

1 Department of Health

2

3 Adopted Permanent Rules Relating to Asbestos-Related Work

4

5 Rules as Adopted

6 4620.3000 APPLICABILITY.

7 Parts 4620.3000 to 4620.3724 apply to persons performing
8 asbestos-related work.

9 4620.3100 DEFINITIONS.

10 Subpart 1. **Scope.** For the purpose of parts 4620.3000 to
11 4620.3724, the following terms have the meanings given them.

12 Subp. 1a. **Abatement.** "Abatement" means the performance of
13 asbestos-related work, other than air monitoring, in the
14 quantities specified in Minnesota Statutes, section 326.71,
15 subdivision 4. Abatement includes area preparation, containment
16 removal, and cleanup.

17 Subp. 2. [See repealer.]

18 Subp. 2a. **Adequately wet.** "Adequately wet" means mixed or
19 penetrated with liquid to prevent the release of particulates.

20 Subp. 2b. **Alternative clearance standard.** "Alternative
21 clearance standard" means the asbestos concentration of 70
22 structures per square millimeter (70 s/mm²) of filter surface
23 when the clearance air samples are analyzed by transmission
24 electron microscopy according to part 4620.3598.

25 Subp. 2c. **Alternative indoor air standard.** "Alternative
26 indoor air standard" means the maximum permissible fiber
27 concentration in the air established according to part 4620.3597.

28 Subp. 2d. Area preparation. "Area preparation" means:

29 A. the construction of a decontamination unit under
30 parts 4620.3569; 4720.3580, subpart 2; and 4620.3581, subpart 3;

31 B. the installation of a HEPA-filtered negative
32 pressure system under part 4620.3570; and

33 C. the performance of any activities required by
34 parts 4620.3580, subpart 4, items A, B, D, E, G, and H;
35 4620.3581, subpart 4, item A; 4620.3582, subpart 3, item A;

1 4620.3566; 4620.3567; and 4620.3568.

2 Subp. 3. **Asbestos.** "Asbestos" has the meaning given in
3 Minnesota Statutes, section 326.71, subdivision 2.

4 Subp. 4. **Asbestos contractor.** "Asbestos contractor" means
5 a person who conducts asbestos-related work and includes persons
6 who perform in-house asbestos-related work using their own
7 employees.

8 Subp. 5. **Asbestos project plan.** "Asbestos project plan"
9 means the written plan described in part 4620.3560.

10 Subp. 5a. **Asbestos site supervisor.** "Asbestos site
11 supervisor" means an individual who is certified under part
12 4620.3310.

13 Subp. 5b. **Asbestos work area.** "Asbestos work area" means
14 an area established by the person performing asbestos-related
15 work, where airborne concentrations of asbestos exceed or can
16 reasonably be expected to exceed 0.01 fibers per cubic
17 centimeter (f/cc) or the alternative indoor air standard
18 established according to parts 4620.3594 to 4620.3598.

19 Subp. 6. **Asbestos worker.** "Asbestos worker" means any
20 individual certified under part 4620.3300.

21 Subp. 7. **Asbestos-containing material or ACM.**
22 "Asbestos-containing material or ACM" has the meaning given in
23 Minnesota Statutes, section 326.71, subdivision 3.

24 Subp. 7a. **Asbestos inspection.** "Asbestos inspection"
25 means an activity undertaken by visual or physical examination
26 to determine the presence, the location, or to assess the
27 condition of friable or nonfriable asbestos-containing material
28 or suspected asbestos-containing material. Asbestos inspection
29 includes reinspection of known asbestos-containing material or
30 assumed asbestos-containing material. Asbestos inspection does
31 not include:

32 A. the periodic surveillance performed under Code of
33 Federal Regulations, title 40, chapter I, subchapter R, part
34 763, subpart E, section 763.92, paragraph (b), amended through
35 February 3, 1994;

36 B. an inspection performed by an employee or agent of

1 the federal, state, or local government solely for the purpose
2 of determining compliance with applicable statutes or rules; and

3 C. visual inspections of the type described in parts
4 4620.3560 to 4620.3598 solely for the purpose of determining
5 completion of asbestos-related work.

6 Subp. 7b. **Asbestos inspector.** "Asbestos inspector" is an
7 individual as defined in Minnesota Statutes, section 326.71,
8 subdivision 4a, and who is certified under part 4620.3330.

9 Subp. 7c. **Asbestos management plan.** "Asbestos management
10 plan," as specified in part 4620.3470, means a site-specific
11 written plan for:

12 A. the maintenance of asbestos-containing material in
13 a condition that prevents the release of asbestos fibers; and

14 B. response procedures for an asbestos fiber release
15 episode.

16 Subp. 7d. **Asbestos management planner.** "Asbestos
17 management planner" is an individual as defined in Minnesota
18 Statutes, section 326.71, subdivision 4c, and who is certified
19 under part 4620.3340.

20 Subp. 7e. **Asbestos project design.** "Asbestos project
21 design" as specified in part 4620.3480, means site-specific
22 written project specifications for an asbestos-related work
23 project. ~~Bidding-documents-that-incorporate~~ Written technical
24 project specifications incorporated into bidding documents are
25 also considered project design.

26 Subp. 7f. **Asbestos project designer.** "Asbestos project
27 designer" is an individual as defined in Minnesota Statutes,
28 section 326.71, subdivision 4d, and who is certified under part
29 4620.3350.

30 Subp. 8. **Asbestos-related work.** "Asbestos-related work"
31 has the meaning given in Minnesota Statutes, section 326.71,
32 subdivision 4.

33 Subp. 9. [See repealer.]

34 Subp. 10. [See repealer.]

35 Subp. 10a. **Clearance standard.** "Clearance standard" means
36 the maximum permissible fiber concentration in the air within an

1 asbestos work area following completion of abatement. The
2 clearance standard is 0.01 fibers per cubic centimeter of air
3 (f/cc) when analyzed by phase contrast microscopy according to
4 part 4620.3597, subparts 1, 3, and 4.

5 Subp. 11. **Commissioner.** "~~Commissioner~~" ~~has the meaning~~
6 ~~given in Minnesota Statutes, section 326.71, subdivision 5~~ means
7 the commissioner of health.

8 Subp. 11a. **Containment.** "Containment" means the structure
9 which must be constructed as specified in part ~~4620.3598~~
10 4620.3568 around the asbestos work area.

11 Subp. 12. [See repealer.]

12 Subp. 13. **Contracting entity.** "Contracting entity" has
13 the meaning given in Minnesota Statutes, section 326.71,
14 subdivision 6.

15 Subp. 14. **Critical barriers.** "Critical barriers" means
16 the barriers constructed to separate and isolate the asbestos
17 work area from the rest of the facility and the outdoors,
18 including the barriers constructed over doors, windows, and air
19 passageways.

20 Subp. 14a. **Demolition.** "Demolition," with respect to a
21 facility, means the:

22 A. wrecking or taking out of any load-supporting
23 structural member of the facility together with any related
24 handling operations; or

25 B. intentional burning of the facility.

26 Subp. 15. [See repealer.]

27 Subp. 16. **Emergency project.** "Emergency project" means a
28 project which was not planned but results from a sudden,
29 unexpected event whose consequences, if not immediately attended
30 to, present either a safety or public health hazard or would
31 damage ~~equipment~~ the facility or facility components. This
32 includes work required by nonroutine failures of equipment.

33 Subp. 17. [See repealer.]

34 Subp. 18. [See repealer.]

35 [For text of subps 19 and 20, see M.R.]

36 Subp. 20a. **Facility.** "Facility" means any:

1 A. institutional, commercial, public, industrial, or
2 residential structure, building, or installation, including any
3 structure, building, or installation containing condominiums or
4 individual dwelling units operated as a residential cooperative;
5 or

6 B. ship at dock in Minnesota.

7 Subp. 20b. Facility component. "Facility component" means
8 any part of a facility including equipment.

9 Subp. 21. Friable asbestos material. "Friable asbestos
10 material" means any material containing more than one percent
11 asbestos by microscopic visual estimation by area, that hand
12 pressure can crumble, pulverize, or reduce to powder when dry.
13 Friable asbestos material includes previously nonfriable
14 asbestos material which becomes damaged to the extent that when
15 dry all or a portion of the material may be crumbled,
16 pulverized, or reduced to powder by hand pressure.

17 Subp. 22. [See repealer.]

18 Subp. 23. Glove bag. "Glove bag" means a bag, fitted with
19 arms, through which limited types of asbestos-related work may
20 be performed, as allowed in part 4620.3580.

21 [For text of subp 24, see M.R.]

22 Subp. 24a. Homogeneous area. "Homogeneous area" means an
23 area of surfacing materials, thermal system insulation
24 materials, flooring, or other miscellaneous materials which upon
25 examination for properties such as age, color, and texture
26 appear to be composed of the same material.

27 Subp. 24b. Indoor air standard. "Indoor air standard"
28 means the maximum permissible fiber concentration in the air
29 outside of the asbestos work area during asbestos-related work.
30 The indoor air standard is 0.01 fibers per cubic centimeter of
31 air (f/cc) when analyzed by phase contrast microscopy according
32 to part 4620.3597, unless an alternative indoor air standard has
33 been established.

34 Subp. 25. Industrial facility. "Industrial facility"
35 means a facility in an industry classified in the Standard
36 Industrial Classification Manual, 1987 edition, published by the

1 Office of Management and Budget, within Major Groups 20 to 39,
2 46, and 49. This document is not subject to frequent change, is
3 incorporated by reference, and is available at the State Law
4 Library, Minnesota Judicial Center, 25 Constitution Avenue,
5 Saint Paul, Minnesota 55155.

6 Subp. 25a. **Installation.** "Installation" means any
7 building or structure or any group of buildings or structures at
8 a single demolition or renovation site that are under the
9 control of the same owner or operator as described in Code of
10 Federal Regulations, title 40, chapter I, subchapter R, part 61,
11 subpart M, section 61.141, amended through July 1, 1994.

12 Subp. 25b. **Maintenance or maintenance activity.**
13 "Maintenance" or "maintenance activity" means any encapsulation,
14 enclosure, or removal of asbestos-containing material on or
15 around a mechanical system or machinery to sustain the operating
16 condition of the mechanical system or machinery. Maintenance or
17 maintenance activity does not include any encapsulation to
18 return damaged, previously encapsulated ACM to an undamaged
19 condition or to an intact state to prevent fiber release.

20 Subp. 26. [See repealer.]

21 Subp. 27. **Occupied area immediately adjacent to an**
22 **abatement asbestos work area.** "Occupied area immediately
23 adjacent to an **abatement asbestos work area" is a designation**
24 **used during an asbestos-related work project and means an indoor**
25 **space which:**

- 26 A. is not considered part of the asbestos work area;
27 B. shares a wall, floor, or ceiling with the asbestos
28 work area or shares a window, door, or similar opening to a room
29 temporarily considered the asbestos work area; and
30 C. is occupied by individuals not involved in
31 asbestos-related work.

32 Subp. 27a. **Person.** "Person" has the meaning given in
33 Minnesota Statutes, section 326.71, subdivision 8.

34 Subp. 27b. **Project.** "Project" means:

- 35 A. the area preparation, enclosure, removal, or
36 encapsulation operations and air quality monitoring of

1 asbestos-containing material in a quantity that meets or exceeds
2 260 linear feet of friable asbestos-containing material on
3 pipes, 160 square feet of friable asbestos-containing material
4 on other facility components, or if linear feet or square feet
5 cannot be measured, a total of 35 cubic feet of friable
6 asbestos-containing material on or off all facility components
7 in one facility. The removal, enclosure, or encapsulation
8 described in this item may not be subdivided to fall below the
9 quantity specified in this item. In single-family residences
10 and residential buildings with no more than four dwelling units,
11 asbestos-containing materials excluded from this definition are
12 floor tiles and sheeting, roofing materials, siding, and all
13 ceilings with asbestos-containing material;

14 B. a series of activities, excluding maintenance
15 activity, which individually consist of area preparation and the
16 enclosure, removal, or encapsulation operations and air quality
17 monitoring of asbestos-containing material in quantities less
18 than the quantities specified in item A where the total quantity
19 of asbestos-containing material enclosed, removed, or
20 encapsulated during a calendar year meets or exceeds the
21 quantities specified in item A in that facility;

22 C. a series of maintenance activities where the
23 contracting entity has predicted that the additive quantity of
24 maintenance during a calendar year will exceed 260 linear feet,
25 160 square feet, or 35 cubic feet in a facility during the
26 calendar year; or

27 D. a small residential abatement.

28 Subp. 28. **Renovation.** "Renovation" means altering in any
29 way one or more facility components. In asbestos-related work
30 renovation includes the enclosure, removal, or encapsulation of
31 friable asbestos-containing material.

32 Subp. 29. **Responsible individual.** "Responsible individual"
33 means one who has the authority to represent the asbestos
34 contractor in all matters related to the asbestos contractor
35 license and is certified as a site supervisor under part
36 4620.3310.

1 Subp. 30. [See repealer.]

2 Subp. 31. **Small residential abatement.** "Small residential
3 abatement" means any asbestos-related work performed in a single-
4 or multifamily residence where the quantity of
5 asbestos-containing material to be enclosed, removed, or
6 encapsulated is greater than ten but less than 260 linear feet
7 of friable asbestos-containing material on pipes or ducts or
8 greater than six but less than 160 square feet of friable
9 asbestos-containing material on other facility components.

10 A. The asbestos-related work described in this
11 subpart may not be subdivided to fall below the quantities
12 specified in this subpart.

13 B. Small residential abatement in single-family
14 residences and residential buildings with no more than four
15 dwelling units does not include work on floor tiles and
16 sheeting, roofing materials, siding, and all ceilings with
17 asbestos-containing materials.

18 Subp. 32. **Training course.** "Training course" means a
19 course of instruction for an asbestos worker, asbestos site
20 supervisor, asbestos inspector, asbestos management planner,
21 asbestos project designer, or an individual who performs
22 asbestos air monitoring.

23 Subp. 33. **Tunnel.** "Tunnel" means a below-grade corridor
24 or crawl space which is not used for:

25 A. a human thoroughfare; or

26 B. ~~storage; or~~

27 C. ~~an air plenum for any ventilation system.~~

28 4620.3200 CONTRACTOR LICENSURE.

29 Subpart 1. [See repealer.]

30 Subp. 2. **Application for license.** An applicant for an
31 asbestos contractor license must submit to the commissioner:

32 A. a completed application on a form provided by the
33 commissioner, which seeks only information the commissioner
34 reasonably considers necessary to identify the applicant and to
35 determine whether the applicant meets the statutory and

1 regulatory requirements for licensure;

2 B. a \$100 nonrefundable application fee with-a
3 ~~business-check, cashier's-check, or money-order~~ of \$100, which
4 is not in the form of a personal check, payable to the Minnesota
5 Department of Health;

6 C. the name, address, social security number, and
7 signature of the responsible individual as defined in part
8 4620.3100, subpart 29;

9 D. a copy of the responsible individual's current
10 site supervisor ~~card~~ certificate issued by the Minnesota
11 Department of Health;

12 E. a list of the other states in which the asbestos
13 contractor is licensed or certified for asbestos-related work
14 and for each state, the license or certificate number and the
15 expiration date of each license or certificate;

16 F. copies of any asbestos related citations or
17 notices of violation issued by the Minnesota Department of Labor
18 and Industry, Occupational Safety and Health Review-Board
19 Division, the Minnesota Pollution Control Agency, the federal
20 Occupational Safety and Health Administration, or the federal
21 Environmental Protection Agency, within two years before the
22 date of application; or similar citations received by the
23 asbestos contractor for work performed in other states, and a
24 description of corrective actions taken; and

25 G. the asbestos contractor's Minnesota business
26 identification number ~~and the United States Internal Revenue~~
27 ~~Service-employer-identification-number.~~

28 Subp. 2a. **Workers' compensation.** As part of the
29 application process in subpart 2, the applicant must provide
30 evidence of workers' compensation insurance as required by
31 Minnesota Statutes, section 176.182, unless the applicant is not
32 liable to pay compensation under Minnesota Statutes, chapter 176.

33 A. If the applicant is not liable to pay compensation
34 under Minnesota Statutes, chapter 176, the applicant must submit
35 a letter to the commissioner, signed and dated, stating why the
36 applicant is not liable.

1 B. The Minnesota Department of Health must be listed
2 on the certificate of insurance as a certificate holder. A
3 30-day written notice to the Minnesota Department of Health,
4 asbestos ~~abatement~~ unit, is required if the policy is canceled
5 before the expiration date of the policy.

6 Subp. 3. Denial of asbestos contractor license application.

7 The commissioner shall deny an application for an asbestos
8 contractor license if the applicant fails to comply with the
9 requirements of subparts 2, 2a, and 4a. Additional grounds for
10 the commissioner to deny an application are stated in Minnesota
11 Statutes, section 144.99, subdivision 8, paragraph (a) or (b).
12 An applicant:

13 A. must be notified in writing of the denial of the
14 license application and reasons for the denial; and

15 B. is not required to pay a second fee if the
16 applicant submits a second asbestos contractor application
17 according to subpart 2, within 30 days of the receipt of notice
18 that the asbestos contractor license application has been
19 denied. Fees are required for all subsequent applications.

20 Subp. 4. Terms of licensure. An asbestos contractor
21 license is effective for one year unless it is revoked or
22 suspended by the commissioner. An asbestos contractor license
23 is not transferable.

24 Subp. 4a. Responsible individual. A licensed asbestos
25 contractor must at all times have a responsible individual who
26 represents the asbestos contractor. If the responsible
27 individual identified on the current asbestos contractor license
28 no longer serves in that capacity, the contractor, within ten
29 days of the change in the responsible individual, must provide a
30 statement to the commissioner identifying and signed by the new
31 responsible individual and stating the date when that individual
32 assumed the duties of the responsible individual.

33 Subp. 5. Annual license renewal. If a contractor wants to
34 renew the asbestos contractor license, the contractor must
35 submit ~~an~~ a completed application under subpart 2 that is
36 received by the commissioner ~~at least 14 calendar days before~~ by

1 the expiration date on the existing asbestos contractor license.

2 Subp. 6. [See repealer.]

3 Subp. 7. [See repealer.]

4 Subp. 8. Procedures for obtaining duplicate license. The
5 commissioner shall issue a duplicate asbestos contractor license
6 to replace a lost, destroyed, or mutilated license if the
7 licensee submits a completed application for a duplicate license
8 ~~on-a-form-provided-by-the-commissioner~~ and pays a charge to the
9 commissioner for the cost of duplicating the license.

10 Subp. 9. Subcontractors. A subcontractor who performs
11 asbestos-related work must hold a valid asbestos contractor
12 license.

13 4620.3250 USE OF QUALIFIED INDIVIDUALS.

14 Qualified individuals must be used to perform
15 asbestos-related work.

16 A. An asbestos contractor must employ only asbestos
17 workers and site supervisors with current certificates issued by
18 the commissioner to conduct asbestos-related work.

19 B. An asbestos contractor must ensure that a current
20 asbestos worker certificate or asbestos site supervisor
21 certificate for each individual engaged in asbestos-related work
22 is readily available at the work site for review by the
23 commissioner.

24 C. An asbestos contractor must ensure that a
25 certified asbestos site supervisor is present at the work site
26 during all times when asbestos-related work is performed.

27 4620.3300 CERTIFICATION OF ASBESTOS WORKER.

28 Subpart 1. Certification of asbestos worker required. An
29 individual who performs asbestos-related work must be certified
30 by the commissioner as an asbestos worker under this part unless
31 that individual is certified as an asbestos site supervisor.

32 Subp. 2. Qualifications or experience requirements. To be
33 eligible for certification as an asbestos worker, an individual
34 must have completed either:

35 A. two years full-time attendance, or the part-time

1 equivalent, in an apprenticeship program for general commercial
2 construction trades which is either approved by the Minnesota
3 Department of Labor and Industry, Division of Voluntary
4 Apprenticeship, or registered with the United States Department
5 of Labor, Bureau of Apprenticeship and Training;

6 B. a vocational training program in a
7 construction-related discipline of not less than 18 months; or

8 C. work experience of at least 1,000 hours of work
9 experience in general commercial construction trades.

10 Subp. 3. Training requirements for initial certification.

11 To be eligible for initial certification as an asbestos worker:

12 A. an applicant must complete before the
13 commissioner's receipt of the application, an initial asbestos
14 worker training course that is:

15 (1) permitted by the commissioner under part
16 4620.3704;

17 (2) approved by the United States Environmental
18 Protection Agency (EPA) with the EPA approval granted after June
19 1, 1987; or

20 (3) approved by a state asbestos training program
21 accredited by the EPA; and

22 B. an applicant must complete, before the
23 commissioner's receipt of the application, an asbestos worker
24 refresher course permitted by the commissioner under part
25 4620.3704 if the applicant has completed an initial asbestos
26 worker training course specified in item A, subitem (2) or (3).

27 Subp. 3a. Training diploma expiration; retraining. The
28 applicant for certification as an asbestos worker must complete
29 an annual asbestos worker refresher course permitted by the
30 commissioner under part 4620.3704 when the diploma from an
31 initial worker training course, as specified in subpart 3, item
32 A, has expired before the commissioner's receipt of the
33 application.

34 A. The most recent asbestos worker refresher course
35 taken must be permitted by the commissioner under part 4620.3704.

36 B. Any refresher courses completed subsequent to the

1 expiration of the diploma must have been completed no more than
2 12 months after the expiration date of the preceding diploma.

3 Subp. 4. Application for initial asbestos worker
4 certification. An applicant for initial certification as an
5 asbestos worker must submit to the commissioner:

6 A. a completed application on a form provided by the
7 commissioner, which seeks only information the commissioner
8 reasonably considers necessary to identify the applicant and to
9 determine whether the applicant meets the statutory and
10 regulatory requirements for certification;

11 B. a nonrefundable application fee of \$50 ~~with-a~~
12 ~~business-check, cashier's-check, or money-order~~, which is not in
13 the form of a personal check, payable to the Minnesota
14 Department of Health;

15 C. evidence of qualifications or experience described
16 in subpart 2 as shown by:

17 (1) a document showing completion of the
18 apprenticeship attendance requirement in subpart 2, item A;

19 (2) certified transcripts of coursework completed
20 in the vocational training program described in subpart 2, item
21 B; or

22 (3) an affidavit by each of the applicant's
23 employers, contracting parties, or labor organizations detailing
24 the dates of employment, hours worked, and job duties for the
25 work experience described in subpart 2, item C; and

26 D. a copy of the applicant's original diploma for the
27 initial asbestos worker training course completed and, if
28 applicable, copies of each of the applicant's original diplomas
29 for the asbestos worker refresher training courses completed.

30 Subp. 5. Renewal. An individual certified as an asbestos
31 worker must apply for renewal of the asbestos worker
32 certification by submitting to the commissioner a completed
33 renewal application ~~at-least-30-calendar-days-before~~ by the
34 expiration date of the current asbestos worker certificate. The
35 renewal application must include:

36 A. the completed renewal application on a form

1 provided by the commissioner, which seeks only information the
 2 commissioner reasonably considers necessary to identify the
 3 applicant and to determine whether the applicant meets the
 4 statutory and regulatory requirements for renewal of
 5 certification;

6 B. a nonrefundable \$50 renewal application fee ~~with-a~~
 7 ~~business-check, cashier's-check, or money-order~~ of \$50, which is
 8 not in the form of a personal check, payable to the Minnesota
 9 Department of Health; and

10 C. ~~evidence-of-completion-of~~ a copy of the training
 11 course diploma from the most recent asbestos worker refresher
 12 training course required by subpart 3a.

13 Subp. 6. Denial of asbestos worker certification. The
 14 commissioner shall deny an application for asbestos worker
 15 certification if the applicant fails to comply with all
 16 applicable requirements in this part. Additional grounds for
 17 the commissioner to deny an application are stated in Minnesota
 18 Statutes, section 144.99, subdivision 8, paragraphs (a) and
 19 (b). An applicant:

20 A. must be notified in writing of the denial of the
 21 certificate and the reasons for the denial; and

22 B. is not required to pay a second fee if the
 23 applicant submits a second asbestos worker certification
 24 application according to subpart 4 or 5 within 30 days of
 25 receipt of notice that the asbestos worker certification has
 26 been denied. Fees are required for all subsequent applications.

27 Subp. 7. Duration of certificate; transfer. An asbestos
 28 worker certificate issued by the commissioner is valid for one
 29 year after the completion date on the training course diploma
 30 for the most recently completed training course. The asbestos
 31 worker certificate is not transferable.

32 Subp. 8. Duplicate certificate. To replace a lost,
 33 destroyed, or mutilated asbestos worker certificate, the
 34 certified asbestos worker must submit a completed application
 35 for a duplicate asbestos worker certificate ~~on-a-form-provided~~
 36 ~~by-the-commissioner~~ and pay the a charge ~~with-a-business-check,~~

1 ~~cashier's check, or money order payable~~ to the Minnesota
2 Department of Health for the cost of duplicating the certificate.

3 4620.3310 CERTIFICATION OF ASBESTOS SITE SUPERVISOR.

4 Subpart 1. **Certification required.** An individual who
5 supervises asbestos-related work or has the authority to act as
6 the agent of the asbestos contractor at the asbestos work area
7 must be certified as an asbestos site supervisor by the
8 commissioner.

9 Subp. 2. **Qualifications or experience requirements.** To be
10 eligible for certification as an asbestos site supervisor, an
11 individual must have either:

12 A. work experience of at least 2,000 hours in
13 asbestos-related work, safety, industrial hygiene, ~~or other~~
14 hazardous materials control, or other general commercial
15 construction trades;

16 B. a bachelor's degree in architecture, engineering,
17 physical or life science, and work experience of at least 500
18 hours in asbestos-related work, safety, industrial hygiene, ~~or~~
19 hazardous materials control, or other general commercial
20 construction trades;

21 C. a master's degree in environmental health,
22 industrial hygiene, or safety; or

23 D. completion of an apprenticeship program within the
24 general commercial construction trades that is either approved
25 by the Minnesota Department of Labor and Industry, Division of
26 Voluntary Apprenticeship, or registered with the United States
27 Department of Labor, Bureau of Apprenticeship and Training.

28 Subp. 3. **Training requirements for initial certification.**
29 To be eligible for initial certification as an asbestos site
30 supervisor:

31 A. an applicant must complete, before the
32 commissioner's receipt of the application, an initial asbestos
33 site supervisor training course that is:

34 (1) permitted by the commissioner under part
35 4620.3704;

1 (2) approved by the United States Environmental
2 Protection Agency (EPA) with the EPA approval granted after June
3 1, 1987; or

4 (3) approved by a state asbestos training program
5 accredited by the EPA; and

6 B. an applicant must complete, before the
7 commissioner's receipt of the application, an asbestos site
8 supervisor refresher course permitted by the commissioner under
9 part 4620.3704 if the applicant has completed an initial
10 asbestos site supervisor training course specified in item A,
11 subitem (2) or (3).

12 Subp. 4. Training diploma expiration; retraining. The
13 applicant for certification as an asbestos site supervisor must
14 complete an annual asbestos site supervisor refresher course
15 permitted by the commissioner under part 4620.3704 when the
16 diploma from an initial site supervisor training course as
17 specified in subpart 3, item A, has expired before the
18 commissioner's receipt of the application.

19 A. The most recent asbestos site supervisor refresher
20 course completed must be permitted by the commissioner under
21 part 4620.3704.

22 B. Any refresher courses completed subsequent to the
23 expiration of the diploma must have been completed no more than
24 12 months after the expiration date of the preceding diploma.

25 Subp. 5. Initial certification application. An applicant
26 for initial certification as an asbestos site supervisor must
27 submit to the commissioner:

28 A. a completed application on a form provided by the
29 commissioner, which seeks only information the commissioner
30 reasonably considers necessary to identify the applicant and to
31 determine whether the applicant meets the statutory and
32 regulatory requirements for certification;

33 B. a nonrefundable application fee of \$50 ~~with-a~~
34 ~~business-check, cashier's-check, or money-order,~~ which is not in
35 the form of a personal check, payable to the Minnesota
36 Department of Health;

1 C. the evidence of qualifications or experience
2 described in subpart 2 as shown by:

3 (1) an affidavit by each of the applicant's
4 employers, contracting parties, or labor organizations detailing
5 the dates of employment, hours worked, and job duties for the
6 work experience described in subpart 2, item A;

7 (2) both a certified transcript of the coursework
8 completed for the degree described in subpart 2, item B, and
9 affidavits by each of the applicant's employers, contracting
10 parties, or labor organizations detailing the dates of
11 employment, hours worked, and job duties for the work experience
12 described in subpart 2, item B;

13 (3) certified transcripts of the coursework
14 completed for the degree described in subpart 2, item C; or

15 (4) a certified copy of the document that
16 verifies completion of the apprenticeship requirement in subpart
17 2, item D; and

18 D. a copy of the applicant's original diploma for the
19 initial asbestos site supervisor training course completed and,
20 if applicable, copies of each of the applicant's original
21 diplomas for the asbestos site supervisor refresher training
22 courses.

23 Subp. 6. **Renewal.** An individual certified as an asbestos
24 site supervisor must apply for renewal of asbestos site
25 supervisor certification by submitting to the commissioner a
26 completed renewal application ~~at least 30 calendar days before~~
27 by the expiration date of the current asbestos site supervisor
28 certificate. The renewal application must include:

29 A. the completed renewal application on a form
30 provided by the commissioner, which seeks only information the
31 commissioner reasonably considers necessary to identify the
32 applicant and to determine whether the applicant meets the
33 statutory and regulatory requirements for renewal of
34 certification;

35 B. a nonrefundable \$50 renewal application fee with a
36 business-check, cashier's-check, or money-order of \$50, which is

1 not in the form of a personal check, payable to the Minnesota
2 Department of Health; and

3 C. ~~evidence-of-completion-of~~ a copy of the training
4 course diploma from the most recent asbestos site supervisor
5 refresher training course required by subpart 4.

6 Subp. 7. Denial of certification. The commissioner shall
7 deny an application for an asbestos site supervisor if the
8 applicant fails to comply with all applicable requirements in
9 this part. Additional grounds for the commissioner to deny an
10 application are stated in Minnesota Statutes, section 144.99,
11 subdivision 8, paragraphs (a) and (b). An applicant:

12 A. must be notified in writing of the denial of the
13 certificate and the reasons for the denial; and

14 B. is not required to pay a second fee if the
15 applicant submits a second asbestos site supervisor application
16 within 30 days of the receipt of the notice that the asbestos
17 site supervisor application has been denied. Fees are required
18 for all subsequent applications.

19 Subp. 8. Duration of certificate; transfer. An asbestos
20 site supervisor certificate is valid for 12 months after the
21 completion date on the diploma for the most recently completed
22 training course. The asbestos site supervisor certificate is
23 not transferable.

24 Subp. 9. Duplicate certificate. To replace a lost,
25 destroyed, or mutilated asbestos site supervisor certificate,
26 the certified asbestos site supervisor must submit a completed
27 application for a duplicate asbestos site supervisor certificate
28 ~~on-a-form-provided-by-the-commissioner~~ and pay the a charge with
29 ~~a-business-check, cashier's-check, or money order payable~~ to the
30 Minnesota Department of Health for the cost of duplicating the
31 certificate.

32 4620.3330 CERTIFICATION OF ASBESTOS INSPECTOR.

33 Subpart 1. Certification required. Beginning three months
34 after the effective date of parts 4620.3000 to 4620.3724, an
35 individual who performs an asbestos inspection, as defined in

1 part 4620.3100, must be certified by the commissioner as an
2 asbestos inspector.

3 Subp. 2. Qualifications and experience. Beginning six
4 months after the effective date of parts 4620.3000 to 4620.3724,
5 an individual applying for certification as an asbestos
6 inspector must show evidence of either:

7 A. work experience of at least 500 hours in the field
8 of building inspection, asbestos-related work, safety,
9 industrial hygiene, or hazardous materials control;

10 B. completion of an apprenticeship program within the
11 general commercial construction trades approved by the Minnesota
12 Department of Labor and Industry, Division of Voluntary
13 Apprenticeship, or registered with the United States Department
14 of Labor, Bureau of Apprenticeship and Training;

15 C. licensure by Minnesota as a building official;

16 D. a bachelor's degree in architecture, engineering,
17 industrial hygiene, industrial technology safety, or physical or
18 life science, and 40 hours of on-site asbestos inspection
19 experience accompanying a Minnesota-certified asbestos
20 inspector; or

21 E. registration or certification as a registered
22 architect, ~~registered~~ licensed professional engineer, certified
23 industrial hygienist, or certified safety professional.

24 Subp. 3. Training requirements for initial certification.

25 To be eligible for initial certification as an asbestos
26 inspector an applicant must complete, before the commissioner's
27 receipt of the application:

28 A. an initial asbestos inspector training course that
29 is:

30 (1) permitted by the commissioner under part
31 4620.3704;

32 (2) approved by the United States Environmental
33 Protection Agency (EPA) with the EPA approval granted after June
34 1, 1987; or

35 (3) approved by a state asbestos training program
36 accredited by the EPA; and

1 B. an asbestos inspector refresher course permitted
2 by the commissioner under part 4620.3704 if the applicant has
3 completed an initial asbestos inspector training course
4 specified in item A, subitem (2) or (3).

5 Subp. 4. Training diploma expiration; retraining. The
6 applicant for certification as an asbestos inspector must
7 complete an annual asbestos inspector refresher course permitted
8 by the commissioner under part 4620.3704 to maintain
9 certification eligibility when the diploma from an initial
10 inspector training course as specified in subpart 3, item A, has
11 expired before the commissioner's receipt of the application.

12 A. The most recent asbestos inspector refresher
13 course completed must be permitted by the commissioner under
14 part 4620.3704.

15 B. Any refresher courses which have been completed
16 subsequent to the expiration of the diploma must have been
17 completed no more than 12 months after the expiration date of
18 the preceding diploma.

19 Subp. 5. Application for initial certification. An
20 applicant for initial certification as an asbestos inspector
21 must submit to the commissioner:

22 A. a completed application on a form provided by the
23 commissioner, which seeks only information the commissioner
24 reasonably considers necessary to identify the applicant and to
25 determine whether the applicant meets the statutory and
26 regulatory requirements for certification;

27 B. a nonrefundable application fee of \$100 ~~with-a~~
28 business-check, cashier's-check, or money-order, which is not in
29 the form of a personal check, payable to the Minnesota
30 Department of Health;

31 C. the evidence of qualification or experience
32 required by subpart 2 as shown by:

33 (1) an affidavit by each of the applicant's
34 employers, contracting parties, or labor organizations detailing
35 the dates of employment, hours worked, and job duties for the
36 work experience described in subpart 2, item A;

1 (2) a certified copy of the document that
 2 verifies completion of the apprenticeship requirement described
 3 in subpart 2, item B;

4 (3) a certified copy of the applicant's current
 5 license by Minnesota as a building official described in subpart
 6 2, item C;

7 (4) both the certified transcript of coursework
 8 completed for the degree described in subpart 2, item D, and
 9 affidavits by each of the applicant's employers, contracting
 10 parties, or labor organizations describing the dates of
 11 employment, hours worked, and job duties for the work experience
 12 described in subpart 2, item D; or

13 (5) a copy of the applicant's current
 14 registration or certification as described in subpart 2, item E;
 15 and

16 D. a copy of the applicant's original diploma for the
 17 initial asbestos inspector training course, and, if applicable,
 18 copies of each of the applicant's original diplomas from the
 19 asbestos inspector refresher training courses.

20 Subp. 6. **Renewal.** An individual certified as an asbestos
 21 inspector must apply for renewal of asbestos inspector
 22 certification by submitting to the commissioner a completed
 23 renewal application ~~at least 30 calendar days before~~ by the
 24 expiration date of the current asbestos inspector certificate.
 25 The renewal application must include:

26 A. the completed renewal application on a form
 27 provided by the commissioner, which seeks only information the
 28 commissioner reasonably considers necessary to identify the
 29 applicant and to determine whether the applicant meets the
 30 statutory and regulatory requirements for renewal of
 31 certification;

32 B. a nonrefundable \$100 renewal application fee with
 33 a business check, cashier's check, or money order of \$100, which
 34 is not in the form of a personal check, payable to the Minnesota
 35 Department of Health; and

36 C. evidence of completion of a copy of the training

1 course diploma from the most recent asbestos inspector refresher
2 training course required by subpart 4.

3 Subp. 7. Denial of certification. The commissioner shall
4 deny an application for asbestos inspector certification if the
5 applicant fails to comply with all applicable requirements in
6 this part. Additional grounds for the commissioner to deny an
7 application are stated in Minnesota Statutes, section 144.99,
8 subdivision 8, paragraphs (a) and (b). An applicant:

9 A. must be notified in writing of the denial of the
10 certificate and the reasons for the denial; and

11 B. is not required to pay a second fee if the
12 applicant submits a second asbestos inspector application within
13 30 days of the receipt of the notice that the asbestos inspector
14 application has been denied. Fees are required for all
15 subsequent applications.

16 Subp. 8. Duration of certificate; transfer. An asbestos
17 inspector certificate is valid for 12 months after the
18 completion date on the diploma for the most recently completed
19 training course. The asbestos inspector certificate is not
20 transferable.

21 Subp. 9. Duplicate certificate. To replace a lost,
22 destroyed, or mutilated asbestos inspector certificate, the
23 certified asbestos inspector must submit a completed application
24 for a duplicate asbestos inspector certificate ~~on-a-form~~
25 ~~provided-by-the-commissioner~~ and pay the a charge with-a
26 ~~business-check, cashier's-check, or money-order-payable~~ to the
27 Minnesota Department of Health for the cost of duplicating the
28 certificate.

29 4620.3340 ASBESTOS MANAGEMENT PLANNER CERTIFICATION.

30 Subpart 1. Certification required. Beginning three months
31 after the effective date of parts 4620.3000 to 4620.3724, an
32 individual who develops an asbestos management plan must be
33 certified by the commissioner as an asbestos management planner.

34 Subp. 2. Qualifications or experience requirements.
35 Beginning six months after the effective date of parts 4620.3000

1 to 4620.3724, an individual applying for certification must show
2 evidence of either:

3 A. work experience of at least 1,000 hours in the
4 field of building inspection, asbestos-related work, safety,
5 industrial hygiene, or hazardous materials control;

6 B. licensure by Minnesota as a building official;

7 C. a bachelor's degree in architecture, engineering,
8 physical or life science, and work experience of 500 hours in
9 the field of building inspection, asbestos-related work, safety,
10 industrial hygiene, or hazardous materials control;

11 D. registration as a registered architect, licensure
12 as a professional engineer, or certification as a certified
13 industrial hygienist or certified safety professional; or

14 E. a master's degree in environmental health,
15 industrial hygiene or safety, and work experience of 250 hours
16 in the field of building inspection, asbestos-related work,
17 safety, industrial hygiene, or hazardous materials control.

18 **Subp. 3. Training requirements for initial certification.**

19 To be eligible for initial certification as an asbestos
20 management planner an applicant must complete, before the
21 commissioner's receipt of the application:

22 A. an initial asbestos management planner training
23 course that is:

24 (1) permitted by the commissioner under part
25 4620.3704;

26 (2) approved by the United States Environmental
27 Protection Agency (EPA) with the EPA approval granted after June
28 1, 1987; or

29 (3) approved by a state asbestos training program
30 accredited by the EPA; and

31 B. an asbestos management planner refresher course
32 permitted by the commissioner under part 4620.3704 if the
33 applicant has completed the initial asbestos management planner
34 training course specified in item A, subitem (2) or (3).

35 **Subp. 4. Training diploma expiration; retraining.** The
36 applicant for certification as an asbestos management planner

1 must complete an annual asbestos management planner refresher
2 course permitted by the commissioner under part 4620.3704 when
3 the diploma from an initial management planner training course
4 as specified in subpart 3, item A, has expired before the
5 commissioner's receipt of the application.

6 A. The most recent asbestos management planner
7 refresher course completed must be permitted by the commissioner
8 under part 4620.3704.

9 B. Any refresher courses which have been completed
10 subsequent to the expiration of the diploma must have been
11 completed no more than 12 months after the expiration date of
12 the preceding diploma.

13 Subp. 5. **Application for initial certification.** An
14 applicant for initial certification as an asbestos management
15 planner must submit to the commissioner:

16 A. a completed application on a form provided by the
17 commissioner, which seeks only information the commissioner
18 reasonably considers necessary to identify the applicant and to
19 determine whether the applicant meets the statutory and
20 regulatory requirements for certification;

21 B. a nonrefundable application fee of \$100 ~~with-a~~
22 ~~business-check, cashier's-check, or money-order~~, which is not in
23 the form of a personal check, payable to the Minnesota
24 Department of Health; and

25 C. the evidence of qualification or experience
26 required by subpart 2 which is:

27 (1) an affidavit by each of the applicant's
28 employers, contracting parties, or labor organizations detailing
29 the dates of employment, hours worked, and job duties for the
30 work experience described in subpart 2, item A;

31 (2) a copy of the applicant's current license by
32 Minnesota as a building official described in subpart 2, item B;

33 (3) both the certified transcript of the
34 coursework completed for the degree described in subpart 2, item
35 C, and affidavits by each of the applicant's employers,
36 contracting parties, or labor organizations describing the dates

1 of employment, hours worked, and job duties for the work
2 experience described in subpart 2, item C;

3 (4) a copy of the applicant's current
4 registration or certification as described in subpart 2, item D;
5 or

6 (5) both the certified transcript of the
7 coursework completed for the degree described in subpart 2, item
8 E, and affidavits by each of the applicant's employers,
9 contracting parties, or labor organizations describing the dates
10 of employment, hours worked, and job duties for the work
11 experience described in subpart 2, item E; and

12 D. a copy of the applicant's original diploma for the
13 initial asbestos management planner training course and, if
14 applicable, copies of each of the applicant's original diplomas
15 for the asbestos management planner refresher training courses.

16 Subp. 6. **Renewal.** An individual certified as an asbestos
17 management planner must apply for renewal of asbestos management
18 planner certification by submitting to the commissioner a
19 completed renewal application ~~at least 30 calendar days before~~
20 by the expiration date of the current asbestos management
21 planner certificate. The renewal application must include:

22 A. the completed renewal application on a form
23 provided by the commissioner, which seeks only information the
24 commissioner reasonably considers necessary to identify the
25 applicant and to determine whether the applicant meets the
26 statutory and regulatory requirements for renewal of
27 certification;

28 B. a nonrefundable \$100 renewal application fee with
29 ~~a business check, cashier's check, or money order,~~ which is not
30 in the form of a personal check, payable to the Minnesota
31 Department of Health; and

32 C. ~~evidence of completion of~~ a copy of the training
33 course diploma from the most recent asbestos management planner
34 refresher training course required by subpart 4.

35 Subp. 7. **Denial of certification.** The commissioner shall
36 deny an application for certification as an asbestos management

1 planner if the applicant fails to comply with the requirements
 2 in this part. Additional grounds for the commissioner to deny
 3 an application are stated in Minnesota Statutes, section 144.99,
 4 subdivision 8, paragraphs (a) and (b). An applicant:

5 A. must be notified in writing of the denial of the
 6 certificate and the reasons for the denial; and

7 B. is not required to pay a second fee if the
 8 applicant submits a second asbestos management planner
 9 application within 30 days of the receipt of the notice that the
 10 asbestos management planner application has been denied. Fees
 11 are required for all subsequent applications.

12 Subp. 8. Duration of certificate; transfer. An asbestos
 13 management planner certificate is valid for 12 months after the
 14 completion date on the diploma for the most recently completed
 15 training course. The asbestos management planner certificate is
 16 not transferable.

17 Subp. 9. Duplicate certificate. To replace a lost,
 18 destroyed, or mutilated asbestos management planner certificate,
 19 the certified asbestos management planner must submit a
 20 completed application for a duplicate asbestos management
 21 planner certificate ~~on-a-form-provided-by-the-commissioner~~ and
 22 pay the a charge ~~with-a-business-check,-cashier's-check,-or~~
 23 ~~money-order-payable~~ to the Minnesota Department of Health for
 24 the cost of duplicating the certificate.

25 4620.3350 ASBESTOS PROJECT DESIGNER CERTIFICATION.

26 Subpart 1. Certification required. Beginning three months
 27 after the effective date of parts 4620.3000 to 4620.3724, an
 28 individual who prepares an asbestos project design must be
 29 certified by the commissioner as an asbestos project designer.

30 Subp. 2. Qualifications or experience requirements.
 31 Beginning six months after the effective date of parts 4620.3000
 32 to 4620.3724, to be eligible for certification as an asbestos
 33 project designer, an individual applying for certification must
 34 show evidence of completion of either:

35 A. work experience of at least 4,000 hours in

1 asbestos-related work or asbestos management activity as defined
2 in Minnesota Statutes, section 326.71; or

3 B. registration as a registered architect, licensure
4 as a professional engineer, or certification as a certified
5 industrial hygienist or certified safety professional.

6 Subp. 3. Training requirements for initial certification.
7 To be eligible for initial certification as an asbestos project
8 designer, an applicant must complete, before the commissioner's
9 receipt of the application:

10 A. an initial asbestos project designer training
11 course that is:

12 (1) permitted by the commissioner under part
13 4620.3704;

14 (2) approved by the United States Environmental
15 Protection Agency (EPA) with the EPA approval granted after June
16 1, 1987; or

17 (3) approved by a state asbestos training program
18 accredited by the EPA; and

19 B. an asbestos project designer refresher course
20 permitted by the commissioner under part 4620.3704 if the
21 applicant has completed the initial asbestos project designer
22 training course specified in item A, subitem (2) or (3).

23 Subp. 4. Training diploma expiration; retraining. The
24 applicant for certification as an asbestos project designer must
25 complete an annual asbestos project designer refresher course
26 permitted by the commissioner under part 4620.3704 when the
27 diploma from an initial project designer training course as
28 specified in subpart 3, item A, has expired before the
29 commissioner's receipt of the application.

30 A. The most recent asbestos project designer
31 refresher course completed must be permitted under part
32 4620.3704 by the commissioner.

33 B. Any refresher courses which have been completed
34 subsequent to the expiration of the diploma must have been
35 completed no more than 12 months after the expiration date of
36 the preceding diploma.

1 Subp. 5. Application for initial certification. An
2 applicant for initial certification as an asbestos project
3 designer must submit to the commissioner:

4 A. a completed application on a form provided by the
5 commissioner, which seeks only information the commissioner
6 reasonably considers necessary to identify the applicant and to
7 determine whether the applicant meets the statutory and
8 regulatory requirements for certification;

9 B. a nonrefundable application fee of \$100 ~~with-a~~
10 ~~business-check, cashier's-check, or money-order,~~ which is not in
11 the form of a personal check, payable to the Minnesota
12 Department of Health;

13 C. a copy of the applicant's original diploma for the
14 initial asbestos project designer training course and, if
15 applicable, copies of each of the applicant's original diplomas
16 from the asbestos project designer refresher training courses;
17 and

18 D. the evidence of qualification or experience
19 required by subpart 2 which is:

20 (1) an affidavit by each of the applicant's
21 employers, contracting parties, or labor organizations detailing
22 the dates of employment, hours worked, and job duties for the
23 work experience discussed in subpart 2, item A; or

24 (2) a copy of the applicant's current
25 certification, registration, or licensure described in subpart
26 2, item B.

27 Subp. 6. Renewal. An individual certified as an asbestos
28 project designer must apply for renewal of asbestos project
29 designer certification by submitting to the commissioner a
30 completed renewal application ~~at-least-30-calendar-days-before~~
31 by the expiration date of the current asbestos project designer
32 certificate. The renewal application must include:

33 A. the completed renewal application on a form
34 provided by the commissioner, which seeks only information the
35 commissioner reasonably considers necessary to identify the
36 applicant and to determine whether the applicant meets the

1 statutory and regulatory requirements for renewal of
2 certification;

3 B. a nonrefundable \$100 renewal application fee with
4 ~~a-business-check,-cashier's-check,-or-money-order~~ of \$100, which
5 is not in the form of a personal check, payable to the Minnesota
6 Department of Health; and

7 C. ~~evidence-of-completion-of~~ a copy of the training
8 course diploma from the most recent asbestos project designer
9 refresher training course required by subpart 4.

10 Subp. 7. Denial of certification. The commissioner shall
11 deny an application for an asbestos project designer certificate
12 if the applicant fails to comply with the requirements in this
13 part. Additional grounds for the commissioner to deny an
14 application are stated in Minnesota Statutes, section 144.99,
15 subdivision 8, paragraphs (a) and (b). An applicant:

16 A. must be notified in writing of the denial of the
17 certificate and the reasons for the denial; and

18 B. is not required to pay a second fee if the
19 applicant submits a second asbestos project designer application
20 within 30 days of the receipt of the notice that the asbestos
21 project designer application has been denied. Fees are required
22 for all subsequent applications.

23 Subp. 8. Duration of certificate; transfer. An asbestos
24 project designer certificate is valid for 12 months after the
25 completion date on the diploma for the most recently completed
26 training course. The asbestos project designer certificate is
27 not transferable.

28 Subp. 9. Duplicate certificate. To replace a lost,
29 destroyed, or mutilated asbestos project designer certificate,
30 the certified asbestos project designer must submit a completed
31 application for a duplicate asbestos project designer
32 certificate ~~on-a-form-provided-by-the-commissioner~~ and pay the a
33 ~~charge with-a-business-check,-cashier's-check,-or-money-order~~
34 payable to the Minnesota Department of Health for the cost of
35 duplicating the certificate.

1 4620.3410 ASBESTOS-RELATED WORK PROJECT NOTICE.

2 Subpart 1. General. Each licensed asbestos contractor
3 must notify the commissioner of each project to be performed in
4 whole or in part by the licensed asbestos contractor.

5 Subp. 2. Requirements for notice. At least five calendar
6 days before the beginning of a project, except as provided in
7 part 4620.3420, the commissioner must receive from the licensed
8 asbestos contractor:

9 A. a completed notice on a form provided by the
10 commissioner which seeks only information the commissioner
11 reasonably considers necessary to inspect the project and issue
12 the permit;

13 B. the permit fee for the project as determined under
14 part 4620.3430; and

15 C. except for small residential abatement projects,
16 documentary evidence of the costs of the portion of the project
17 to be performed by the licensed asbestos contractor, as
18 described in part 4620.3430, signed by the contracting entity.

19 Subp. 3. Notice of abatement schedule. The commissioner
20 must be notified in advance of the dates and work shift times
21 for abatement.

22 A. If a project will occur in two or more phases
23 between the project start and end dates specified on the notice,
24 the commissioner must receive a written schedule of abatement
25 dates and work shift times from the licensed asbestos contractor
26 performing abatement at least five calendar days before
27 beginning the project.

28 B. For a project described in part 4620.3100, subpart
29 27b, item B or C, if the licensed asbestos contractor performing
30 abatement cannot reasonably determine the schedule for abatement
31 at the time of notice, the licensed asbestos contractor
32 performing abatement must also submit written notice to the
33 commissioner of abatement dates and work shift times for each
34 portion of the project which exceeds three linear feet or three
35 square feet of asbestos-containing material, so that the
36 commissioner receives the notice as soon as possible before that

1 portion of the project begins.

2 C. ~~Each notice required by this subpart must be~~
3 ~~submitted on a form provided by the commissioner.~~

4 ~~D.~~ The asbestos contractor performing abatement must
5 ensure that at least one site supervisor is present at the
6 project site on the dates and during the work shifts for which
7 the commissioner has been notified.

8 ~~E.~~ D. The asbestos contractor performing abatement
9 must ensure that abatement is performed only during dates and
10 work shifts for which the commissioner has been notified.

11 4620.3415 AMENDMENT OF NOTICE.

12 The licensed asbestos contractor performing abatement must
13 notify the commissioner according to this part of any change in
14 the information reported to the commissioner by that contractor
15 under part 4620.3610.

16 A. All amendments except for work shift times and
17 dates must be in writing ~~on a form provided by the commissioner~~
18 with the permit number and the changes clearly indicated.

19 B. Any amendment of the project start date to an
20 earlier start date must be received by the commissioner at least
21 five calendar days before abatement begins.

22 C. An amendment, other than a change of the project
23 start date to an earlier start date, must be received by the
24 commissioner no later than the effective date and time of the
25 change.

26 D. Any amendment of the dates or work shift times,
27 other than the project start and end dates, must be received by
28 the commissioner by voice mail, telephone, facsimile, ~~or mail,~~
29 or delivery.

30 4620.3420 EMERGENCY PROJECT NOTICE.

31 Subpart 1. **Emergency project begun during work hours.** For
32 an emergency project which begins between 8:00 a.m. and 4:30 p.m.
33 on the days the Minnesota Department of Health is open, the
34 commissioner must receive from the licensed asbestos contractor:

35 A. a completed notice on a form provided by the

1 commissioner which seeks only information the commissioner
2 considers reasonably necessary to inspect the project and issue
3 the permit as soon as possible before the project begins; and

4 B. within five calendar days after the emergency
5 project begins, the items listed in part 4620.3410, subpart 2,
6 items B and C.

7 Subp. 2. **Emergency project begun after work hours.** For an
8 emergency project which begins at a time other than the times
9 specified in subpart 1, the commissioner must receive from the
10 licensed asbestos contractor:

11 A. a completed notice on a form provided by the
12 commissioner which seeks only information the commissioner
13 considers reasonably necessary to inspect the project and issue
14 the permit by 4:30 p.m. of the next day the department is open;
15 and

16 B. within five calendar days after the emergency
17 project begins, the items listed in part 4620.3410, subpart 2,
18 items B and C.

19 Subp. 3. **Amendments to emergency project notice.**
20 Amendments to the emergency project notice form must be made
21 according to part 4620.3415, items A, C, and D. An amendment to
22 an emergency project notice must not include additional
23 asbestos-containing material to be abated unless that material
24 is part of the same emergency situation.

25 4620.3425 PERMIT ISSUANCE.

26 If the licensed asbestos contractor performing abatement
27 complies with the requirements of part 4620.3410, subparts 2 and
28 3, or 4620.3420, subpart 1 or 2, the commissioner shall issue a
29 project permit to the licensed asbestos contractor. The project
30 permit shall expire on the end date stated on the notice or any
31 amendment of the end date made under part 4620.3415.

32 4620.3430 PERMIT FEES.

33 Subpart 1. **General.** Fees are required for all projects.

34 Subp. 2. **Permit fees for abatement other than small**
35 **residential abatement.** As required by Minnesota Statutes,

1 section 326.75, subdivision 3, the asbestos contractor
2 performing abatement must ensure that a project fee equal to one
3 percent of the total cost of the abatement portion of a project
4 ~~must-be~~ is paid to the commissioner.

5 A. The total cost of the abatement portion of a
6 project must include the cost of abatement area preparation,
7 decontamination units, containment and permanent enclosures,
8 alterations, abatement operations, repairs, wages, materials,
9 waste disposal, profit, performance bonds, insurance, and
10 administrative overhead. The total cost of the abatement
11 portion of a project does not include the cost of reinsulation
12 or the cost of air quality monitoring.

13 B. If the final invoice amount for the abatement
14 portion exceeds the total cost of the abatement portion of the
15 project previously reported on the notification form, the
16 asbestos contractor performing abatement must ensure that an
17 additional fee payment in the amount of one percent of that
18 difference ~~must-be~~ is submitted to the commissioner within 30
19 calendar days of the submission of the invoice to the
20 contracting entity.

21 C. If the final project cost amount for the abatement
22 portion is less than the total cost of the abatement portion of
23 the project previously reported on the notification form, the
24 commissioner must pay a refund of the excess fee payment to the
25 licensed asbestos contractor.

26 Subp. 3. Permit fees for air quality monitoring, other
27 than small residential abatement. As required by Minnesota
28 Statutes, section 326.75, subdivision 3, the asbestos contractor
29 performing air monitoring must ensure that a project fee equal
30 to one percent of the total cost of the air quality portion of a
31 project ~~must-be~~ is paid to the commissioner.

32 A. The total cost of the air quality monitoring
33 portion of a project must include the cost of air quality
34 monitoring as specified in part 4620.3598, wages, materials,
35 profit, performance, bonds, insurance, and administrative
36 overhead.

1 B. If the final invoice for the air quality
2 monitoring portion of the project exceeds the total cost of the
3 air quality monitoring portion of the project previously
4 reported on the notification form, the asbestos contractor
5 performing air monitoring must ensure that an additional fee
6 payment in the amount of one percent of that difference ~~must be~~
7 is submitted to the commissioner within 30 calendar days of the
8 submission of the invoice to the contracting entity.

9 C. If the final project cost amount for the air
10 quality monitoring portion is less than the total cost of the
11 air quality monitoring portion of the project previously
12 reported on the notification form, the commissioner must pay a
13 refund of the excess fee payment to the licensed asbestos
14 contractor.

15 Subp. 4. **Small residential abatement permit fee.**
16 Notwithstanding anything in this part, for each small
17 residential abatement the person undertaking that abatement must
18 pay to the commissioner a project permit fee of \$35 per project.

19 4620.3435 POSTING THE WORK SITE.

20 The licensed asbestos contractor performing abatement must
21 post in a conspicuous place outside of the abatement area:

22 A. a copy of the project permit;

23 B. a copy of the project notice and all written
24 amendments pertaining to that project; and

25 C. if applicable, a copy of the notice submitted to
26 the commissioner according to part 4620.3410, subpart 3.

27 4620.3440 RECORDS.

28 Subpart 1. **On-site records.** The asbestos contractor
29 performing abatement must ensure that the records in this
30 subpart ~~must be compiled for each project and be~~ are readily
31 available for review by the commissioner at the work site during
32 the entire period of the project.

33 A. A daily sign-in and sign-out log must identify
34 individuals entering containments, mini-containments, or working
35 with glove bags, by name, certificate number, and length of time

1 spent in the containments, mini-containments, or working with
2 glove bags.

3 B. A copy of the asbestos project plan must be
4 developed according to part 4620.3560.

5 C. All on-site air monitoring results for air
6 monitoring required under parts 4620.3592 to 4620.3598 must be
7 documented, including a written explanation of any fiber count
8 excursion above the applicable standards.

9 D. The negative air pressure measurements required
10 under part 4620.3570 must clearly indicate the measurement, the
11 date and time of the measurement, and the containment to which
12 the measurement applies. All instances of negative pressure
13 deviation from the minimum requirement under part 4620.3570,
14 subparts 4 and 5, must have a written explanation on or attached
15 to the measurement record.

16 Subp. 2. Record retention. The records in subpart 1 must
17 be retained by the asbestos contractor for 30 years after
18 completion of the project. When the licensed asbestos
19 contractor ceases operation, within 20 calendar days of ceasing
20 operation, the responsible individual must submit written notice
21 to the commissioner of the name, address, and telephone number
22 of the individual with whom the records required by subpart 1
23 are deposited.

24 4620.3450 DUTIES OF CONTRACTING ENTITY.

25 A contracting entity is responsible for compliance with
26 this part. A contracting entity must:

27 A. maintain for at least three years, records of the
28 amount of asbestos-containing material removed, enclosed, and
29 encapsulated, during each calendar year, in each facility for
30 which the contracting entity is responsible; and

31 B. before any person begins work involving the
32 enclosure, removal, or encapsulation of asbestos-containing
33 material, inform that person, in writing, of the cumulative
34 quantities of all asbestos-containing materials enclosed,
35 removed, or encapsulated within a facility during the current

1 calendar year, as of the date of the writing.

2 4620.3460 INSPECTION AND ASSESSMENT OF ASBESTOS-CONTAINING
3 MATERIALS.

4 Subpart 1. **Applicability.** When an asbestos inspection is
5 performed, the asbestos inspection must be conducted according
6 to this part.

7 Subp. 2. **Asbestos sampling.** Sampling must be conducted as
8 provided in Code of Federal Regulations, title 40, chapter I,
9 subchapter R, part 763, subpart E, section 763.86, amended
10 through April 15, 1988, and Code of Federal Regulations, title
11 40, chapter I, subchapter R, part 763, subpart E, appendix C,
12 section I, paragraph (B), subparagraph (3), amended through
13 February 3, 1994.

14 Subp. 3. **Asbestos analysis.** Analysis of bulk samples
15 collected as part of an asbestos inspection must be analyzed
16 according to this subpart.

17 A. Bulk samples collected and submitted for analysis
18 must be analyzed for asbestos using a laboratory ~~accredited-by~~
19 ~~the:~~

20 (1) accredited by the National Institute of
21 Science and Technology (NIST) through the National Voluntary
22 Laboratory Accreditation Program (NVLAP); or

23 (2) which successfully participates in the
24 asbestos bulk analysis program of the American Industrial
25 Hygiene Association (AIHA) with-successful-participation-in-the
26 asbestos-bulk-analysis-program.

27 B. Bulk samples must not be composited for analysis
28 and unless allowed by the Environmental Protection Agency (EPA)
29 as specified in "Asbestos NESHAP Clarification Regarding
30 Analysis of Multi-layered Systems," Federal Register, volume 5,
31 number 3, page 542, January 5, 1994. Bulk samples shall be
32 analyzed for asbestos content by polarized light microscopy
33 (PLM), as specified in EPA Method for the Determination of
34 Asbestos in Bulk Building Materials, United States EPA
35 600/R-93/116, 1993. This document is incorporated by reference,

1 is not subject to frequent change, and is available through the
2 Minitex interlibrary loan system.

3 C. A homogeneous area is determined not to contain
4 asbestos only if the results of all samples required to be
5 collected from the area show asbestos in amounts of one percent
6 or less.

7 D. A homogeneous area is determined to contain
8 asbestos if results of at least one sample collected from the
9 area shows that asbestos is present in an amount greater than
10 one percent.

11 E. The asbestos inspector must obtain an analysis
12 report which contains the:

13 (1) name and address of the laboratory performing
14 the analysis;

15 (2) date of the analysis; and

16 (3) name and signature of the person performing
17 the analysis.

18 Subp. 4. **Assessment.** If the asbestos inspector performs
19 an assessment of the condition of asbestos-containing material
20 or suspected asbestos-containing material, the asbestos
21 inspector must provide a written assessment using the categories
22 from Code of Federal Regulations, title 40, chapter I,
23 subchapter R, part 763, subpart E, section 763.88, paragraph
24 (b), items (1) to (7), amended through April 15, 1988, for all
25 known or assumed asbestos-containing material in the facility or
26 portion of the facility inspected.

27 Subp. 5. **Inspector duties.** The asbestos inspector must
28 have a current asbestos inspector certificate at the location
29 where the asbestos inspector is conducting work. The asbestos
30 inspector must prepare a written report which:

31 A. contains the exact location of each homogeneous
32 area of material which is known or assumed to be
33 asbestos-containing material;

34 B. if the asbestos inspector performs an assessment
35 of asbestos-containing material or suspected asbestos-containing
36 material, contains the condition of each homogeneous area of

1 material which is known or assumed to be asbestos-containing
2 material;

3 C. is signed by the inspector;

4 D. is dated by the inspector;

5 E. includes the inspector's Minnesota asbestos
6 inspector certification number;

7 F. provides a photocopy of the current asbestos
8 inspector certificate of each inspector who performed the
9 inspection; and

10 G. is provided to the ~~facility-owner~~ person
11 requesting the inspection.

12 4620.3470 ASBESTOS MANAGEMENT PLAN.

13 Subpart 1. **Applicability.** When an asbestos management
14 planner develops a written asbestos management plan for a
15 facility or portion of a facility, the asbestos management plan
16 must meet the requirements of this part.

17 Subp. 2. **General.** The asbestos management plan must
18 address all materials known or assumed to be asbestos-containing
19 material within the facility or portion of the facility.

20 A. An asbestos management plan must be developed by
21 an individual certified as an asbestos management planner.

22 B. The asbestos management planner must ~~carry~~ have a
23 current asbestos management planner certificate at ~~all-times-the~~
24 ~~asbestos-management-plan-is-being-developed~~ the location where
25 the asbestos management planner is conducting work.

26 C. Any changes to an asbestos management plan must be
27 made by an asbestos management planner.

28 D. The asbestos management planner must ensure that
29 the asbestos management plan is available for review by the
30 commissioner on request.

31 E. Material assumed by the asbestos inspector to be
32 asbestos-containing material must be designated by the asbestos
33 management planner in the asbestos management plan as
34 asbestos-containing material, unless sampling of the material
35 demonstrates the material is not asbestos-containing material.

1 Subp. 3. Asbestos management plan contents. The asbestos
2 management plan must be specific for the facility designated in
3 the plan and contain:

4 A. the name and address of the facility;

5 B. copies of all asbestos inspection reports
6 including copies of all photographs, diagrams, or other items
7 referred to in the report;

8 C. a blueprint, legible diagram, or written
9 description of the facility that indicates the location of all
10 known or assumed asbestos-containing material;

11 D. the name, address, and telephone number of the
12 individual designated to implement and administer the asbestos
13 management plan;

14 E. the name and signature of the management planners
15 making the recommendations, and a photocopy of the valid
16 asbestos management planner certificate belonging to each
17 management planner;

18 F. response actions, or preventative measures
19 performed or to be performed to minimize or prevent fiber
20 release episodes; and

21 G. procedures to inform facility maintenance
22 personnel and outside contractors of the location and identity
23 of building materials known or assumed to be asbestos-containing
24 material before the beginning of work in an area where these
25 materials are located.

26 4620.3480 ASBESTOS PROJECT DESIGN.

27 Subpart 1. Applicability. When an asbestos project design
28 is prepared, it must be prepared according to this part and
29 signed by the asbestos project designer.

30 Subp. 2. Use of asbestos project designer. The asbestos
31 project designer must have a current asbestos project designer
32 certificate ~~available-for-review-by-the-commissioner~~ at the
33 designer's-work-site location where the asbestos project
34 designer is conducting work. The asbestos project designer must
35 include in the asbestos project design a photocopy of the

1 current asbestos project designer certificate of the asbestos
2 project designer who prepared the asbestos project design.

3 Subp. 3. Technical specification content requirements.

4 The asbestos project designer must include in the asbestos
5 project design the method for complying with all applicable work
6 practice requirements of parts 4620.3000 to 4620.3724. The
7 asbestos project design must address:

8 A. preparation of each asbestos-related work area;

9 B. establishment of each containment;

10 C. establishment of each decontamination unit and
11 procedures for use;

12 D. evaluation and selection of various fiber release
13 control options;

14 E. establishment, maintenance, and monitoring of
15 negative air pressure within each containment;

16 F. asbestos-containing material enclosure, removal,
17 encapsulation, or repair work practices;

18 G. visual inspection procedures for each asbestos
19 abatement containment area;

20 H. air monitoring, including analysis, documentation,
21 and record keeping;

22 I. respiratory protection and personal protective
23 equipment requirements; and

24 J. disposal of asbestos-containing materials and
25 project waste.

26 4620.3559 APPLICABLE WORK PRACTICES FOR ABATEMENT.

27 Any person performing asbestos-related work must ensure
28 compliance with parts 4620.3560 to 4620.3598.

29 A. Notwithstanding this part, for asbestos-related
30 work involving the enclosure, removal, or encapsulation of
31 asbestos-containing material that is located outside the
32 foundation, curtain walls, or roof of a facility and is above
33 grade, the asbestos contractor must comply with parts 4620.3000
34 to 4620.3724 except parts 4620.3566; 4620.3567; 4620.3568,
35 subparts 1 to 4; 4620.3569; 4620.3570; 4620.3575, subparts 1 to

1 8; 4620.3580; 4620.3581; 4620.3585; 4620.3592; 4620.3594;
2 4620.3596; 4620.3597; and 4620.3598.

3 B. Notwithstanding this part, in the case of
4 asbestos-related work within a tunnel, as defined in part
5 4620.3100, subpart 33, the asbestos contractor must:

6 (1) comply with parts 4620.3000 to 4620.3724 except
7 part 4620.3568, subparts 2 to 4; and

8 (2) use two layers of six-mil polyethylene sheeting
9 for critical containment barriers when complying with part
10 4620.3567.

11 4620.3560 ASBESTOS PROJECT PLAN.

12 Subpart 1. **Applicability.** For each project other than a
13 project in a single-family residence executed by the domiciled
14 owner of the residence, the person performing abatement must
15 prepare a project-specific asbestos project plan.

16 Subp. 2. **Plan availability.** The person performing
17 abatement must have a complete and current asbestos project plan
18 available for inspection at the project site at the start of the
19 project.

20 Subp. 3. **Asbestos project plan content.** The asbestos
21 project plan must contain:

22 A. the name and address of the project site;

23 B. a list of the asbestos work areas, including room
24 numbers if known, of the project;

25 C. the amount and type of asbestos-containing
26 material to be removed, encapsulated, or enclosed in each
27 asbestos work area;

28 D. the date when the heating, ventilating, and air
29 conditioning (HVAC) system for each asbestos work area will be
30 shut down;

31 E. the name of any person responsible for the
32 shutdown in item D;

33 F. the rated capacity of each negative air machine
34 used to establish and maintain the negative air pressure of each
35 containment;

1 G. the calculation showing the number of containment
2 air changes per hour and the number of negative air machines
3 used to establish and maintain the required containment negative
4 air pressure for each containment;

5 H. documentation if a negative air system is to be
6 exhausted indoors, why it is technically infeasible to exhaust
7 the negative air system outdoors; and

8 I. a floor plan or sketch which indicates:

9 (1) the dimensions and volume of each
10 containment;

11 (2) the location of any negative air machines
12 used in the asbestos work area;

13 (3) the location of any decontamination unit to
14 be used in conjunction with each asbestos work area; and

15 (4) the type, size, and location of any
16 containment attachments through which asbestos waste containers
17 are removed from the containment.

18 Subp. 4. **Asbestos project plan changes.** If any
19 information was estimated or a change occurs during the project,
20 the new information must be added to the asbestos project plan
21 as it becomes known.

22 4620.3566 CLEANING CONTAINMENT AREA BEFORE ABATEMENT.

23 All surfaces of the containment area must be cleaned before
24 abatement. The following actions must be taken before abatement
25 begins.

26 A. Uncontaminated movable objects must be removed
27 from the containment area.

28 B. Contaminated objects or objects suspected of being
29 contaminated must be either:

30 (1) vacuumed with a HEPA-filter equipped vacuum;

31 (2) wet wiped; or

32 (3) disposed of as asbestos waste.

33 C. Decontaminated movable objects must be removed
34 from the containment area.

35 D. Objects that cannot be removed from the

1 containment area must be cleaned by HEPA-filter equipped
2 vacuuming or by wet wiping.

3 E. Before the critical barriers are constructed, all
4 remaining surfaces in the containment area that will be in
5 contact with the critical barriers must be cleaned by
6 HEPA-filter equipped vacuuming or by wet wiping.

7 F. Any freestanding containment wall that needs to be
8 constructed must be framed after the removal of all movable
9 objects from the containment area.

10 4620.3567 INSTALLATION OF CRITICAL BARRIERS.

11 All openings between the containment area and
12 uncontaminated areas must be sealed with at least one layer of
13 six-mil polyethylene plastic sheeting securely fastened to
14 achieve an airtight seal around the opening.

15 A. All objects or structures that cannot be removed
16 from the containment area must be covered with at least one
17 layer of six-mil polyethylene plastic sheeting securely fastened
18 to achieve an airtight seal around the object or structure.

19 B. All heating, ventilating, and air conditioning
20 intake and exhaust openings in the containment area and any
21 seams in system components must be sealed with at least ~~one~~
22 layer two layers of six-mil polyethylene sheeting securely
23 fastened to achieve an airtight seal around the object or
24 structure.

25 C. All penetrations, including penetrations around
26 electrical conduits, telephone wires, water supply pipes, and
27 drain pipes, must be sealed with at least one layer of six-mil
28 polyethylene plastic sheeting securely fastened to achieve an
29 airtight seal around the object.

30 D. All porous surfaces except ceilings not addressed
31 in items A to C must be sealed with at least one layer of
32 six-mil polyethylene plastic sheeting securely fastened to
33 achieve an airtight seal.

34 E. All openings between the asbestos abatement
35 containment area and contaminated areas must be sealed with at

1 least one layer of six-mil polyethylene plastic sheeting or
2 comparable material securely fastened to achieve an airtight
3 seal around the opening.

4 F. If any freestanding containment wall is to be
5 used, the porous outside of the wall frame or frame of the
6 freestanding containment must be covered with at least one layer
7 of six-mil polyethylene sheeting securely fastened to achieve an
8 airtight seal.

9 4620.3568 CONTAINMENT.

10 Subpart 1. **General.** The containment must be constructed
11 to separate and isolate the containment area from the rest of
12 the building and the outdoors. The containment must be airtight
13 and leakproof.

14 Subp. 2. **Floor sheeting.** Floor sheeting must be placed
15 over the entire floor as part of the containment.

16 A. Floor sheeting must consist of at least two layers
17 of six-mil polyethylene plastic sheeting or comparable material.

18 B. For the first layer, enough area for overlap with
19 the wall sheeting must be provided to maintain an airtight and
20 leakproof seal for the containment.

21 C. For the second layer, the sheeting must extend 12
22 inches beyond the wall or floor joints.

23 D. Floor sheeting must be sized to minimize seams.

24 E. The floor must have no seams at wall and floor
25 joints.

26 Subp. 3. **Wall sheeting.** Wall sheeting must be placed over
27 the entire wall. Wall sheeting must:

28 A. consist of at least one layer of four-mil
29 polyethylene plastic sheeting;

30 B. provide enough area for overlap with the other
31 wall or floor sheeting to maintain an airtight and leakproof
32 seal for the containment;

33 C. be sized to minimize seams;

34 D. extend to the deck area or floor joists;

35 E. not have seams located at wall and floor joints;

1 and

2 F. have a 12-inch by 12-inch clear viewing window,
3 where feasible, to allow for a view of the work area if the
4 polyethylene plastic sheeting is not clear. ~~This item is not
5 applicable in a single-family residence if a basement is made
6 into a single-containment area with the decontamination unit
7 abutting the entryway to the basement.~~

8 Subp. 4. Freestanding containment walls and freestanding
9 containments. Freestanding containment walls and freestanding
10 containments must:

11 A. have floor sheeting that complies with subpart 2;

12 B. have interior wall sheeting that complies with
13 subpart 3;

14 C. have the frame painted with a nonporous paint if
15 the framing materials used for a freestanding wall or
16 containment are made of a porous material such as wood, unless
17 the framing materials are covered with polyethylene sheeting or
18 the framing materials are disposed of as asbestos waste at the
19 end of the project; and

20 D. have interior ceiling sheeting that consists of
21 one layer of four-mil polyethylene plastic sheeting and is
22 securely fastened to provide an airtight, leakproof containment
23 if containment walls do not abut the ceiling.

24 Subp. 5. Posting asbestos work area. During
25 asbestos-related work, warning signs must be displayed at all
26 approaches to the asbestos work area. The sign must state:
27 "DANGER. ASBESTOS CANCER AND LUNG DISEASE HAZARD. AUTHORIZED
28 PERSONNEL ONLY. RESPIRATORS AND PROTECTIVE CLOTHING ARE
29 REQUIRED IN THIS AREA."

30 4620.3569 DECONTAMINATION UNITS.

31 Subpart 1. General. Procedures for the use of the
32 decontamination unit must be established by the person
33 performing abatement to prevent contamination outside the
34 asbestos work area. A decontamination unit must be used by all
35 persons when exiting a containment. The decontamination unit

1 must:

2 A. be contiguous with the containment area except as
3 provided in subpart 2;

4 B. consist of a series of connecting rooms with the
5 middle room being the shower room;

6 C. have doorways between the rooms and entrances to
7 the unit protected with two overlapping sheets of polyethylene
8 or the functional equivalent; and

9 D. have a shower room that:

10 (1) is leakproof;

11 (2) contains a series of water filters with the
12 last filter capable of collecting particles of 5.0 micron or
13 less;

14 (3) is supplied with hot and cold water
15 adjustable at the tap; and

16 (4) is supplied with soap and disposable towels.

17 Subp. 2. **Location.** In facilities classified in the
18 Standard Industrial Classification Manual, 1987, as a B
19 division, D division-major group 26, or E division-major group
20 49, the decontamination unit must be connected to the
21 containment where feasible. The Standard Industrial
22 Classification Manual, 1987, is available from the National
23 Technical Information Service, 5285 Port Royal Road,
24 Springfield, Virginia, 22161, or from the State Law Library,
25 Minnesota Judicial Center, 25 Constitution Avenue, St. Paul,
26 Minnesota 55155.

27 Subp. 3. **Waste.** Filtered wastewater from the shower must
28 be discharged to a sanitary sewer or a septic system, or may be
29 collected in barrels for later disposal to a sanitary sewer or
30 septic system.

31 Subp. 4. **Small residential decontamination unit.** For
32 small residential abatement, the decontamination unit must
33 consist of at least a clean room, shower room, and dirty room.

34 Subp. 5. **Decontamination unit other than small residential**
35 **abatement.** For abatement in a facility other than small
36 residential abatement, the decontamination unit must consist of

1 a clean room, ~~a three-foot~~ an air lock chamber, a shower, a
2 ~~three-foot~~ an air lock chamber, and a dirty room.

3 4620.3570 HEPA-FILTERED NEGATIVE PRESSURE.

4 Subpart 1. General. The containment must be provided with
5 a HEPA-filter equipped ventilation system.

6 Subp. 2. HEPA-filter equipped negative air requirements.

7 The HEPA-filter negative air machine must be equipped with:

8 A. a calibrated pressure gauge to measure the
9 pressure drop across the filter;

10 B. an audible alarm or an automatic unit shutdown
11 mechanism activated in the event of a breach in the filter or in
12 the absence of a filter;

13 C. an audible alarm or automatic unit shutdown
14 mechanism activated when the differential pressure across the
15 filter exceeds a preset pressure; and

16 D. an automatic electrical power cutoff switch so the
17 unit will not operate if the HEPA-filter is not present or not
18 positioned correctly.

19 Subp. 3. Continuous operation of HEPA-filter equipped
20 ventilation system. The HEPA-filter equipped ventilation system
21 must operate continuously from the time of asbestos disturbance
22 until results of analysis of the clearance samples indicate the
23 air inside the containment is at or below the clearance standard
24 or the alternative clearance standard.

25 Subp. 4. HEPA-filter equipped system criteria. The
26 HEPA-filter equipped ventilation system must be operated
27 according to the criteria in this subpart.

28 A. The amount of air exhausted from the containment
29 must provide for at least four air changes per hour within the
30 containment.

31 B. A negative pressure of at least 0.02 inches of
32 water must be established and maintained within each containment
33 with respect to the area outside of the containment.

34 C. The negative pressure must be measured by a
35 recording manometer.

1 (1) The recording manometer must be placed as far
2 from the intake of the HEPA-filter equipped ventilation system
3 as possible.

4 (2) The recording manometer must be placed to
5 ensure that the reading is of the containment's negative
6 pressure.

7 (3) The recording manometer must be monitored
8 every two hours throughout all abatement work shifts to ensure
9 continuous recording operation.

10 (4) The recording manometer must be zeroed before
11 work begins each day.

12 (5) Each recording manometer must be calibrated
13 at least annually.

14 (6) In the event of a failure of a recording
15 manometer during a project, the following actions must be taken:

16 (i) an operating recording manometer must be
17 placed in service within 24 hours of the failure of the initial
18 recording manometer;

19 (ii) until an operating recording manometer
20 is placed in service, hourly pressure readings must be
21 documented for all work shifts; and

22 (iii) documentation must be available at the
23 work site for each failure of the recording manometer.

24 Subp. 5. Inability to establish or maintain a negative
25 pressure of at least 0.02 inches of water. If it is not
26 possible to establish or maintain a negative pressure of at
27 least 0.02 inches of water in the containment with respect to
28 the pressure outside the containment for a period of 15 minutes,
29 items A to D apply in addition to the requirements of subpart 4,
30 item C.

31 A. A pressure as close to negative 0.02 inches of
32 water as possible must be maintained from the time construction
33 of the containment is completed until results from clearance air
34 samples are obtained.

35 B. The amount of air exhausted from the containment
36 must be increased to at least six air changes per hour within

1 the containment.

2 C. Documentation must be available on site for each
3 case of the failure to establish negative pressure or each case
4 of failure to maintain a pressure of negative 0.02 inches of
5 water in the containment with respect to the air pressure
6 outside the containment. The documentation must specify the:

7 (1) probable cause of failure to establish or
8 maintain the required negative air pressure;

9 (2) date of failure to establish or maintain the
10 required negative air pressure;

11 (3) times of failure to maintain the required
12 negative air pressure; and

13 (4) name of the asbestos site supervisor in
14 charge of the site at the time of failure to establish or
15 maintain the required negative air pressure in the containment
16 with respect to the air pressure outside the containment.

17 D. Specific methods used to reestablish a negative
18 pressure of at least 0.02 inches of water in the containment
19 with respect to the air outside the containment must be
20 documented and available for review on site.

21 Subp. 6. **HEPA-filtered ventilation system exhaust.** The
22 HEPA-filter equipped ventilation system must be positioned to
23 exhaust filtered air to the outside of the facility. If it is
24 not technically feasible to exhaust the HEPA-filter equipped
25 ventilation systems outdoors, there must be air monitoring every
26 four hours during abatement activity in the vicinity of the
27 HEPA-filter equipped ventilation system exhaust.

28 4620.3571 REMOVAL OF ASBESTOS-CONTAINING MATERIAL.

29 Subpart 1. **General.** Water to which a surfactant has been
30 added must be used before and during removal of
31 asbestos-containing material to prevent fibers from becoming
32 airborne during asbestos-related work. All asbestos-containing
33 material must:

34 A. be adequately wet before removal;

35 B. be adequately wet during removal;

1 C. be placed and sealed in containers while
2 adequately wet; and

3 D. not be allowed to dry.

4 Subp. 2. Removal of structures and objects covered with
5 asbestos-containing material. A structure or object covered
6 with asbestos-containing material must be:

7 A. removed intact or in large sections where
8 possible;

9 B. adequately wet before being sealed in six-mil
10 clear polyethylene sheeting or comparable material;

11 C. adequately wet during removal of the structure or
12 object; and

13 D. lowered to the floor or ground and not dropped.

14 Subp. 3. Waste. Waste containers must be sealed to
15 prevent drying of the asbestos-containing material.

16 4620.3572 ENCAPSULATION OF ASBESTOS-CONTAINING MATERIAL.

17 Encapsulation of asbestos-containing material must meet the
18 requirements in this part.

19 A. Any loose or hanging asbestos-containing material
20 must be removed before encapsulation according to part 4620.3571.

21 B. Filler compound applied to gaps in existing
22 asbestos-containing material must contain no asbestos, adhere
23 well to the substrate, and provide a base for the encapsulant.

24 C. Spray encapsulant must be applied using only
25 airless spray equipment.

26 D. Encapsulant must be water-based.

27 E. Encapsulated asbestos-containing material must be
28 ~~labeled and the label must state:--"DANGER.--CONTAINS-ASBESTOS~~
29 ~~FIBERS.--AVOID-CREATING-DUST.--CANCER-AND-LUNG-DISEASE-HAZARD."~~
30 specially designated, according to Code of Federal Regulations,
31 title 29, section 1926.1101(k)(8), to warn individuals who may
32 disturb the material.

33 4620.3573 PERMANENT ENCLOSURE OF ASBESTOS-CONTAINING MATERIAL.

34 Installation of a permanent enclosure of
35 asbestos-containing material must meet the requirements in this

1 part.

2 A. A permanent enclosure must:

3 (1) consist of a rigid barrier with impermeable
4 sides;

5 (2) be designed to prevent air movement across
6 the rigid barrier; and

7 (3) render the area behind it inaccessible.

8 B. Any asbestos-containing materials that will be
9 disturbed during the installation of hangers, brackets, or other
10 portions of the permanent enclosure must be sprayed with water
11 to which surfactant has been added.

12 C. Any loose or hanging asbestos-containing material
13 must be removed before construction of the enclosure.

14 ~~D. Permanently-enclosed-asbestos-containing-material~~
15 ~~must-be-labeled-and-the-label-must-state:--"DANGER:--CONTAINS~~
16 ~~ASBESTOS-FIBERS:--AVOID-CREATING-DUST:--CANCER-AND-LUNG-DISEASE~~
17 ~~HAZARD:--"~~ The permanent enclosure must be specially designated,
18 according to Code of Federal Regulations, title 29, section
19 1926.1101(k)(8), to warn individuals who may disturb the
20 enclosure.

21 4620.3575 COMPLETION OF ABATEMENT.

22 Subpart 1. Postabatement cleaning. After
23 asbestos-containing material has been removed, encapsulated, or
24 enclosed, interior surfaces of the containment and interior
25 surfaces of the decontamination unit must be cleaned.

26 A. HEPA-filter equipped vacuuming, wet wiping, or
27 both, must be used.

28 B. Cleaning must be performed until no asbestos dust,
29 residue, dirt, or debris is visible on any part of the work area.

30 C. All liquid waste must be cleaned up and disposed
31 of as described in subpart 9.

32 D. All abatement equipment must be cleaned and all
33 equipment except the HEPA-filter equipped negative air machine
34 must be removed from the containment.

35 E. Asbestos contaminated equipment that cannot be

1 cleaned must be sealed in two layers of six-mil polyethylene
2 before removal from the containment.

3 F. Asbestos-containing material which was removed
4 must be taken out of the containment.

5 Subp. 2. Visual inspection of containment after
6 postabatement cleaning. A visual inspection of the containment
7 and the decontamination unit must be performed after the
8 containment and decontamination unit have dried completely.

9 A. Any residue observed in the containment or
10 decontamination unit must be considered to be asbestos.

11 B. The sequence of cleaning and inspection must be
12 repeated until the area passes a visual inspection.

13 C. The inspection must establish completeness of
14 removal, encapsulation, enclosure, and cleanup.

15 (1) Surfaces must be wiped using a dark damp
16 cloth to collect the dust, debris, and residue from surfaces.

17 (2) The cloth must be inspected for evidence of
18 dust.

19 (3) After the final inspection, residue, dust,
20 dirt, or debris must not be visually detectable on any part of
21 the work area, including floors, walls, ducts, conduits, pipes,
22 and ceiling tile grid bars, as well as the asbestos abatement
23 equipment.

24 Subp. 3. Removal of containment walls and floors. After
25 the postabatement visual inspection, removal of the walls and
26 floors must occur in the order specified in items A and B.

27 A. When porous surfaces inside the containment have
28 not been covered according to part 4620.3568, encapsulant must
29 be used on those porous surfaces to securely seal down any
30 residual fibers.

31 (1) The encapsulant must be applied after the
32 containment has passed the visual inspection required under
33 subpart 2.

34 (2) The encapsulation must comply with part
35 4620.3572.

36 (3) The encapsulant must be allowed to dry

1 completely before final clearance air samples are taken
2 according to part 4620.3594.

3 B. The walls and floors of the containment may be
4 removed only after:

5 (1) the containment and the decontamination unit
6 have passed the visual inspection specified in subpart 2; and

7 (2) any encapsulant that has been applied is
8 completely dry.

9 Subp. 4. Visual inspection after removal of containment
10 walls and floors. Following removal of the walls and floors of
11 the containment, all surfaces previously in contact with the
12 walls and floors of the containment and the interior
13 decontamination unit must be inspected.

14 A. The inspection must be done according to subpart 2.

15 B. Whenever contamination is observed, the entire
16 area must be cleaned, using a HEPA-filter equipped vacuum, wet
17 wiping, or both, until no contamination is visible.

18 Subp. 5. Completion of clearance air sampling. Clearance
19 air sampling must be performed and samples analyzed according to
20 part 4620.3596, 4620.3597, or 4620.3598, before removal of
21 critical barriers and the decontamination unit.

22 Subp. 6. Removal of critical barriers. Critical barriers
23 must be:

24 A. removed after the containment and the
25 decontamination unit have passed the visual inspection specified
26 in subpart 4 and completion of clearance air sampling as
27 specified in subpart 5;

28 B. removed after the contracting entity grants
29 permission to remove the barriers;

30 C. removed before the decontamination unit is
31 disassembled; and

32 D. disposed of as asbestos-containing waste.

33 Subp. 7. Final visual inspection of asbestos work area.

34 Areas where critical barriers had been placed must be inspected
35 and cleaned as specified in subpart 4 to ensure that no surface
36 contamination is visible.

1 A. Whenever contamination is observed, the entire
2 area must be cleaned, using a HEPA-filter equipped vacuum and
3 wet wiping, or both, until no contamination is visible.

4 B. If contamination is found, the asbestos work area
5 must be cleaned and cleared as specified in subpart 5.

6 Subp. 8. Replacement of heating, ventilating, and
7 air-conditioning system filters. The interior surfaces of
8 ventilation system ductwork must be decontaminated when a visual
9 inspection indicates the presence of asbestos-containing
10 material. When contamination is indicated, items A to C apply.

11 A. Except for small residential abatement, all
12 disposable system filters that serve the asbestos work area must
13 be:

14 (1) replaced at the conclusion of the project;

15 and

16 (2) disposed of as asbestos waste.

17 B. A person performing small residential abatement
18 must advise the owner of the residence of the need to replace
19 disposable filters from heating, ventilation, and
20 air-conditioning systems once the project is complete.

21 C. All nondisposable filters must be cleaned and
22 decontaminated by the person performing abatement after the
23 project is complete.

24 Subp. 9. On-site handling of asbestos-containing waste.
25 Asbestos-containing waste must be handled on site according to
26 this subpart.

27 A. Metal or fiber drums with locking ring tops must
28 be used for disposal of asbestos-containing waste material that
29 contains sharp edges, unless the sharp edges can be covered or
30 blunted.

31 B. For asbestos-containing waste material that does
32 not have sharp edges, bags of at least six-mil polyethylene must
33 be used. Bags must be:

34 (1) clear;

35 (2) goosenecked before sealed; and

36 (3) doubled to prevent leakage.

1 4620.3580 GLOVE BAG PROCEDURES.

2 Subpart 1. Application. When a portion of a project
3 includes the removal, encapsulation, or enclosure of less than
4 25 linear feet of asbestos-containing pipe lagging or less than
5 ten square feet of asbestos-containing material per room, for
6 that portion of the project the person performing abatement may
7 use the glove bag procedures in this part instead of the
8 procedures in parts 4620.3565 to 4620.3575, subparts 1 to 8.

9 In process areas of facilities not accessible to the
10 general public and designated in Division B, D, or E of the 1987
11 edition of the Standard Industrial Classification Manual,
12 asbestos-containing material may be abated in quantities up to
13 25 linear feet or ten square feet for each 15,000 square foot
14 area of floor space using the glove bag procedures in this
15 part instead of the procedures in parts 4620.3565 to 4620.3575,
16 subparts 1 to 8. Division B, D, and E of the 1987 edition of
17 the Standard Industrial Classification Manual are incorporated
18 by reference and are not subject to frequent change. A copy of
19 this material is available from the State Law Library, Minnesota
20 Judicial Center, 25 Constitution Avenue, St. Paul, MN 55155, or
21 for loan or inspection from the Barr Library of the Minnesota
22 Department of Health or through the Minitex interlibrary loan
23 system.

24 Subp. 2. Placement of remote decontamination unit. A
25 remote decontamination unit must be available for any individual
26 performing the glove bag operation before the glove bag is set
27 up. The remote decontamination unit must be used whenever the
28 individual leaves the asbestos work area. The remote
29 decontamination unit must be:

30 A. placed within 20 feet of the glove bag operation;

31 or

32 B. used with the procedures in subitems (1) and (2)
33 to prevent contamination of any area between the glove bag
34 operation and the remote decontamination unit.

35 (1) For an individual wearing a single layer of

1 protective clothing, before leaving the asbestos work area, the
2 individual must use a HEPA-filter equipped vacuum to remove
3 contamination from protective clothing and exposed body
4 surfaces. A clean second layer of protective clothing must be
5 placed over existing protective clothing before proceeding to
6 the remote decontamination area.

7 (2) For an individual wearing two layers of
8 protective clothing, before leaving the asbestos work area, the
9 individual must use a HEPA-filter equipped vacuum to remove
10 contamination from the outer layer of protective clothing and
11 exposed body surfaces. The individual must then remove the
12 outer layer of protective clothing before proceeding to the
13 remote decontamination unit.

14 ~~C. The remote decontamination unit must be used~~
15 ~~whenever the individual leaves the asbestos work area.~~

16 Subp. 3. Remote decontamination unit. For each glove bag
17 operation, a remote decontamination unit must be used that
18 complies with part 4620.3569, subparts 1, items B to D, and 2.

19 Subp. 4. Glove bag set-up procedure. For each abatement
20 project using a glove bag, the glove bag procedures in this
21 subpart must be followed.

22 A. Before the glove bag operation begins, the area
23 within ten feet of the glove bag operation must be cleaned using
24 a HEPA-filter equipped vacuum, wet wiping, or both, until no
25 dust nor debris is visible.

26 B. Polyethylene sheeting of at least one layer of
27 six-mil or comparable material must be placed on the floor below
28 the glove bag operation.

29 C. Glove bags must be constructed of transparent
30 six-mil polyethylene.

31 D. If a glove bag is to be used on one portion of a
32 continuous section of damaged or significantly damaged thermal
33 system insulation, the entire section of damaged or
34 significantly damaged thermal system insulation must be sealed
35 in two layers of six-mil polyethylene sheeting. Edges of the
36 sheeting must be secured with tape.

1 E. The glove bag must be attached so
2 asbestos-containing material adjacent to the glove bag is not
3 disturbed during glove bag preparation.

4 F. Removal and encapsulation of asbestos-containing
5 material must be done inside the glove bag.

6 G. All openings in the glove bag, including openings
7 from insertion of tools, sprayers, or HEPA-filter equipped
8 nozzles must be securely sealed with tape before removal or
9 encapsulation begins.

10 H. Before removal or encapsulation begins, the glove
11 bag must be smoke tested for any breach in the seal.

12 (1) The smoke must be released inside the glove
13 bag.

14 (2) To test the seal of the glove bag, pressure
15 must be applied to the outside of the glove bag.

16 (3) The glove bag must be visually inspected for
17 smoke leaking or escaping from the glove bag, with attention
18 given to the seams of the glove bag and points of attachment.

19 (4) All detectable leaks must be repaired with
20 tape before removal or encapsulation of the asbestos-containing
21 material.

22 Subp. 5. **Asbestos removal or encapsulation.** For each
23 abatement project using a glove bag, the procedures in this
24 subpart must be followed for the removal or encapsulation of
25 asbestos-containing material using a glove bag.

26 A. Sliding the glove bag during or following asbestos
27 removal or encapsulation is prohibited.

28 B. A glove bag must not be used more than once.

29 C. Asbestos-containing material must be adequately
30 wet at all times during removal.

31 D. An airless or Hudson-type sprayer must be used to
32 wet the asbestos-containing material.

33 E. Surfaces from which asbestos has been removed must
34 be cleaned with a brush and wet wiped until no visible
35 asbestos-containing material remains.

36 F. All exposed asbestos-containing material within

1 the glove bag must be encapsulated with an encapsulant before
2 the glove bag is removed according to part 4620.3672.

3 G. A visual inspection of the abated surface within
4 the glove bag must be performed before the glove bag is
5 removed. The glove bag operation is not complete until all
6 visible asbestos-containing material is removed or encapsulated.

7 Subp. 6. Completion of glove bag operation. Every glove
8 bag operation must be completed according to the procedures in
9 this subpart.

10 A. Before the glove bag is removed, the interior
11 surfaces of the glove bag must be cleaned using an airless or
12 Hudson-type sprayer until no visible residue is seen on the top
13 and vertical sides of the glove bag.

14 B. Tools must be removed from the glove bag as
15 specified in this item.

16 (1) With hands in the gloves, tools must be
17 grabbed and the gloves pulled inside out.

18 (2) The air in the glove bag must be evacuated
19 using a HEPA-filter equipped vacuum.

20 (3) With the tools in them, the glove must be
21 twisted and sealed with tape. The glove must then be cut off by
22 cutting across the middle of the tape.

23 (4) The glove containing the tools must be
24 labeled as asbestos-containing material.

25 (5) The glove containing the tools must be opened
26 only inside another glove bag, decontamination unit,
27 containment, or when submerged under water.

28 (6) The glove containing the tools, if
29 transported off site, must be placed in a leak-tight container
30 and labeled as asbestos-containing material.

31 (7) That portion of the ~~airless~~ sprayer that was
32 inside the glove bag must be wet wiped as it is pulled out of
33 the glove bag. The hole resulting from removal of the sprayer
34 must immediately be sealed with tape.

35 C. The glove bag must be collapsed using a
36 HEPA-filter equipped vacuum.

1 D. After the glove bag is collapsed, the glove bag
2 must be squeezed tightly as close to the top of the glove bag as
3 possible, twisted, and bound with tape.

4 E. The glove bag must then be cut from the pipe or
5 other facility component and placed in a leak-tight container
6 and the container handled according to part 4620.3575, subpart 9.

7 F. The area beneath the glove bag operation must be
8 inspected for any dust or debris resulting from the glove bag
9 operation.

10 G. Dust and debris from the glove bag operation must
11 be assumed to be asbestos-containing material and must be
12 cleaned using a HEPA-filter equipped vacuum or wet wiped.

13 H. The six-mil polyethylene sheeting must not be
14 reused. The sheeting must be bagged, labeled as
15 asbestos-containing waste, and handled as specified in part
16 4620.3575, subpart 9.

17 Subp. 7. On-site handling of asbestos-containing waste.
18 On-site handling of asbestos-containing waste from a glove bag
19 operation must comply with part 4620.3575, subpart 9.

20 4620.3581 MINI-CONTAINMENT PROCEDURES.

21 Subpart 1. Mini-containment. When a portion of a project
22 includes abatement of less than ~~ten~~ 25 linear feet of
23 asbestos-containing pipe lagging or less than ~~six~~ ten square
24 feet of asbestos-containing material per room, for that portion
25 of the project, the person performing abatement may use the
26 mini-containment procedures in this part instead of the
27 procedures in parts 4620.3566 to 4620.3575.

28 In process areas of facilities not accessible to the
29 general public and designated in Division B, D, or E of the 1987
30 edition of the Standard Industrial Classification Manual,
31 asbestos-containing material may be abated in quantities up to
32 25 linear feet or ten square feet for each 15,000 square foot
33 area of floor space using the mini-containment procedures in
34 this part. Divisions B, D, and E of the 1987 edition of the
35 Standard Industrial Classification Manual are incorporated by

1 reference and are not subject to frequent change. A copy of
2 this material is available from the State Law Library, Minnesota
3 Judicial Center, 25 Constitution Avenue, St. Paul, MN 55155, or
4 for loan or inspection from the Barr Library of the Minnesota
5 Department of Health or through the Minitex interlibrary loan
6 system.

7 Subp. 2. Remote decontamination. Before proceeding to the
8 remote decontamination unit, individuals performing
9 mini-containment operations must:

10 A. remove the outer layer of clothing worn during
11 mini-containment abatement;

12 B. vacuum clean all exposed parts of the body and
13 hair using a HEPA-filter equipped vacuum cleaner; and

14 C. don a nonpermeable layer of protective clothing
15 which covers all body surfaces except the face and hands.

16 Subp. 3. Remote decontamination unit. A remote
17 decontamination unit must be available that complies with part
18 4620.3569, subparts 1, items B to D, and 2. The remote
19 decontamination must be:

20 A. available in the facility prior to the start of
21 mini-containment operations;

22 B. used by individuals following mini-containment
23 operations for each asbestos work area; and

24 C. placed in an area to minimize contamination of the
25 area between the asbestos work area and the remote
26 decontamination unit.

27 Subp. 4. Mini-containment set-up procedure. All
28 mini-containment operations must comply with this subpart.

29 A. Before the mini-containment operation begins, the
30 area within ten feet of the mini-containment operation must be
31 cleaned using a HEPA-filter equipped vacuum, wet wiping, or
32 both, until no dust nor debris is visible.

33 B. A mini-containment must:

34 (1) be constructed of one layer of six-mil
35 polyethylene sheeting or comparable material;

36 (2) be equipped with a HEPA-filter equipped

1 vacuum or a HEPA-filter equipped ventilation system so air
2 pressure within the mini-containment is negative with respect to
3 the air in the area outside the mini-containment; and

4 (3) have all seams in the polyethylene sheeting
5 sealed.

6 Subp. 5. **Asbestos removal or enclosure.** All persons using
7 a mini-containment to perform abatement must comply with this
8 subpart.

9 A. Negative air pressure within the mini-containment
10 must be maintained until the procedures in subpart 6, item H G,
11 are completed.

12 B. Surfaces from which asbestos-containing material
13 has been removed must be thoroughly cleaned until no visible
14 asbestos-containing material remains.

15 C. All exposed asbestos-containing material within
16 the mini-containment must be encapsulated according to part
17 4620.3572 before the mini-containment is removed.

18 Subp. 6. **Completion of mini-containment operation.** Every
19 mini-containment operation must be completed according to the
20 procedures in this subpart.

21 A. All tools and equipment used in the
22 mini-containment must be wet wiped until no visible residue
23 remains.

24 B. The wet wiped tools and equipment must be passed
25 through the mini-containment door in a sealed, leakproof
26 container.

27 C. The leakproof container containing the tools must
28 be opened only inside another mini-containment, decontamination
29 unit, containment, or when submerged under water.

30 D. If the leakproof container with the tools is
31 transported off-site, the container must be labeled as
32 asbestos-containing material.

33 E. After the asbestos removal, encapsulation, or
34 enclosure is complete, the interior of the mini-containment must:

35 (1) be cleaned using HEPA-filter equipped
36 vacuuming, wet wiped, or both; or

1 (2) have an encapsulant applied to the interior
2 of the mini-containment.

3 F. Before the mini-containment is removed, a visual
4 inspection of the interior of the mini-containment and the
5 abated surfaces must be performed as specified in part
6 4620.3575, subpart 2.

7 G. The mini-containment must be removed as specified
8 in this item. The mini-containment must be removed by:

9 (1) sealing the door and collapsing the
10 containment using a HEPA-filter equipped vacuum; or

11 (2) tearing down the mini-containment only after
12 the results of clearance air sampling performed according to
13 parts 4620.3594 to 4620.3598 indicate that fiber levels within
14 the mini-containment do not exceed the clearance standard or
15 alternative clearance standard in either part 4620.3100, subpart
16 2b or 10a.

17 4620.3582 REMOVAL OF ENTIRE FACILITY COMPONENTS WITH INTACT
18 ASBESTOS-CONTAINING MATERIAL.

19 Subpart 1. **Applicability.** A person performing abatement
20 may use the procedures in this part as an alternative to the
21 procedures in parts 4620.3566 to 4620.3575 when the criteria in
22 subpart 2 are met.

23 Subp. 2. **Conditions for removal of entire facility**
24 **components.** The procedures in this part may be used to remove
25 entire facility components with intact asbestos-containing
26 material when the:

27 A. amount of asbestos-containing material to be glove
28 bagged does not exceed 25 linear feet per room;

29 B. asbestos-containing material or its covering to be
30 removed is not damaged; and

31 C. glove bag procedures in part 4620.3580 are
32 followed.

33 Subp. 3. **Procedures.** The work practices of this subpart
34 must be followed in the sequence provided.

35 A. Before disturbing the asbestos-containing

1 material, cleaning of the area within ten feet of the
2 asbestos-containing material to be removed must be completed
3 according to part 4620.3566.

4 B. The asbestos-containing material or its covering
5 to be removed must be ~~adequately~~ wet with amended water before
6 wrapping.

7 (1) The covering must not be broken to wet the
8 asbestos-containing material.

9 (2) The asbestos-containing material and its
10 covering must remain ~~adequately~~ wet until final disposal.

11 C. The facility component to be removed must be
12 wrapped in two layers of six-mil polyethylene sheeting.

13 D. The polyethylene sheeting must be sealed with tape
14 or a comparable material to provide an airtight seal around the
15 facility component to be removed.

16 E. Areas which will be cut to release the facility
17 component must be free of asbestos.

18 (1) When a glove bag is used to provide an
19 asbestos-free surface, the glove bag must be attached to the
20 polyethylene wrap.

21 (2) After the glove bag has been removed from the
22 structure, the encapsulated ends must be wrapped in six-mil
23 polyethylene sheeting and sealed with tape or a comparable
24 material.

25 F. If the facility component is not located on the
26 ground or floor, the facility component must be:

27 (1) supported while being released; and

28 (2) lowered to the ground or floor and not
29 dropped or thrown.

30 G. Facility components must be labeled with asbestos
31 warning labels and handled according to part 4620.3575, subpart
32 9.

33 H. If asbestos-containing material is removed from
34 the facility component removed under this part, removal must be
35 done according to parts 4620.3560 to 4620.3575.

1 4620.3585 ABATEMENT FOR DEMOLITION BY DESTRUCTION TO THE GROUND.

2 Subpart 1. **Applicability.** This part may be used when a
3 facility or portion of a facility:

4 A. will be subjected to demolition by destruction to
5 the ground within 24 hours of the completion of asbestos-related
6 work; and

7 B. has been secured to prevent entry following the
8 completion of asbestos-related work.

9 Subp. 2. **Exceptions.** When demolition by destruction to
10 the ground is performed as specified in subpart 1, the person
11 performing abatement asbestos-related work must comply with
12 parts 4620.3000 to 4620.3724, except for parts 4620.3568,
13 subparts 1 to 4~~7~~and; 4620.3575, subparts 3, 4, and 8; and
14 4620.3594.

15 Subp. 3. **Securing facility following asbestos-related**
16 **work.** To secure the facility or portion of the facility to be
17 demolished by destruction to the ground, the person performing
18 abatement must board up all windows, doorways, or other points
19 of entry on the foundation and first levels of the facility or
20 portion of the facility after asbestos-related work has been
21 completed.

22 Subp. 4. **Demolition prior to asbestos-related work.**
23 Abatement must comply with subpart 5 when:

24 A. a facility or portion of a facility is demolished
25 by destruction to the ground; and

26 B. friable asbestos-containing material is present in
27 amounts greater than six square feet or ten linear feet but less
28 than 160 square feet or 260 linear feet for a former single- or
29 multifamily dwelling or greater than 260 linear feet, 160 square
30 feet, or 35 cubic feet in other facilities.

31 Subp. 5. **Abatement following facility demolition.** When a
32 facility or portion of a facility is demolished as described in
33 subpart 4, the person performing abatement must comply with
34 items A to D.

35 A. The site must be secured and posted with warning
36 signs that state: "DANGER. ASBESTOS. CANCER AND LUNG DISEASE

1 HAZARD. AUTHORIZED PERSONNEL ONLY. RESPIRATORS AND PROTECTIVE
2 CLOTHING ARE REQUIRED IN THIS AREA."

3 B. Notification of the project must be given to the
4 commissioner as specified in part 4620.3420.

5 C. A person licensed as specified in part 4620.3200
6 must be used for removal of asbestos-containing material from
7 the demolition rubble.

8 D. Individuals handling asbestos-containing material
9 at the site must be certified as specified in parts 4620.3300
10 and 4620.3310.

11 4620.3592 INDOOR AIR MONITORING.

12 Subpart 1. **Applicability.** As part of every project,
13 indoor air monitoring must be performed as specified in this
14 part except that indoor air monitoring is not required:

15 A. when a project is performed in preparation for
16 demolition of a facility and the facility will not be entered or
17 occupied by any individual not involved with asbestos-related
18 work during and after the project; or

19 B. if a domiciled owner of a single-family residence
20 conducts a project in the single-family residence.

21 Subp. 2. **General.** Indoor air monitoring must be conducted
22 outside the containment area during all asbestos-related work
23 including preparation and cleanup from the time disturbance of
24 asbestos-containing material occurs until the results of
25 clearance air sampling indicate fiber levels in the air within
26 the containment do not exceed the clearance standard or
27 alternative clearance standard.

28 A. For each containment, two air samples must be
29 collected simultaneously no less than once during every four
30 hours zero to five-hour period while abatement personnel are on
31 site performing asbestos-related work.

32 B. One of the two indoor air monitoring samples
33 required in item A must be collected within ten feet of the
34 entrance to the decontamination unit. The other air sampling
35 location must be selected to detect failures in the containment.

1 C. Sample collection must be performed within ten
2 feet of the containment.

3 ~~D. Not more than 3,000 liters of air must be drawn~~
4 ~~through each sample cassette.~~ Sample collection and analysis
5 must comply with this part and part 4620.3597, subparts 2 to 4.

6 Subp. 3. Evacuation and corrective measures. If, during
7 the project, the fiber concentration in air measured outside the
8 containment exceeds the indoor air standard, or the alternative
9 indoor air standard, or one or more samples are too heavily
10 loaded to allow for quantitative analysis, the steps in items A
11 and B must take place.

12 A. Except as noted in subpart 4, the occupied area
13 immediately adjacent to the ~~abatement~~ asbestos work area must be
14 evacuated.

15 B. Evacuated areas must not be reoccupied until:

16 (1) the containment barriers are examined by the
17 site supervisor for holes or separations in the barriers and any
18 holes or separations are repaired;

19 (2) the negative pressure of the containment is
20 checked by the site supervisor and if not in compliance with
21 part 4620.3570, is brought into compliance;

22 (3) the areas adjacent to the containment are
23 cleaned using HEPA-filter vacuum cleaning, wet wiping methods,
24 or both;

25 (4) following completion of subitems (1) to (3),
26 five air samples have been collected simultaneously according to
27 parts 4620.3596 and 4620.3597 in which the area where elevated
28 fiber levels occurred; and

29 (5) analysis indicates that the fiber
30 concentration in all air samples collected under subitem (4)
31 does not exceed the indoor air standard or the alternative
32 indoor air standard.

33 Subp. 4. Suspected nonasbestos dust. When elevated fiber
34 concentrations in the air outside the containment are suspected
35 to be from nonasbestos dust in the air, evacuation of the
36 occupied areas immediately adjacent to the asbestos work area

1 may be delayed, provided the actions in this subpart are taken
2 immediately.

3 A. The indoor air monitoring samples which indicate
4 elevated fiber concentrations must be reanalyzed by transmission
5 electron microscopy to distinguish between asbestos and
6 nonasbestos fibers greater than five microns in length with an
7 aspect ratio of three-to-one. Repeat analysis under this item
8 must meet the requirements of "Mandatory Transmission Electron
9 Microscopy Method," Code of Federal Regulations, title 40,
10 chapter I, subchapter R, part 763, subpart E, appendix A,
11 section II, Parts A, E, F, H, I, and J, amended through October
12 30, 1987, and as qualified in subitems (1) and (2).

13 (1) Code of Federal Regulations, title 40,
14 chapter I, subchapter R, part 763, subpart E, appendix A,
15 section II, part A, is modified as follows:

16 (a) The definition of "aspect ratio" is
17 modified to read:

18 "3. "Aspect ratio" -- a ratio of the length to the width
19 of a particle. Minimum aspect ratio as defined by this method
20 is equal to or greater than 3:1."

21 (b) The definition of "fiber" is modified to
22 read:

23 "9. "Fiber" -- a structure greater than or equal to five
24 microns in length with an aspect ratio (length to width) of 3:1
25 or greater and having substantially parallel sides."

26 (2) Code of Federal Regulations, title 40, part
27 763, subpart E, appendix A, section II, part F, is modified as
28 follows:

29 (a) Paragraph 9(a) is modified to read:

30 "9. Recording Rules.

31 a. Any continuous grouping of particles in which an
32 asbestos fiber with an aspect ratio greater than or equal to 3:1
33 and a length greater than or equal to 5.0 microns is detected
34 shall be recorded on the count sheet. These will be designated
35 asbestos structures and will be classified as fibers, bundles,
36 clusters, or matrices. Record as individual fibers any

1 contiguous grouping having 0, 1, or 2 definable intersections.
2 Groupings having more than 2 intersections are to be described
3 as cluster or matrix. An intersection is a nonparallel touching
4 or crossing of fibers, with the projection having an aspect
5 ratio of 3:1 or greater. See the following Figure 2:"

6 (b) Paragraph 9(a), figure 2, the portion
7 entitled "DO NOT COUNT AS STRUCTURES," is modified by changing
8 the aspect ratio from "5:1" to "~~3:1~~" "3:1" and the micrometer
9 length from "0.5" to "5.0."

10 (c) Paragraph 9(a)(i) is modified to read:

11 "i. Fiber. A structure having minimum length greater than
12 or equal to five microns and an aspect ratio (length to width)
13 of 3:1 or greater and substantially parallel sides. Note the
14 appearance of the end of the fiber, i.e., whether it is flat,
15 rounded, or dovetailed."

16 (d) Paragraph 10(a) is modified to read:

17 "a. Fiber. A structure having minimum length greater than
18 or equal to 5 microns and an aspect ratio (length to width) of
19 3:1 or greater and substantially parallel sides. Note the
20 appearance of the end of the fiber, i.e, whether it is flat,
21 rounded, or dovetailed."

22 B. If the analysis results obtained according to item
23 A indicate the concentration of asbestos fibers in the air
24 exceeds 0.01 fibers per cubic centimeter of air, the occupied
25 area immediately adjacent to the ~~abatement~~ asbestos work area
26 must be evacuated and not reoccupied until the corrective
27 measures of subpart 3, item B, have been performed and
28 documented.

29 Subp. 5. Indoor air monitoring during glove bag or
30 mini-containment procedures. When the glove bag or
31 mini-containment procedures in parts 4620.3580 and 4620.3581 are
32 used, indoor air monitoring must be performed according to this
33 subpart.

34 A. At least two indoor air samples per room must be
35 collected continuously from the time of initial disturbance of
36 the asbestos-containing material until the time all glove bags

1 or mini-containments have been removed in the room.

2 B. Indoor air samples during glove bag or
3 mini-containment procedures must be collected within ten feet of
4 the glove bag or mini-containment operation.

5 ~~C. The volume of air drawn through each indoor air~~
6 ~~sample cassette must not exceed 3,000 liters.~~ Sample collection
7 and analysis must be completed according to subpart 4, item A,
8 or part 4620.3597, subparts 2 to 4.

9 D. The glove bag or mini-containment operation is not
10 complete and the asbestos work area must not be reoccupied until
11 each of the indoor air samples has been analyzed and the result
12 of each sample indicates a fiber level below the indoor air
13 standard or the alternative indoor air standard.

14 E. Except as noted in item F, if any indoor air
15 sample result exceeds the indoor air standard or the alternative
16 indoor air standard, or if any indoor air sample is too heavily
17 loaded to be quantitatively analyzed, subitems (1) to (3) must
18 be followed.

19 (1) The area where the glove bag or
20 mini-containment operation was performed must be recleaned and
21 reinspected according to part 4620.3575, subpart 4.

22 (2) After recleaning and reinspection, at least
23 two indoor air samples must be collected according to item C
24 within ten feet of the area where the glove bag or
25 mini-containment operation was performed.

26 (3) If any air sample result exceeds the indoor
27 air standard or alternative indoor air standard, subitems (1)
28 and (2) must be repeated.

29 F. When elevated fiber concentrations in the asbestos
30 work area are suspected to be from nonasbestos dust in the air,
31 the asbestos work area may be reoccupied if the following
32 actions are taken:

33 (1) the actions required in subpart 4, item A,
34 must be performed immediately; and

35 (2) if the analysis results obtained according to
36 subpart 4, item A, indicate the concentration of asbestos fibers

1 in the air exceeds 0.01 fibers per cubic centimeter of air, or
2 if any indoor air sample is too heavily loaded to be
3 quantitatively analyzed, the asbestos work area must be
4 evacuated and the actions required in item E must be taken
5 immediately.

6 4620.3594 CLEARANCE AIR SAMPLING.

7 Subpart 1. General. When enclosure, removal, or
8 encapsulation is completed during an abatement, clearance air
9 sampling must be performed to ensure that fiber levels in the
10 air within the containment area do not exceed the clearance
11 standard or alternative clearance standard.

12 A. The asbestos containment area must not be
13 reoccupied until compliance with subitem (1) or (2) is achieved:

14 (1) each of five clearance air samples, collected
15 according to subpart 2, ~~are~~ is less than or equal to the
16 clearance standard or the alternative clearance standard; or

17 (2) for a small residential abatement each of
18 three clearance air samples, collected according to subpart 2,
19 are less than or equal to the clearance standard.

20 B. If any clearance air sample result exceeds the
21 clearance standard or alternative clearance standard, or any
22 clearance air sample is too heavily loaded to be quantitatively
23 analyzed, the containment area must be recleaned and reinspected
24 according to part 4620.3575, subpart 4. Following compliance
25 with part 4620.3575, subpart 4, clearance air sampling must be
26 repeated according to this subpart.

27 Subp. 2. Clearance air sampling procedures. Clearance air
28 sampling must be conducted in the containment area after the
29 containment has been cleaned thoroughly, dried completely, and
30 passed the visual inspection required under part 4620.3575,
31 subpart 4.

32 A. The critical barriers specified in part 4620.3567
33 must remain in place.

34 B. The decontamination unit must remain in place and
35 remain operational.

1 C. Negative pressure within the containment must be
2 maintained until analysis of clearance air samples is complete.

3 D. The clearance air sampling sites must be selected
4 on a random basis within the containment to provide unbiased and
5 representative sampling of the air within the containment.

6 E. Clearance air sampling must be performed with
7 equipment that has been cleaned and decontaminated before use.

8 F. Clearance air sampling must be conducted as
9 specified in subitems (1) to (3).

10 (1) Except for clearance air sampling specified
11 in part 4620.3581, subpart 6, item G, subitem (2), before
12 clearance air sampling, floors, ceilings, and walls all surfaces
13 must be blown with the air from a one horsepower leaf blower to
14 agitate the air and reentrain loose fibers in the air within the
15 containment.

16 (2) ~~Stationary fans must be used within the~~
17 ~~containment to agitate containment air during clearance air~~
18 ~~sampling. The stationary fans must be placed in locations that~~
19 ~~do not interfere with clearance air sampling. Except for~~
20 clearance air sampling specified in part 4620.3581, subpart 6,
21 item G, subitem (2), stationary fans must be placed in locations
22 that do not interfere with air monitoring equipment. Fan air
23 must be directed toward the ceiling. One fan must be used for
24 each 10,000 cubic feet of containment area.

25 (3) When electrical power is provided, the power
26 supply equipment must be underwriter laboratory approved and not
27 modified. Wiring must be grounded and the circuits protected by
28 ground fault interrupt devices.

29 G. Equipment such as fans and pumps must be wet wiped
30 with clean water and disposable wipes before removal from the
31 containment.

32 4620.3596 GENERAL REQUIREMENTS FOR AIR MONITORING SAMPLE
33 COLLECTION.

34 The air monitoring samples required by parts 4620.3592 and
35 4620.3594 must be collected as specified in this part.

1 A. All air monitoring sample collection must be
2 conducted by an individual who is either an asbestos worker or
3 asbestos site supervisor and who:

4 (1) has completed a Minnesota asbestos air
5 sampling course permitted by the commissioner under part
6 4620.3704; ~~or~~

7 (2) is certified as a certified industrial
8 hygienist by the American Board of Industrial Hygiene; or

9 (3) before the effective date of this part, has
10 completed the National Institute for Occupational Safety and
11 Health (NIOSH) course number 582, entitled Sampling and
12 Identification of Airborne Asbestos, or a course equivalent to
13 the NIOSH 582 course.

14 B. Air monitoring sample cassettes must be submitted
15 for analysis on the day collected.

16 C. The contract for air monitoring sample analysis
17 must specify that results must be available orally or in writing
18 no later than 48 hours after submission for analysis or before
19 disassembly of the containment, whichever is earlier.

20 4620.3597 PHASE CONTRAST MICROSCOPY.

21 Subpart 1. Phase contrast microscopy air sample analysis.
22 Analysis by phase contrast microscopy must comply with National
23 Institute ~~of~~ for Occupational Safety and Health (NIOSH) Method
24 7400, revision number 3, titled "Fibers" published in the NIOSH
25 Manual of Analytical Methods, Third Edition, August 1994
26 supplement or equivalent methods. This document is incorporated
27 by reference, is not subject to frequent change, and is
28 available through the Minitex interlibrary loan system.

29 Subp. 2. Procedures for establishing an alternative indoor
30 air standard. When collecting air monitoring samples to
31 establish an alternative indoor air standard, the procedures in
32 this part apply.

33 A. An alternative indoor air standard may be
34 established only if background fiber levels in the asbestos work
35 area exceed the indoor air standard before the start of

1 abatement.

2 B. To establish an alternative indoor air standard,
3 five air monitoring samples must be collected simultaneously and
4 analyzed according to this part before the start of abatement
5 including area preparation.

6 C. The alternative indoor air standard must be
7 calculated as the upper bound of the range defined by the 95
8 percent confidence interval from the average of the result of
9 the five indoor air monitoring samples.

10 D. Locations for air monitoring sample collection
11 must be selected to provide suitable data for comparison with
12 indoor air monitoring samples collected after abatement begins.
13 Sample locations must be indoors and within ten feet of where
14 the containment will be constructed.

15 E. The alternative indoor air standard applies only
16 to the containment area where the air samples used to establish
17 the alternative indoor air standard were collected.

18 Subp. 3. Air monitoring sample collection and analysis.

19 When phase contrast microscopy is used to analyze air monitoring
20 samples:

21 A. air volumes drawn through the filter cassette must
22 be sufficient to determine fiber concentrations to 0.01 fibers
23 per cubic centimeter of air;

24 B. a volume of 2,000 liters must be drawn through the
25 filter cassette, except as noted in item C; and

26 C. when a volume of 2,000 liters cannot be drawn
27 through the filter cassette, subitems (1) to (5) apply.

28 (1) More fields must be counted than the 100
29 microscope field maximum which is specified in NIOSH method 7400.

30 (2) The maximum number of fields to be counted
31 must be determined by dividing 2,000 liters by the volume
32 filtered and multiplying the result by 100 fields.

33 (3) Additional segments of the filter must be
34 used for counting.

35 (4) If the cumulative fiber count reaches 100
36 fibers before the maximum number of fields have been counted,

1 the analysis must stop.

2 (5) The concentration must be calculated based on
3 the number of fibers and the number of fields counted.

4 Subp. 4. Transitional air monitoring sample
5 analysis. Between the effective date of this part and one year
6 after the effective date, air monitoring samples must be
7 analyzed by a-person-not-affiliated-with-the-person-who
8 collected-the-air-samples-and-must-be:

9 A. a laboratory that is accredited by the American
10 Industrial Hygiene Association; or

11 B. an analyst participating-in considered proficient
12 by the American Industrial Hygiene Association's asbestos
13 analyst registry program; or

14 C. a laboratory considered proficient in asbestos
15 analysis by the American Industrial Hygiene Association (AIHA)
16 Proficiency Analytical Testing (PAT) Program for phase contrast
17 microscopy.

18 Subp. 5. Air sample analysis. Beginning one year after
19 the effective date of this part, air monitoring samples must be
20 analyzed by:

21 A. a laboratory that is accredited by the American
22 Industrial Hygiene Association; or

23 B. an analyst considered proficient by the American
24 Industrial Hygiene Association's asbestos analyst registry
25 program.

26 4620.3598 TRANSMISSION ELECTRON MICROSCOPY.

27 Subpart 1. Use of alternative clearance standard. When
28 the alternative clearance standard is used, items A and B apply.

29 A. The transmission electron microscopy method for
30 air monitoring sample collection and analysis must comply with
31 Code of Federal Regulations, title 40, chapter I, subchapter R,
32 part 763, subpart E, appendix A, section II, amended through
33 October 30, 1987.

34 B. The volume of air drawn through a 25-millimeter
35 filter cassette must be equal to or greater than 1,200 liters.

1 The volume of air drawn through a 37-millimeter filter cassette
2 must be greater than or equal to 2,800 liters. Both types of
3 filter cassettes must contain a sample filter that has a pore
4 size of 0.8 microns or smaller.

5 Subp. 2. Air monitoring sample analysis. Alternative
6 clearance air monitoring samples analyzed by transmission
7 electron microscopy must be analyzed by a laboratory accredited
8 by the United States National Institute of Standards and
9 Technology National Voluntary Laboratory Accreditation Program
10 (NVLAP) for analysis of samples by transmission electron
11 microscopy.

12 4620.3702 APPLICATION FOR TRAINING COURSE PERMIT.

13 Subpart 1. Applications other than renewal. Except as
14 provided in subpart 2, to obtain a permit from the commissioner
15 for a training course, the training course provider must submit,
16 to be received by the commissioner at least 60 days before the
17 course is offered:

18 A. a completed application on a form provided by the
19 commissioner, which seeks only information the commissioner
20 reasonably considers necessary to identify the applicant and to
21 determine whether the training course meets the statutory and
22 regulatory requirements for a permit;

23 B. except for an air sampling course described in
24 part 4620.3718, subpart 5, a \$500 nonrefundable application fee
25 of \$500, which is not in the form of a personal check, payable
26 to the Minnesota Department of Health in-the-form-of-a-business
27 check,-cashier's-check,-or-money-order-unless-the-course-is-for
28 air-sampling-described-in-part-4620-3718,-subpart-5;

29 C. the course curriculum;

30 D. a copy of all course materials;

31 E. the examination to be used and the answer key for
32 the examination;

33 F. resumes of all course instructors which include
34 information on coursework completed as specified in part
35 ~~4620-3712~~ 4620.3716, subpart 3, item A;

1 G. a copy of all enforcement actions taken against
2 the provider by the United States Environmental Protection
3 Agency and any other state; and

4 H. an example of the diploma to be issued by the
5 provider to course participants who complete the course and pass
6 the examination in the event the commissioner approves the
7 permit application.

8 Subp. 2. **Renewal.** To obtain a renewal of a training
9 course permit, the training course provider must submit, to be
10 received by the commissioner at least 30 days before expiration
11 of the current permit:

12 A. a completed renewal application on a form provided
13 by the commissioner, which seeks only information the
14 commissioner reasonably considers necessary to identify the
15 applicant and to determine whether the training course meets the
16 statutory and regulatory requirements for a permit;

17 B. except for an air sampling course described in
18 part 4620.3718, subpart 5, a \$250 nonrefundable renewal fee of
19 \$250, which is not in the form of a **business personal** check,
20 ~~cashier's-check, or money-order~~ payable to the Minnesota
21 Department of Health unless the course is for air sampling as
22 described in part 4620.3718, subpart 5; and

23 C. documentation of any change in the information on
24 the training course most recently submitted by the provider
25 under subpart 1, items C to H.

26 4620.3704 PERMITTING TRAINING COURSES.

27 Subpart 1. **Applications other than renewal.** For an
28 application submitted under part 4620.3702, subpart 1, the
29 commissioner shall issue a permit for the training course if the
30 provider has complied with part 4620.3702, subpart 1, and if the
31 provider, training course, and diploma meet all applicable
32 requirements in parts 4620.3708 to 4620.3722.

33 Subp. 2. **Renewal applications.** For an application
34 submitted under part 4620.3702, subpart 2, the commissioner
35 shall renew the permit for the training course if:

1 A. the provider has complied with part 4620.3702,
2 subpart 2;

3 B. the provider, training course, and diploma meet
4 all applicable requirements in parts 4620.3708 to 4620.3722; and

5 C. for second and subsequent renewals of the same
6 training course, the provider has presented the training course
7 within the state while the permit was in effect and within two
8 years before the date of the renewal application.

9 Subp. 3. **Reciprocity with other states.** A training course
10 shall be permitted by the commissioner if the course is
11 permitted or approved by another state's asbestos regulatory
12 program equivalent to the Minnesota Department of Health's
13 asbestos regulatory program and if the training course provider
14 complies with part 4620.3702, subpart 1.

15 Subp. 4. **Denial of permit.** The commissioner shall deny an
16 application for a training course permit if the applicant fails
17 to comply with all applicable requirements in this part.
18 Additional grounds for the commissioner to deny an application
19 are stated in Minnesota Statutes, section 144.99, subdivision 8,
20 paragraphs (a) and (b). An applicant:

21 A. must be notified in writing of the denial of the
22 license application and reasons for the denial; and

23 B. is not required to pay a second fee if the
24 applicant submits a second training course permit application
25 according to subpart 2, within 30 days of the receipt of notice
26 that the training course permit has been denied.

27 Subp. 5. **Duration of permit.** A training course permit
28 shall be valid for one year.

29 **4620.3708 TRAINING COURSE DIPLOMAS.**

30 If a training course is permitted under part 4620.3704, the
31 training course provider must ensure that each enrollee who
32 successfully completes the training course receives an original
33 diploma which:

34 A. meets the requirements of Code of Federal
35 Regulations, title 40, chapter I, subchapter R, part 763,

1 subpart E, appendix C, section I, part C, paragraph (1), as
2 amended through February 3, 1994;

3 B. indicates the location of the course; and

4 C. clearly states: "Approved by the State of
5 Minnesota under Minnesota Rules, parts 4620.3702 to 4620.3722."

6 4620.3710 ADVANCE NOTICE AND AMENDMENTS.

7 The training course provider must submit to the
8 commissioner, by mail or facsimile, on a form provided by the
9 commissioner, which is consistent with this part:

10 A. a notice of the date, time, and location, and
11 training course instructors of each permitted training course to
12 be presented by the course provider, so the commissioner
13 receives the notice at least 14 calendar days before the
14 training course begins;

15 B. an amended notice for any change in the
16 information contained in the original notice described in item
17 A, other than an advancement of the training course date
18 described in item C, so the commissioner receives the amended
19 notice before the permitted training course begins;

20 C. an amended notice for any change in the date of
21 the training course which advances the beginning date of the
22 course, so the commissioner receives the amended notice at least
23 14 calendar days before the training course begins;

24 D. a notice of any change in any-information the
25 course curriculum or course materials submitted to the
26 commissioner in part ~~47720-3702~~ 4620.3702, other than the date,
27 time, or location of the course or any information on a course
28 instructor, so the commissioner receives the notice at least 30
29 calendar days before the training course begins; and

30 E. a notice of any change in any information
31 submitted to the commissioner under part 4620.3702 on any
32 training course instructor, so the commissioner receives the
33 notice at least seven calendar days before the training course
34 begins.

35 4620.3712 ATTENDANCE REQUIREMENTS.

1 The training course provider must require participants to
2 attend the entire training course as a condition for successful
3 completion of the training course. A training course provider
4 must:

5 A. maintain a daily sign-in log as documentation of
6 attendance for each training course; and

7 B. submit a copy of the daily sign-in log to the
8 commissioner within 48 hours of completion of the training
9 course.

10 4620.3714 ENROLLMENT LIMITS.

11 The enrollment limits of this part apply to all permitted
12 training courses.

13 A. The number of participants in a class must not
14 exceed 24.

15 B. For training courses which require hands-on
16 training, the participant-to-instructor ratio for hands-on
17 training groups must not exceed eight-to-one.

18 4620.3716 TRAINING COURSE CONDITIONS.

19 Subpart 1. General. The course requirements in this part
20 apply to all permitted training courses.

21 Subp. 2. Separation of training courses. Asbestos worker,
22 asbestos site supervisor, asbestos inspector, asbestos
23 management planner, asbestos project designer, and air sampling
24 courses must be taught separately.

25 Subp. 3. Training course instructors. If all instructors
26 for a training course meet the requirements in this subpart, the
27 commissioner shall approve the instructors as part of any permit
28 issued for the training course.

29 All training course instructors must:

30 A. complete coursework ~~that teaches the application~~
31 ~~of methods designed to teach adults~~ in teaching methods and
32 methods of evaluation to continually monitor the participants'
33 progress;

34 B. have knowledge about all subjects to be presented
35 by the instructor; and

1 C. apply the methods of adult instruction described
2 in item A.

3 Subp. 4. Written examinations. All training courses must
4 include a written examination that meets the requirements in
5 this subpart.

6 A. Each training course must include a written
7 examination that is given only at the end of the training course.

8 B. If the commissioner provides an applicable written
9 examination, the training course provider must use the written
10 examination provided by the commissioner.

11 C. Training course examinations must be administered
12 by the training course provider unless notified of other
13 arrangements in advance by the commissioner.

14 D. If the training course provider administers the
15 examination, the training course provider must:

16 (1) not reveal any portion of the examination
17 contents to any participant before administering the
18 examination;

19 (2) ensure the security of the examination;

20 (3) ensure that any participant who passes the
21 examination does so on the participant's own merit; and

22 ~~(4) ensure that there is an empty chair or at
23 least three feet between participants; and~~

24 ~~(5) ensure that no written material other than
25 the examination materials are allowed within the participant's
26 viewing distance.~~

27 E. The training course provider must monitor the
28 examination.

29 F. The written examination for an initial training
30 course and refresher training course must incorporate questions
31 about Minnesota law and rules related to asbestos and comply
32 with the requirements of Code of Federal Regulations, title 40,
33 chapter I, subchapter R, part 763, subpart E, appendix C,
34 section I, part C, paragraph (2), amended through February 3,
35 1994.

36 G. The final written examination for an initial

1 training course and refresher training course must meet the
2 requirements in this item. A score of at least 70 percent is
3 required to pass any training course written examination. The
4 initial and refresher examination for an:

5 (1) asbestos worker must consist of at least 50
6 multiple-choice questions;

7 (2) asbestos site supervisor must consist of at
8 least 100 multiple-choice questions;

9 (3) asbestos inspector must consist of at least
10 50 multiple-choice questions;

11 (4) asbestos management planner must consist of
12 at least 50 multiple-choice questions;

13 (5) asbestos project designer must consist of at
14 least 100 multiple-choice questions; and

15 (6) asbestos air sampling course must consist of
16 at least 50 multiple-choice questions.

17 H. If a participant in a worker training course is
18 unable to read the written examination, the training course
19 provider must arrange to administer the examination in an
20 alternative manner to the participant.

21 Subp. 5. **Successful completion of initial training**
22 **course.** To successfully complete an initial training course, a
23 participant must:

24 A. attend the entire training course;

25 B. demonstrate to the instructor proficiency during
26 the hands-on portion of the course; and

27 C. pass a closed-book written examination that
28 complies with subpart 4.

29 Subp. 6. **Requirements for completion of refresher training**
30 **courses.** To complete a refresher training course, the
31 participant must:

32 A. attend the entire training course; and

33 B. pass a closed-book written examination that meets
34 the requirements in subpart 4.

35 Subp. 7. **Training site.** All training courses must be
36 presented in Minnesota.

1 4620.3718 COURSE CONTENT AND LENGTH.

2 Subpart 1. General. Course content for training courses
3 permitted by the commissioner must meet the requirements of this
4 part.

5 Subp. 2. Incorporation of Minnesota law and rules. The
6 training course provider must incorporate all asbestos-related
7 Minnesota law and rules into all course materials and
8 instruction wherever the course material and instruction
9 addresses a subject covered by Minnesota law and rules.

10 Subp. 3. Incorporation of new material into training
11 course. The training course provider must incorporate any new
12 information into course material as required by the commissioner.

13 Subp. 4. Length and content of initial asbestos-related
14 training courses. Initial training course length and content
15 must meet the requirements in this subpart with one day equal to
16 eight hours including breaks and lunch. The initial training
17 course length and content requirements for:

18 A. asbestos workers must meet the length and content
19 requirements in Code of Federal Regulations, title 40, chapter
20 I, subchapter R, part 763, subpart E, appendix C, section I,
21 part B, paragraph (1), amended through February 3, 1994;

22 B. asbestos site supervisors must meet the training
23 course length and content requirements in Code of Federal
24 Regulations, title 40, chapter I, subchapter R, part 763,
25 subpart E, appendix C, section I, part B, paragraph (2), amended
26 through February 3, 1994;

27 C. asbestos inspectors must meet the initial training
28 course length and content requirements in Code of Federal
29 Regulations, title 40, chapter I, subchapter R, part 763,
30 subpart E, appendix C, section I, part B, paragraph (3), amended
31 through February 3, 1994;

32 D. asbestos management planners must meet the initial
33 training course length and content requirements in Code of
34 Federal Regulations, title 40, chapter I, subchapter R, part
35 763, subpart E, appendix C, section I, part B, paragraph (4),

1 amended through February 3, 1994; and

2 E. asbestos project designers must meet the initial
3 training course length, content, and prerequisite requirements
4 in Code of Federal Regulations, title 40, chapter I, subchapter
5 R, part 763, subpart E, appendix C, section I, part B, paragraph
6 (5), amended through February 3, 1994.

7 Subp. 5. Length and content of air sampling training. The
8 initial training course for asbestos air sampling must be at
9 least two days in length and meet the requirements in this
10 subpart. The training must address:

11 A. the National Institute ~~of~~ for Occupational Safety
12 and Health's sampling method specified in part 4620.3597,
13 subpart 1;

14 B. the sampling requirements and procedures in parts
15 4620.3592 to 4620.3598;

16 C. the sampling requirements and procedures specified
17 in item B:

- 18 (1) the alternative indoor air standard;
- 19 (2) the alternative air clearance standard;
- 20 (3) the appropriate use of alternative standards;
- 21 (4) the number of fields to be counted and what
22 to do when sampling volumes are below 2,000 liters;
- 23 (5) sampling techniques and requirements outside
24 the containment during abatement;
- 25 (6) reasons to evacuate the facility, reentry
26 after evacuation, and the reasons for delay of evacuation;
- 27 (7) sampling when negative air machines exhaust
28 indoors;
- 29 (8) sampling during glove bag and
30 mini-containment operations; and

31 (9) all phases of final containment clearance;

32 D. the Occupational Safety and Health Administration
33 (OSHA) personal sampling requirements, procedures, and
34 rationale, including calculation of time-weighted averages
35 contained in Code of Federal Regulations, title 29, section
36 1926.1101, paragraphs (c) and (f), and appendix A, amended

1 through September 29, 1995;

2 E. the ~~Asbestos-Hazard-and-Emergency-Response-Act~~
3 ~~(AHERA)~~ Environmental Protection Agency (EPA) sampling
4 requirements and procedures in Code of Federal Regulations,
5 title 40, section 763.90(i) and subpart E, appendix A, amended
6 through April 15, 1988;

7 F. a comparison of the ~~AHERA~~ EPA, OSHA, and Minnesota
8 air sampling requirements;

9 G. an introduction to analysis procedures;

10 H. sampling equipment calibration methods;

11 I. problems that may be encountered during sample
12 collection;

13 J. decontamination of sampling equipment after
14 sampling; and

15 K. hands-on sampling training, including;

16 (1) calibrating a rotameter using primary
17 standard;

18 (2) measuring sampling pump flow rate using a
19 rotameter;

20 (3) assembling sampling cassettes;

21 (4) setting up a sampling train for area
22 sampling, collecting an air sample, and calculating the volume
23 sampled;

24 (5) setting up, on a course participant, a
25 sampling train for personal sampling;

26 (6) calculating time-weighted averages; and

27 (7) calculating the alternative indoor air
28 standard described in part 4620.3597, subpart 2.

29 Subp. 6. **Hands-on training required.** For initial worker
30 and site supervisor training, the course must include lectures,
31 demonstrations, hands-on training, course review, and an
32 examination as specified in part 4620.3716, subpart 4. The
33 hands-on training must be at least 14 hours in length and must
34 include:

35 A. demonstration by the instructor of the use of the
36 respiratory protection devices with at least six different

1 respirator types;

2 B. demonstration by the instructor and practice by
3 each course participant of disassembly, cleaning, and reassembly
4 of a half-face air purifying respirator and a full-face powered
5 air purifying respirator;

6 C. practice by each course participant in identifying
7 faults with half-face air purifying and full-face powered air
8 purifying respirators with damaged or missing parts;

9 D. demonstration by the instructor of respirator fit
10 checking;

11 E. demonstration by the instructor of respirator fit
12 testing;

13 F. practice by each participant in donning full-body
14 protective clothing;

15 G. demonstration by the instructor and practice by
16 each course participant of simulated asbestos abatement of pipe
17 insulation using a glove bag;

18 H. practice by each course participant constructing a
19 decontamination unit;

20 I. practice by each participant constructing a
21 containment and using a HEPA-filtered negative air machine to
22 produce negative pressure in the containment;

23 J. demonstration by the instructor and practice by
24 each participant of simulated abatement of ceiling spray-on; and

25 K. demonstration by the instructor and practice by
26 each course participant of removing and replacing the filter
27 elements in a HEPA-filtered negative air machine.

28 **Subp. 7. Annual refresher courses.** Annual refresher
29 courses for asbestos project designers, asbestos management
30 planners, asbestos inspector, asbestos site supervisors, and
31 asbestos workers must:

32 A. meet the refresher course length and content
33 specified in Code of Federal Regulations, title 40, chapter I,
34 subchapter R, part 763, subpart E, appendix C, section I, part
35 D, amended through February 3, 1994;

36 B. include a review of the topics covered in an

1 initial training course as specified in subpart 5; and

2 C. comply with part 4620.3716, subpart 6.

3 Subp. 8. Time limits for training courses. If extra time
4 is required to complete the prescribed instruction of a
5 permitted training course or to add subjects not prescribed for
6 the training course, the course may be extended if:

7 A. instruction is not more than eight hours per day,
8 including lunch and other breaks; and

9 B. the training course is held no more than five
10 successive days.

11 4620.3720 RECORDKEEPING REQUIREMENTS FOR TRAINING COURSE
12 PROVIDERS.

13 Each provider of a permitted training course must comply
14 with this part.

15 A. If the commissioner requests any or all of the
16 documents described in item B, the provider must submit the
17 requested documents so the commissioner receives them within
18 seven calendar days of the commissioner's request.

19 B. For each permitted training course, the provider
20 must keep for six years:

21 (1) copies of all training course materials;

22 (2) records of all instructor qualifications and
23 commissioner approvals of instructors;

24 (3) records of examinations including the name of
25 the person who proctors the examination, a copy of the
26 examination, the date and location of each examination, and
27 participant scores of each individual taking the examination;

28 (4) records of certificates issued on completion
29 of the training course including the discipline, unique
30 certificate number, training dates and location, recipient,
31 examination date and location, and expiration date of the
32 certificate;

33 (5) records of the time and place the training
34 course was held and the instructors for each day of the training
35 course.

1 C. If a training course provider ceases to conduct
2 training, the training course provider must notify the
3 commissioner and give the commissioner the training records
4 within 60 days of ceasing to provide training.

5 4620.3722 TRAINING COURSES WITH PROVISIONAL OR FULL APPROVAL
6 BEFORE EFFECTIVE DATE.

7 The provider of a training course which has full approval
8 from the commissioner before the effective date of parts
9 4620.3702 to 4620.3722 may apply for renewal under part
10 4620.3702, subpart 2, no later than 30 days before the
11 expiration date of the approval.

12 A. The provider of a training course which has
13 provisional approval from the commissioner before the effective
14 date of parts 4620.3702 to 4620.3722 may apply for a renewal
15 permit under part 4620.3702, subpart 2, no later than 90 days
16 after the effective date of parts 4620.3702 to 4620.3722.

17 B. All provisional approvals shall expire 91 days
18 after the effective date of parts 4620.3702 to 4620.3722.

19 4620.3724 VARIANCE.

20 The commissioner may grant a variance to part 4620.3710,
21 item A, ~~subitem-(1)~~, and, where space limitations prevent
22 compliance with the specified requirements or where compliance
23 with the specified requirements would create a greater hazard,
24 to parts 4620.3566, 4620.3567, 4620.3568, subparts 1 to 4,
25 4620.3569, 4620.3571, subparts 1 and 2, and 4620.3575, subpart
26 3. A variance shall be considered only according to the
27 procedures and criteria in parts 4717.7000 to 4717.7050.

28 4717.7000 VARIANCE REQUEST.

29 Subpart 1. Request. A party may ask the commissioner of
30 health to grant a variance from the following rules:

31 A. clean indoor air, parts 4620.0100 to 4620.1500,
32 except part 4620.0300;

33 B. formaldehyde in housing, part 4620.1800;

34 C. asbestos abatement, part 4620.3710, item A,

1 ~~subitem-(1)~~, and, where space limitations prevent compliance
2 with the specified requirements or where compliance with the
3 specified requirements would create a greater hazard, parts
4 4620.3566, 4620.3567, 4620.3568, subparts 1 to 4, 4620.3569,
5 4620.3571, subparts 1 and 2, and 4620.3575, subpart 3;

6 D. lodging establishments, parts 4625.0400 to
7 4625.0600; 4625.0900; 4625.1200 to 4625.1600; 4625.2000, except
8 the last sentence; and 4625.2200;

9 E. food and beverage establishments, parts 4625.2901
10 to 4625.7801, except parts 4625.3601; 4625.3801, subpart 1;
11 4625.3901, subpart 3; 4625.4101, subpart 1; 4625.4301;
12 4625.4401; 4625.4601; 4625.5000; 4625.5101, subpart 7;
13 4625.5601; 4625.5701; 4625.6101, subparts 3 and 7; 4625.6601;
14 4625.6701; 4625.7101, subpart 7; 4625.7601; and 4625.7701;

15 F. manufactured home parks and recreational camping
16 areas, parts 4630.0400; 4630.0600, subparts 2 to 4; and
17 4630.0900 to 4630.1700;

18 G. children's camps, parts 4630.2300 to 4630.4700;

19 H. migrant labor camps, parts 4630.5000 to 4630.6500;

20 I. roller towels, part 4635.0200;

21 J. enclosed sports arenas, parts 4620.3900 to
22 4620.4800, except part 4620.4300;

23 K. water conditioning contractors and installers,
24 parts 4715.5000 to 4715.6000;

25 L. public swimming pools, parts 4717.0100 to
26 4717.3900;

27 M. water haulers, parts 4720.4000 to 4720.4600;

28 N. wells and borings, parts 4725.0100 to 4725.7450;

29 O. explorers and exploratory borings, parts 4727.0100
30 to 4727.1300; and

31 P. ionizing radiation, parts 4730.0100 to 4730.3605,
32 except parts 4730.0400 and 4730.0600.

33 [For text of subps 2 and 3, see M.R.]

34 REPEALER. Minnesota Rules, parts 4620.3100, subparts 2, 9, 10,
35 12, 15, 17, 18, 22, 26, and 30; 4620.3200, subparts 1, 6, and 7;

05/09/96

[REVISOR] SGS/DP AR2422

1 4620.3400; 4620.3500; 4620.3600; and 4620.3700, are repealed.