# Asbestos Abatement Project Checklist

**Important Note:** This is a summary of the Asbestos Abatement Act and Rules. It is not a substitute for the full Act and Rules. The complete text of the Asbestos Abatement Act and Rules is posted on the MDH web site:

- Minnesota Statutes and Rules: Asbestos (https://www.health.state.mn.us/communities/environment/asbestos/rules.html)

## 1. Credentialing and Personnel

| # | Standard | Standard Summary | Yes | No | N/A |
|---|---|---|---|---|---|
| 1a | MS 326.72.1 | Contractor has current MDH asbestos contractor license | | | |
| 1b | MS 326.73.1 | Individual is a certified worker. A current MDH certification is available | | | |
| 1c | MS 326.73.1 | Individual is a certified supervisor. A current MDH certification is available | | | |
| 1d | MR 4620.3250.1 | ARW is only being performed by MDH certified supervisors and workers | | | |
| 1e | MR 4620.3250.1.A | Contractor employs only MDH certified supervisors or workers | | | |
| 1f | MR 4620.3250.2.A | An MDH certified supervisor is present at the work site at all times when ARW is performed | | | |

## 2. Documentation

| # | Standard | Standard Summary | Yes | No | N/A |
|---|---|---|---|---|---|
| 2a | MR 4620.3435 and MS 326.72.2 | The project permit is available | | | |
| 2b | MR 4620.3435 and MS 326.72.2 | The project notice is available | | | |
| 2c | MR 4620.3440.1.A | A daily sign in/out log identifying individuals by name, certificate number, time in abatement area | | | |
| 2d | MS 326.72.2 | Contractor has current MDH asbestos contractor license available | | | |
| 2e | MR 4620.3440.1.B | The asbestos project plan is available | | | |

| # | Standard | The Project Plan Contains | Yes | No | N/A |
|---|---|---|---|---|---|
| 2f | MR 4620.3560.3.A | The name and address of the project site | | | |
| 2g | MR 4620.3560.3.B | A list of the asbestos work areas | | | |
| 2h | MR 4620.3560.3.C | The amount and type of ACM to be removed | | | |
| 2i | MR 4620.3560.3.D | Date when HVAC system will be shut down | | | |
| 2j | MR 4620.3560.3.E | The person responsible for item D | | | |
| 2k | MR 4620.3560.3.F | The capacity of each HEPA unit used | | | |
| 2l | MR 4620.3560.3.G | The air changes per hour calculations and number of HEPA units used to maintain -0.02”WC | | | |
| 2m | MR 4620.3560.3.H | Documentation if negative air system is exhausted indoors | | | |
| 2n | MR 4620.3560.3.I | A floor plan or sketch which indicates: | | | |
| 2o | MR 4620.3560.3.I.1 | The dimensions and volume of containment | | | |
| 2p | MR 4620.3560.3.I.2 | HEPA unit locations | | | |
| 2q | MR 4620.3560.3.I.3 | The decontamination unit location | | | |
| 2r | MR 4620.3560.3.I.4 | The bag-out location | | | |
| 2s | MR 4620.3560.4 | Any changes to the project plan are documented | | | |
| 2t | MR 4620.3440.1.C | All on-site air monitoring results are available | | | |
| 2u | MR 4620.3440.1.D | Negative air pressure records have date and time of the measurements. Any deviations are documented | | | |

## 3. Cleaning Abatement Area before Abatement

| # | Standard | Standard Summary | Yes | No | N/A |
|---|---|---|---|---|---|
| 3a | MR 4620.3566.A | Uncontaminated movable objects removed from the containment area | | | |
| 3b | MR 4620.3566.C | Decontaminated movable objects removed from the containment area | | | |
| 3c | MR 4620.3566.E | All remaining surfaces in the containment area are cleaned by HEPA-filter vacuuming or wet wiping | | | |

## 4. Installation of Critical Barriers

| # | Standard | Standard Summary | Yes | No | N/A |
|---|---|---|---|---|---|
| 4a | MR 4620.3567 | Critical barriers are installed | | | |
| 4b | MR 4620.3567.A | Anything not removed from the containment area is covered with one layer of six-mil poly | | | |
| 4c | MR 4620.3567.B | All HVAC openings and seams, in the containment area, are sealed with two layers of six-mil poly | | | |
| 4d | MR 4620.3567.C | All penetrations are sealed with one layer of six-mil poly | | | |
| 4e | MR 4620.3567.D | All other porous surfaces are sealed with one layer of six-mil poly | | | |
| 4f | MR 4620.3567.E | All openings between the containment and other areas are sealed with one layer of six-mil poly | | | |
| 4g | MR 4620.3567.F | All openings between the containment and other areas are sealed with one layer of six-mil poly | | | |

## 5. Containment

| # | Standard | Standard Summary | Yes | No | N/A |
|---|---|---|---|---|---|
| 5a | MR 4620.3568.1 | Containment is constructed | | | |
| 5b | MR 4620.3568.2.A | Floor sheeting is two layers of six-mil poly | | | |
| 5c | MR 4620.3568.3 | Wall sheeting is one layer of four-mil poly | | | |
| 5c | MR 4620.3568.5 | All approaches to the work area have warning signs | | | |

## 6. Decontamination Unit

| # | Standard | Standard Summary | Yes | No | N/A |
|---|---|---|---|---|---|
| 6a | MR 4620.3569.1 | Decontamination unit is being used by all persons exiting the containment | | | |
| 6b | MR 4620.3569.1.A | Decontamination unit is attached to the containment | | | |
| 6c | MR 4620.3569.1.B | Consist of a series of connecting rooms | | | |
| 6d | MR 4620.3569.1.C | Rooms have doorways consisting of two overlapping sheets of plastic | | | |
| 6e | MR 4620.3569.1.D.1 | Shower room is leak proof | | | |

| # | Standard | Standard Summary | Yes | No | N/A |
|---|---|---|---|---|---|
| 6f | MR 4620.3569.1.D.2 | The shower has a series of water filters with the last filter being a 5.0 micron filter | | | |
| 6g | MR 4620.3569.1.D.3 | The shower tap has hot/cold water that is adjustable | | | |
| 6h | MR 4620.3569.4 | Decontamination unit for residential abatement has a clean room, shower room and dirty room (3 stage) | | | |
| 6i | MR 4620.3569.5 | Decontamination unit for commercial abatement has a clean room, air lock, shower room, air lock, and dirty room (5 stage) | | | |

## 7. HEPA-Filtered Negative Pressure

| # | Standard | Standard Summary | Yes | No | N/A |
|---|---|---|---|---|---|
| 7a | MR 4620.3570.1 | The containment has HEPA-filter equipped ventilation | | | |
| 7b | MR 4620.3570.3 | The HEPA-filter equipped ventilation operates nonstop from asbestos disturbance until clearance | | | |
| 7c | MR 4620.3570.4.A | HEPA-filter equipped ventilation system provides at least 4 air changes per hour | | | |
| 7d | MR 4620.3570.4.B | A pressure of at least -0.02”WC is established and maintained within the containment | | | |
| 7e | MR 4620.3570.4.C | The pressure is measured by a recording manometer | | | |
| 7f | MR 4620.3570.4.C.1 | The recording manometer is placed as far as possible from the HEPA-filter equipped ventilation | | | |
| 7g | MR 4620.3570.4.C.2 | The recording manometer is placed to read negative pressure | | | |
| 7h | MR 4620.3570.4.C.3 | The recording manometer must be monitored every two hours to ensure continuous operation | | | |
| 7i | MR 4620.3570.4.C.6.i | If the recording manometer fails, an operating manometer is placed in service within 24 hours | | | |
| 7j | MR 4620.3570.4.C.6.ii | If the recording manometer fails, hourly pressure readings are documented for all work shifts. | | | |

| # | Standard | Standard Summary | Yes | No | N/A |
|---|---|---|---|---|---|
| 7k | MR 4620.3570.4.C.6.iii | If the recording manometer fails, each failure is documented | | | |
| 7l | MR 4620.3570.5.B | If unable to establish/maintain -0.02”WC, the air changes must be increased to six air changes per hour | | | |
| 7m | MR 4620.3570.5.C.1 | If unable to establish/maintain -0.02”WC, the probable cause is documented | | | |
| 7n | MR 4620.3570.5.C.2 | If unable to establish/maintain -0.02”WC, the date of the failure is documented | | | |
| 7o | MR 4620.3570.5.C.3 | If unable to establish/maintain -0.02”WC, the time of the failure is documented | | | |
| 7p | MR 4620.3570.5.C.4 | If unable to establish/maintain -0.02”WC, the name of the supervisor at the time of the failure is documented | | | |
| 7q | MR 4620.3570.5.D | If unable to establish or maintain -0.02”WC, for the methods used to reestablish -0.02”WC documentation is available | | | |
| 7r | MR 4620.3570.6 | The HEPA-filter equipped ventilation exhausts outside the facility | | | |
| 7s | MR 4620.3570.6 | If the HEPA-filter equipped ventilation exhausts indoors, one air sample is collected in the vicinity of the exhaust every four hours during abatement | | | |

## 8. Removal of ACM

| # | Standard | Standard Summary | Yes | No | N/A |
|---|---|---|---|---|---|
| 8a | MR 4620.3571.1.A | ACM is wet before removal | | | |
| 8b | MR 4620.3571.1.B | ACM is adequately wet during removal | | | |
| 8c | MR 4620.3571.1.C | ACM is placed and sealed in containers while adequately wet | | | |
| 8d | MR 4620.3571.1.D | ACM is not allowed to dry | | | |
| 8e | MR 4620.3571.2.B | An object covered with ACM is wet before being sealed in six-mil clear poly or comparable material | | | |
| 8f | MR 4620.3571.3 | Waste containers are sealed | | | |

## 9. Completion of Abatement

| # | Standard | Standard Summary | Yes | No | N/A |
|---|---|---|---|---|---|
| 9a | MR 4620.3575.1.B | Work area is cleaned until no asbestos dust, residue, dirt, or debris is visible | | | |
| 9b | MR 4620.3575.1.D | All abatement equipment is cleaned and removed from the containment, except for the HEPA-filtered equipped machine | | | |
| 9c | MR 4620.3575.1.F | Removed ACM is taken out of the containment | | | |
| 9d | MR 4620.3575.3.A.1 | The encapsulant is applied after containment has passed the visual inspection | | | |
| 9e | MR 4620.3575.3.A.3 | The encapsulant is completely dry before final clearance air sample collection | | | |
| 9f | MR 4620.3575.3.B.2 | The encapsulant is completely dry before walls and floors are removed | | | |
| 9f | MR 4620.3575.7 | Critical barriers areas are inspected and cleaned to ensure that no surface contamination is visible | | | |
| 9g | MR 4620.3575.7.A | Any visible contamination must be cleaned using a HEPA-filter equipped vacuum, wet wiping, or both, until no contamination is visible | | | |
| 9h | MR 4620.3575.9.A | Metal or fiber drums with locking tops are used for disposal of ACM that has sharp edges | | | |
| 9i | MR 4620.3575.9.B.1 | Six-mil poly bags are clear | | | |
| 9j | MR 4620.3575.9.B.2 | Six-mil poly bags are goose necked before sealing | | | |
| 9k | MR 4620.3575.9.B.3 | Six-mil poly bags are doubled to prevent leakage | | | |

## 10. Glove Bag Procedures

| # | Standard | Standard Summary | Yes | No | N/A |
|---|---|---|---|---|---|
| 10a | MR 4620.3580.1 | Glove bag removal is limited to less than 25 feet of pipe insulation or 10 square feet of ACM per room | | | |
| 10b | MR 4620.3580.2 | A remote decontamination unit is made available before the glove bag is set up | | | |
| 10c | MR 4620.3580.2 | A remote decontamination unit is used whenever an individual leaves the asbestos work area | | | |
| 10d | MR 4620.3580.2.A | The remote decontamination unit is placed within 20 feet of the glove bag operation | | | |

| # | Standard | Standard Summary | Yes | No | N/A |
|---|---|---|---|---|---|
| 10e | MR 4620.3580.2.B.1 | If wearing one suit, put on a second suit, proceed to decontamination unit (GLOVEBAGGING/MINI ONLY) | | | |
| 10f | MR 4620.3580.2.B.2 | If wearing two suits, remove first suit, proceed to decontamination unit (GLOVEBAGGING/MINI ONLY) | | | |
| 10g | MR 4620.3580.3 | The remote decontamination unit has a clean room, air lock, shower room, air lock, and dirty room | | | |
| 10h | MR 4620.3580.4.A | Area within ten feet of the glove bag is cleaned using HEPA-filter equipped vacuum, wet wiping, or both | | | |
| 10i | MR 4620.3580.4.B | Six-mil poly is placed on the floor below the glove bag | | | |
| 10j | MR 4620.3580.4.D | Damaged pipe insulation is sealed with two layers of six-mil poly before the glove bag is used | | | |
| 10k | MR 4620.3580.5.G | Before the glove bag is removed, a visual inspection of the abated surface within the glove bag is performed | | | |
| 10l | MR 4620.3580.6.F | Area beneath the glove bag is inspected for dust or debris | | | |
| 10m | MR 4620.3580.6.G | Dust and debris from the glove bag is cleaned using HEPA-filter equipped vacuum, wet wiping or both | | | |
| 10n | MR 4620.3580.7 | On-site handling of ACM from a glove bag complies with part 4620.3575, subpart 9 | | | |

## 11. Mini-Containment Procedures

| # | Standard | Standard Summary | Yes | No | N/A |
|---|---|---|---|---|---|
| 11a | MR 4620.3581.1 | Mini-containment removal is limited to less than 25 feet of pipe lagging or 10 square feet of ACM per room | | | |
| 11b | MR 4620.3581.2.A | If wearing two suits, remove first suit, proceed to decontamination unit (GLOVEBAGGING/MINI ONLY) | | | |
| 11c | MR 4620.3581.2.C | If wearing one suit, put on a second suit, proceed to decontamination unit (GLOVEBAGGING/MINI ONLY) | | | |
| 11d | MR 4620.3581.3 | The remote decontamination unit has a clean room, air lock, shower room, air lock, and dirty room | | | |

| # | Standard | Standard Summary | Yes | No | N/A |
|---|---|---|---|---|---|
| 11e | MR 4620.3581.3.A | Remote decontamination is available prior to the start of the mini-containment | | | |
| 11f | MR 4620.3581.3.B | Remote decontamination used by individuals following the mini-containment | | | |
| 11g | MR 4620.3581.4.B | Area within ten feet of the mini-containment is cleaned using a HEPA-filter vacuum, wet wiping, or both, until no dust nor debris is visible | | | |
| 11h | MR 4620.3581.4.B.1 | Mini-containment is constructed of one layer of six-mil poly | | | |
| 11i | MR 4620.3581.4.B.2 | Negative pressure is provided with a HEPA-filter equipped vacuum or a HEPA-filter equipped machine | | | |
| 11j | MR 4620.3581.5.A | Negative pressure is maintained until the mini- containment is collapsed | | | |
| 11k | MR 4620.3581.5.A | Negative pressure is maintained until the mini- containment is cleared | | | |
| 11l | MR 4620.3581.5.B | No visible ACM remains on work surfaces | | | |
| 11m | MR 4620.3581.5.C | All exposed ACM within the mini-containment is encapsulated prior to removal of the mini-containment | | | |
| 11n | MR 4620.3581.6.G.1 | Mini-containment is removed by collapsing the containment using a HEPA-filter equipped vacuum | | | |
| 11o | MR 4620.3581.6.G.2 | Mini-containment is removed after performing clearance air sampling | | | |

## 12. Removal of Entire Facility Components with Intact ACM

| # | Standard | Standard Summary | Yes | No | N/A |
|---|---|---|---|---|---|
| 12a | MR 4620.3582.2.A | Glove bagged ACM does not exceed 25 linear feet per room or 10 square feet | | | |
| 12b | MR 4620.3582.2.B | The ACM is not damaged | | | |
| 12c | MR 4620.3582.3.A | Area within 10’ of ACM is pre-cleaned | | | |
| 12c | MR 4620.3582.3.B | The ACM was wetted with water before wrapping | | | |
| 12d | MR 4620.3582.3.B.2 | The ACM remains wet until disposal | | | |
| 12e | MR 4620.3582.3.C | The facility component is wrapped with two | | | |

| # | Standard | Standard Summary | Yes | No | N/A |
|---|---|---|---|---|---|
| | | layers of six-mil poly | | | |
| 12f | MR 4620.3582.3.D | The poly is sealed with tape to provide an airtight seal around the facility component | | | |
| 12g | MR 4620.3582.3.G | Facility component is labeled with asbestos warning labels | | | |

## 13. Abatement for Demolition by Destruction to the Ground

| # | Standard | Standard Summary | Yes | No | N/A |
|---|---|---|---|---|---|
| 13a | MR 4620.3585.1.A | Facility is demolished within 24 hours of completion of asbestos-related work | | | |
| 13b | MR 4620.3585.1.B | Facility is secured to prevent access after asbestos related work | | | |
| 13c | MR 4620.3585.2 | Work area is pre-cleaned according to 4620.3566 | | | |
| 13d | MR 4620.3585.2 | Critical barriers are installed according to 4620.3567 | | | |
| 13c | MR 4620.3585.2 | Warning signs posted according to 4620.3568(5) | | | |
| 13d | MR 4620.3585.2 | Decontamination is established according to 4620.3569 | | | |
| 13e | MR 4620.3585.2 | HEPA-filtered ventilation is established according to 4620.3570 | | | |
| 13f | MR 4620.3585.2 | ACM is removed according 4620.3571 | | | |
| 13g | MR 4620.3585.2 | Abatement is completed according to 4620.3575 | | | |
| 13h | MR 4620.3585.2 | Waste is contained according to 4620.3575.9 | | | |
| 13i | MR 4620.3585.3 | Facility is secured to prevent access after asbestos related work | | | |
| 13j | MR 4620.3585.5.A | Asbestos warning signs are posted | | | |
| 13k | MR 4620.3585.5.B | Notification is submitted | | | |
| 13l | MR 4620.3585.5.C | MDH licensed contractor is used to remove ACM | | | |
| 13m | MR 4620.3585.5.D | MDH certified individuals are used to remove ACM | | | |

## 14. Indoor Air Monitoring

| # | Standard | Standard Summary | Yes | No | N/A |
|---|---|---|---|---|---|
| 14a | MR 4620.3592.2 | Indoor air monitoring has been conducted outside of the containment during all asbestos-related work | | | |
| 14b | MR 4620.3592.2.A | Two air samples are collected simultaneously during every five hours asbestos-related work is occurring | | | |
| 14c | MR 4620.3592.2.B | One sample is collected by the entrance of the decontamination unit | | | |
| 14d | MR 4620.3592.2.B | One sample is collected in a location in order to detect failures in the containment | | | |
| 14e | MR 4620.3592.2.C | Sample collection is performed within ten feet of the containment | | | |

## 15. Elevated Fiber Counts outside the Containment

| # | Standard | Standard Summary | Yes | No | N/A |
|---|---|---|---|---|---|
| 15a | MR 4620.3592.3.A | The occupied area next to the asbestos work area has been evacuated | | | |
| 15b | MR 4620.3592.3.B.1 | Containment barriers are inspected and repaired | | | |
| 15c | MR 4620.3592.3.B.2 | The negative pressure is in compliance with part 4620.3570 | | | |
| 15d | MR 4620.3592.3.B.3 | Adjacent areas are cleaned using HEPA-filter equipped vacuum cleaning, wet wiping, or both | | | |
| 15e | MR 4620.3592.3.B.4 | Clearance sampling is conducted | | | |
| 15f | MR 4620.3592.3.B.5 | Sample analysis indicates that the fiber concentration did not exceed the indoor air standard | | | |
| 15g | MR 4620.3592.4 | Evacuation of the occupied areas was delayed | | | |
| 15h | MR 4620.3592.4.A | The air samples with elevated fiber concentrations are analyzed using TEM | | | |
| 15i | MR 4620.3592.4.B | If the air quality exceeds 0.01f/cc, the occupied area is evacuated and the area is cleaned and clearance sampling is conducted | | | |

## 16. Glove Bag/Mini-Containment Air Sampling

| # | Standard | Standard Summary | Yes | No | N/A |
|---|---|---|---|---|---|
| 16a | MR 4620.3592.5.A | Two air samples are collected simultaneously from the start of ACM disturbance until the glove bag or mini- containments are removed | | | |
| 16b | MR 4620.3592.5.B | Indoor air samples are collected within ten feet of the glove bag or mini-containments | | | |
| 16c | MR 4620.3592.5.D | Glove bag or mini containment work area was not reoccupied until air samples indicate a fiber level below the indoor air standard | | | |

## 17. Glove Bag/Mini-Containment Overloaded Air Samples

| # | Standard | Standard Summary | Yes | No | N/A |
|---|---|---|---|---|---|
| 17a | MR 4620.3592.5.E.1 | The area is cleaned and inspected | | | |
| 17b | MR 4620.3592.5.E.2 | Two air samples are collected within ten feet of the glove bag or mini-containment operation | | | |
| 17c | MR 4620.3592.5.F.1 | When elevated fiber concentrations are suspected to be from non-asbestos dust, the work area is not occupied until the samples are analyzed by TEM | | | |
| 17d | MR 4620.3592.5.F.2 | If TEM results show a concentration >0.01f/cc or overloading, the work area is evacuated, cleaned, inspected, and two air samples are collected | | | |

## 18. Clearance Air Sampling

| # | Standard | Standard Summary | Yes | No | N/A |
|---|---|---|---|---|---|
| 18a | MR 4620.3594.1 | Clearance air sampling is performed to ensure that fiber levels are $\leq$0.01f/cc | | | |
| 18b | MR 4620.3594.1.A.1 | The containment area is not reoccupied until all five clearance air samples are $\leq$0.01f/cc | | | |
| 18c | MR 4620.3594.1.A.2 | For residential, three clearance air samples are $\leq$0.01f/cc | | | |
| 18d | MR 4620.3594.1.B | If any clearance air sample >0.01f/cc, the containment area is cleaned and inspected and clearance air sampling is repeated | | | |
| 18e | MR 4620.3594.2 | The containment is thoroughly cleaned, dried completely, and passed a visual inspection before clearance air sampling is performed | | | |
| 18f | MR 4620.3594.2.A | The critical barriers are in place | | | |

| # | Standard | Standard Summary | Yes | No | N/A |
|---|---|---|---|---|---|
| 18g | MR 4620.3594.2.B | The decontamination unit is in place and is operational | | | |
| 18h | MR 4620.3594.2.C | Negative pressure is maintained until analysis of clearance air samples has been completed | | | |
| 18i | MR 4620.3594.2.F.1 | A one horsepower leaf blower was used to agitate the air before clearance sampling | | | |
| 18j | MR 4620.3594.2.F.2 | Stationary fans are used to continuously agitate the air during clearance | | | |
| 18k | MR 4620.3594.2.G | Leaf blower, fans and pumps are cleaned before removal from containment | | | |

## 19. General Requirements for Air Sample Collection

| # | Standard | Standard Summary | Yes | No | N/A |
|---|---|---|---|---|---|
| 19a | MR 4620.3596.A.1 | Air sample collection is conducted by an individual who is an asbestos worker or asbestos supervisor and has completed a Minnesota asbestos air sampling course | | | |
| 19b | MR 4620.3596.A.3 | Air sample collection is conducted by an individual who has completed the NIOSH 582 course before July 1, 1996 | | | |
| 19c | MR 4620.3596.B | Air sample cassettes are submitted for analysis on the day of collection | | | |
| 19d | MR 4620.3596.C | Air sample results are made available orally or in writing before disassembly of the containment | | | |

## 20. Phase Contract Microscopy

| # | Standard | Standard Summary | Yes | No | N/A |
|---|---|---|---|---|---|
| 20a | MR 4620.3597.3.B | A volume of 2,000 liters is drawn through the sample | | | |
| 20b | MR 4620.3597.3.C.1 | If <2,000 liters are not collected, more fields have been counted than the 100 microscope field maximum | | | |