.3, except place 100 ml of 0.1 HNO_3 in each of the first two impingers, leave the third impinger empty, and transfer approximately 200 to 300 g of preweighed silica gel from its container to the fourth impinger. Set up the train as shown in Figure 12–1.

5.1.4 Leak-Check Procedures. Follow the general leak-check procedures given in Method 5, Sections 4.1.4.1. (Pretest Leak-Check), 4.1.4.2 (Leak-Checks During the Sample Run), and 4.1.4.3 (Post-Test Leak-Check).

5.1.5 Sampling Train Operation. Follow the same general procedure given in Method 5, Section 4.1.5. For each run, record the data required on a data sheet such as the one shown in EPA Method 5, Figure 5–2.

5.1.6 Calculation of Percent Isokinetic. Same as Method 5, Section 4.1.6.

5.2 *Sample Recovery.* Begin proper cleanup procedure as soon as the probe is removed from the stack at the end of the sampling period.

Allow the probe to cool. When it can be safely handled, wipe off all external particulate matter near the tip of the probe nozzle and place a cap over it. Do not cap off the probe tip tightly while the sampling train is cooling down as this would create a vacuum in the filter holder, thus drawing liquid from the impingers into the filter.

Before moving the sampling train to the cleanup site, remove the probe from the sapling train, wipe off the silicone grease, and cap the open outlet of the probe. Be careful not to lose any condensate that might be present. Wipe off the silicone grease from the glassware inlet where the probe was fastened and cap the inlet. Remove the umbilical cord from the last impinger and cap the impinger. The tester may use ground-glass stoppers, plastic caps, or serum caps to close these openings.

Transfer the probe and filter-impinger assembly to a cleanup area, which is clean and protected from the wind so that the chances of contaminating or losing the sample are minimized.

Inspect the train prior to and during disassembly and note any abnormal conditions. Treat the samples as follows:

5.2.1 *Container No. 1* (Filter). Carefully remove the filter from the filter holder and place it in its identified petri dish container. If it is necessary to fold the filter, do so such that the sample-exposed side is inside the fold. Carefully transfer to the petri dish any visible sample matter and/or filter fibers that adhere to the filter holder gasket by using a dry Nylon bristle brush and/or a sharp-edged blade. Seal the container.

5.2.2 *Container No. 2* (Probe). Taking care that dust on the outside of the probe or other exterior surfaces does not get into the sample, quantitatively recover sample matter or any condensate from the probe nozzle, probe fitting, probe liner, and front half of the filter holder by washing these components with 0.1 N HNO_3 and placing the wash into a glass sample storage container. Measure and record (to the nearest 2-ml) the total amount of 0.1 N HNO_3 used for each rinse. Perform the 0.1 N HNO^3 rinses as follows:

Carefully remove the probe nozzle and rinse the inside surfaces with 0.1 N HNO^3 from a wash bottle while brushing with a stainless steel, Nylon-bristle brush. Brush until the 0.1 N HNO_3 rinse shows no visible particles, then make a final rinse of the inside surface.

Brush and rinse with 0.1 N HNO_3 the inside parts of the Swagelok fitting in a similar way until no visible particles remain.

Rinse the probe liner with 0.1 N HNO_3. While rotating the probe so that all inside surfaces will be rinsed with 0.1 N HNO_3, tilt the probe and squirt 0.1 N HNO_3 into its upper end. Let the 0.1 N HNO_3 drain from the lower end into the sample container. The tester may use a glass funnel to aid in transferring liquid washes to the container. Follow the rinse with a probe brush. Hold the probe in an inclined position, squirt 0.1 N HNO_3 into the upper end of the probe as the probe brush is being pushed with a twisting action through the probe; hold the sample container underneath the lower end of the probe and catch any 0.1 N HNO_3 and sample matter that is brushed from the probe. Run the brush through the probe three times or more until no visible sample matter is carried out with the 0.1 N HNO_3 and none remains on the probe liner on visual inspection. With

stainless steel or other metal probes, run the brush through in the above prescribed manner at least six times, since metal probes have small crevices in which sample matter can be entrapped. Rinse the brush with 0.1 N HNO_3 and quantitatively collect these washings in the sample container. After the brushing make a final rinse of the probe as described above.

It is recommended that two people clean the probe to minimize loss of sample. Between sampling runs, keep brushes clean and protected from contamination.

After insuring that all joints are wiped clean of silicone grease, brush and rinse with 0.1 N HNO_3 the inside of the front half of the filter holder. Brush and rinse each suface three times or more, if needed, to remove visible sample matter. Make a final rinse of the brush and filter holder. After all 0.1 N HNO_3 washings and sample matter are collected in the sample container, tighten the lid on the sample container so that the fluid will not leak out when it is shipped to the laboratory. Mark the height of the fluid level to determine whether leakage occurs during transport. Label the container to clearly identify its contents.

5.2.3 *Container No. 3* (Silica Gel). Check the color of the indicating silica gel to determine if it has been completely spent and make a notation of its condition. Transfer the silica gel from the fourth impinger to the original container and seal. The tester may use a funnel to pour the silica gel and a rubber policeman to remove the silica gel from the impinger. It is not necessary to remove the small amount of particles that may adhere to the walls and are difficult to remove. Since the gain in weight is to be used for moisture calculations, do not use any water or other liquids to transfer the silica gel. If a balance is available in the field, the tester may follow procedure for Container No. 3 under Section 5.4 (Analysis).

5.2.4 *Container No. 4* (Impingers). Due to the large quantity of liquid involved, the tester may place the impinger solutions in several containers. Clean each of the first three impingers and connecting glassware in the following manner:

1. Wipe the impinger ball joints free of silicone grease and cap the joints.

2. Rotate and agitate each impinger, so that the impinger contents might serve as a rinse solution.

3. Transfer the contents of the impingers to a 500-ml graduated cylinder. Remove the outlet ball joint cap and drain the contents through this opening. Do not separate the impinger parts (inner and outer tubes) while transferring their contents to the cylinder. Measure the liquid volume to within ±2 ml. Alternatively, determine the weight of the liquid to within ±0.5 g. Record in the log the volume or weight of the liquid present, along with a notation of any color or film observed in the impinger catch. The liquid volume or weight is needed, along with the silica gel data, to calculate the stack gas moisture content (see Method 5, Figure 5–3).

4. Transfer the contents to Container No. 4.

5. Note: In steps 5 and 6 below, measure and record the total amount of 0.1 N HNO_3 used for rinsing. Pour approximately 30 ml of 0.1 N HNO_3 into each of the first three impingers and agitate the impingers. Drain the 0.1 N HNO_3 through the outlet arm of each impinger into Container No. 4. Repeat this operation a second time; inspect the impingers for any abnormal conditions.

6. Wipe the ball joints of the glassware connecting the impingers free of silicone grease and rinse each piece of glassware twice with 0.1 N HNO_3; transfer this rinse into Container No. 4. (*Do not rinse or brush the glass-fritted filter support.*) Mark the height of the fluid level to determine whether leakage occurs during transport. Label the container to clearly identify its contents.

5.2.5 Blanks. Save 200 ml of the 0.1 N HNO_3 used for sampling and cleanup as a blank. Take the solution directly from the bottle being used and place into a glass sample container labeled "0.1 N HNO_3 blank."

5.3 Sample Preparation.

5.3.1 *Container No. 1* (Filter). Cut the filter into strips and transfer the strips and all loose particulate matter into a 125-ml Erlenmeyer flask. Rinse the petri dish with 10 ml of 50 percent HNO_3 to insure a quantitative transfer and add to the flask. (Note: If the total volume required in Section 5.3.3 is expected to exceed 80 ml, use a 250-ml Erlenmeyer flask in place of the 125-ml flask.)

5.3.2 *Containers No. 2 and No. 4* (Probe and Impingers). (Check the liquid level in Containers No. 2 and/or No. 4 and confirm as to whether or not leakage occurred during transport; note observation on the analysis sheet. If a noticeable amount of leakage had occurred, either void the sample or take steps, subject to the approval of the Administrator, to adjust the final results.) Combine the contents of Containers No. 2 and No. 4 and take to dryness on a hot plate.

5.3.3 Sample Extraction for lead. Based on the approximate stack gas particulate concentration and the total volume of stack gas sampled, estimate the total weight of particulate sample collected. Then transfer the residue from Containers No. 2 and No. 4 to the 125-ml Erlenmeyer flask that contains the filter using rubber policeman and 10 ml of 50 percent HNO_3 for every 100 mg of sample collected in the train or a minimum of 30 ml of 50 percent HNO_3 whichever is larger.

Place the Erlenmeyer flask on a hot plate and heat with periodic stirring for 30 min at a temperature just below boiling. If the sample volume falls below 15 ml, add more 50 percent HNO_3. Add 10 ml of 3 percent H_2O_2 and continue heating for 10 min. Add 50 ml of hot (80°C) deionized distilled water and heat for 20 min. Remove the flask from the hot plate and allow to cool. Filter the sample through a Millipore membrane filter or equivalent and transfer the filtrate to a 250-ml volumetric flask. Dilute to volume with deionized distilled water.

5.3.4 Filter Blank. Determine a filter blank using two filters from each lot of filters used in the sampling train. Cut each filter into strips and place each filter in a separate 125-ml Erlenmeyer flask. Add 15 ml of 50 percent HNO_3 and treat as described in Section 5.3.3 using 10 ml of 3 percent H_2O_2 and 50 ml of hot, deionized distilled water. Filter and dilute to a toal volume of 100 ml using deionized distilled water.

5.3.5 0.1 N HNO_3 Blank. Take the entire 200 ml of 0.1 N HNO_3 to dryness on a steam bath, add 15 ml of 50 percent HNO_3, and treat as described in Section 5.3.3 using 10 ml of 3 percent H_2O_2 and 50 ml of hot, deionized distilled water. Dilute to a total volume of 100 ml using deionized distilled water.

5.4 Analysis.

5.4.1 Lead Determination. Calibrate the spectrophotometer as described in Section 6.2 and determine the absorbance for each source sample, the filter blank, and 0.1 N HNO_3 blank. Analyze each sample three times in this manner. Make appropriate dilutions, as required, to bring all sample Pb concentrations into the linear absorbance range of the spectrophotometer.

If the Pb concentration of a sample is at the low end of the calibration curve and high accuracy is required, the sample can be taken to dryness on a hot plate and the residue dissolved in the appropriate volume of water to bring it into the optimum range of the calibration curve.

5.4.2 Mandatory Check for Matrix Effects on the Lead Results. The analysis for Pb by atomic absorption is sensitive to the chemical compositon and to the physical properties (viscosity, pH) of the sample (matrix effects). Since the Pb procedure described here will be applied to many different sources, many sample matrices will be encountered. Thus, check (mandatory) at least one sample from each source using the Method of Additions to ascertain that the chemical composition and physical properties of the sample did not cause erroneous analytical results.

Three acceptable "Method of Additions" procedures are described in the General Procedure Section of the Perkin Elmer Corporation Manual (see Citation 9.1). If the results of the Method of Additions procedure on the source sample do not agree within 5 percent of the value obtained by the conventional atomic absorption analysis, then the tester must reanalyze all samples from the source using the Method of Additions procedure.

5.4.3 *Container No. 3* (Silica Gel). The tester may conduct this step in the field. Weigh the spent silica gel (or silica gel plus impinger) to the nearest 0.5 g; record this weight.

6. *Calibration.*

Maintain a laboratory log of all calibrations.

6.1 Sampling Train Calibration. Calibrate the sampling train components according to the indicated sections of Method 5: Probe Nozzle (Section 5.1); Pitot Tube (Section 5.2); Metering System (Section 5.3); Probe Heater (Section 5.4); Temperature Gauges (Section 5.5); Leak-Check of the Metering System (Section 5.6); and Barometer (Section 5.7).

6.2 Spectrophotometer. Measure the absorbance of the standard solutions using the instrument settings recommended by the spectrophotometer manufacturer. Repeat until good agreement (±3 percent) is obtained between two consecutive readings. Plot the absorbance (y-axis) versus concentration in μg Pb/ml (x-axis). Draw or compute a straight line through the linear portion of the curve. Do not force the calibration curve through zero, but if the curve does not pass through the origin or at least lie closer to the origin than ±0.003

absorbance units, check for incorrectly prepared standards and for curvature in the calibration curve.

To determine stability of the calibration curve, run a blank and a standard after every five samples and recalibrate, as necessary.

7. *Calculations.*

7.1 Dry Gas Volume. Using the data from this test, calculate $V_{m(std)}$, the total volume of dry gas metered corrected to standard conditions (20°C and 760 mm Hg), by using Equation 5–1 of Method 5. If necessary, adjust $V_{m(std)}$ for leakages as outlined in Section 6.3 of Method 5. See the field data sheet for the average dry gas meter temperature and average orifice pressure drop.

7.2 Volume of Water Vapor and Moisture Content. Using data obtained in this test and Equations 5–2 and 5–3 of Method 5, calculate the volume of water vapor $V_{m(std)}$) and the moisture content B_{ws} of the stack gas.

7.3 Total Lead in Source Sample. For each source sample correct the average absorbance for the contribution of the filter blank and the 0.1 N HNO_3 blank. Use the calibration curve and this corrected absorbance to determine the μg Pb concentration in the sample aspirated into the spectrophotometer. Calculate the total Pb content $C°_{Pb}$ (in μg) in the original source sample; correct for all the dilutions that were made to bring the Pb concentration of the sample into the linear range of the spectrophotometer.

7.4 Lead Concentration. Calculate the stack gas Pb concentration C_{Pb} in mg/dscm as follows:

$$C_{Pb} = K \frac{C°_{Pb}}{V_{m(std)}}$$

Where:

K = 0.001 mg/μg for metric units.

= 2.205 lb/μg for English units.

7.5 Isokinetic Variation and Acceptable Results. Same as Method 5, Sections 6.11 and 6.12, respectively. To calculate v_s, the average stack gas velocity, use Equation 2–9 of Method 2 and the data from this field test.

8. *Alternative Test Methods for Inorganic Lead.*

8.1 Simultaneous Determination of Particulate and Lead Emissions. The tester may use Method 5 to simultaneously determine Pb provided that (1) he uses acetone to remove particulate from the probe and inside of the filter holder as specified by Method 5, (2) he uses 0.1 N HNO_3 in the impingers, (3) he uses a glass fiber filter with a low Pb background, and (4) he treats and analyzes the entire train contents, including the impingers, for Pb as described in Section 5 of this method.

8.2 Filter Location. The tester may use a filter between the third and fourth impinger provided that he includes the filter in the analysis for Pb.

8.3 In-stack Filter. The tester may use an in-stack filter provided that (1) he uses a glass-lined probe and at least two impingers, each containing 100 ml of 0.1 N HNO_3, after the in-stack filter and (2) he recovers and analyzes the probe and impinger contents for Pb. Recover sample from the nozzle with acetone if a particulate analysis is to be made.

9. *Bibliography*

9.1 Perkin Elmer Corporation. Analytical Methods for Atomic Absorption Spectrophotometry. Norwalk, Connecticut. September 1976.

9.2 American Society for Testing and Materials. Annual Book of ASTM Standards. Part 31; Water, Atmospheric Analysis. Philadelphia, Pa. 1974. p. 40–42.

9.3 Klein, R. and C. Hach. Standard Additions—Uses and Limitations in Spectrophotometric Analysis. *Amer. Lab.* 9:21–27. 1977.

9.4 Mitchell, W.J. and M.R. Midgett. Determining Inorganic and Alkyl Lead Emissions from Stationary Sources. U.S. Environmental Protection Agency, Emission Monitoring and Support Laboratory. Research Triangle Park, N.C. (Presented at National APCA Meeting. Houston. June 26, 1978).

9.5 Same as Method 5, Citations 2 to 5 and 7 of Section 7.

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(Secs. 111, 114, and 301(a) of the Clean Air Act as amended (42 U.S.C. 7411, 7414, and 7601(a)))

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