TITLE 178 - ENVIRONMENTAL HEALTH

CHAPTER 22 - ASBESTOS PROJECTS

001. SCOPE AND AUTHORITY. These regulations govern the professions and occupations, businesses, training courses, and standards for asbestos activities under the Asbestos Control Act, Nebraska Revised Statutes (Neb. Rev. Stat.) §§ 71-6301 to 71-6317, and the Uniform Credentialing Act.

002. DEFINITIONS. Definitions set out in the Asbestos Control Act, the Uniform Credentialing Act, Title 172 Nebraska Administrative Code (NAC) 10, and the following apply to this chapter.

002.01 AMENDED WATER. A water solution containing an effective low sudsing wetting agent.

002.02 APPROPRIATE PROTECTIVE CLOTHING. Protective outer clothing which is worn by an individual who is engaged in an asbestos project regardless of the concentration of asbestos fibers in the air within the asbestos project. Protective clothing consists of coveralls or similar whole body covering, head covers and foot covers.

002.03 APPROPRIATE RESPIRATOR. An air purifying respirator providing protection against radionuclides and against dust, fumes and mists in air, and which provide the following respiratory protection for airborne concentrations of asbestos fibers:

(A) Airborne concentration of asbestos not in excess of one fiber per cubic centimeter will require a half-mask air-purifying respirator, other than a disposable respirator, equipped with high-efficiency particulate filters.
(B) Airborne concentration of asbestos not in excess of five fibers per cubic centimeter will require a full facepiece air-purifying respirator equipped with high-efficiency particulate filters.
(C) Airborne concentration of asbestos not in excess of ten fibers per cubic centimeter will require a powered air purifying respirator equipped with high efficiency particulate filters or a supplied-air respirator operated in continuous flow mode.
(D) Airborne concentration of asbestos not in excess of 100 fibers per cubic centimeter will require a full facepiece supplied air respirator operated in pressure demand mode.
(E) Airborne concentration of asbestos greater than 100 fibers per cubic centimeter will require a full facepiece supplied air respirator operated in pressure demand mode equipped with an auxiliary positive pressure self-contained breathing apparatus.

002.04 APPROPRIATE WARNING SIGN. A sign not less than 11 inches wide which contains the equivalent of the following legend, printed in letters of sufficient size and contrast to be readily visible and legible:

DANGER
ASBESTOS

CANCER AND LUNG DISEASE HAZARD
AUTHORIZED PERSONNEL ONLY
RESPIRATORS AND PROTECTIVE CLOTHING ARE
REQUIRED IN THIS AREA

002.05 APPROVED ASBESTOS WASTE DISPOSAL SITE. A solid waste disposal area that is operated under a permit issued by the Nebraska Department of Environment and Energy and is authorized to receive asbestos containing solid wastes.

002.06 APPROVED TRAINING PROGRAM. A program that is accredited by the Department either as an initial training program or as a review training program for an asbestos occupation or meets the statutory requirements in Neb. Rev. Stat. § 71-6310(3).

002.07 ASBESTOS CONTAINING MATERIALS. Any material or product which contains more than 1% asbestos.

002.08 ASBESTOS DANGER LABEL. A label which contains the following legend, printed in letters of sufficient size and contrast to be readily visible and legible:

DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD

002.09 CONTAINMENT AREA. A negative pressure asbestos project work area and decontamination facility configured so as to isolate asbestos project activities from areas which are to remain uncontaminated.

002.10 CONTROL CURTAIN. A closure device constructed of plastic sheeting not less than 6 mil thick and installed in an entryway into an area contaminated or to be contaminated with asbestos containing material. A control curtain is intended to restrict the movement of air into, and from, a contaminated area. This curtain consists of three constructed baffles that cover the entire area of the entryway and are fastened securely along the top of the entryway framework and along alternate sides in a manner that will require individuals to walk the entire width of the entryway between adjacent baffles as they pass around the three panels.

002.11 CURRICULUM. A detailed course outline, description or syllabus submitted to the Department as part of the approval process by an association, educational institution, individual, governmental body or other entity or individual providing an asbestos occupation course.

002.12 DECONTAMINATION FACILITY. Is the portion of the containment area containing an equipment room, shower facility and a clean change room.

002.13 ENGAGING IN AN ASBESTOS PROJECT. Activities that include determining whether asbestos containing materials exist, assessing the condition of asbestos containing materials, preparing plans and

specifications for an asbestos project, performing an asbestos project, or performing final clearance air sampling or soil sampling at the end of an asbestos project may only be performed by licensed individuals.

002.14 HIGH EFFICIENCY PARTICULATE AIR FILTER. A filter capable of trapping and retaining from an air stream 99.97% of asbestos fibers greater than 0.3 microns in size.

002.15 REMOVAL ENCAPSULENT. A penetrating encapsulant specifically designed for removal of asbestos containing material rather than for encapsulation of asbestos containing material in place.

002.16 SEALING MATERIAL. An asbestos-free material used to cover a surface to prevent any asbestos fibers remaining after removal from being dispersed into the air. This term includes sprayed or brushed on decorative and fireproofing materials as well as penetrating or bridging encapsulants.

002.17 STRUCTURE OR STRUCTURAL ITEM. Roofs, walls, ceilings, floors, structural supports, pipes, ducts, fittings and fixtures that have been installed as an integral part of any structure.

002.18 SUCCESSFULLY PASS. Answering correctly at least seventy percent of the questions on the end of course examination.

002.19 WET CLEANING. The process of using amended water or a removal encapsulant and a wet brush, mop, cloth, sponge or similar wet cleaning device to remove completely any visible asbestos containing material residue from surfaces. This definition does not include the use of a non high efficiency particulate air filter-equipped wet vacuum cleaner to pick up wet asbestos containing material debris or contaminated wastewater.

002.20 WETTING AGENT. A surfactant or chemical that is added to water to decrease its surface tension and allow it to spread more easily over or penetrate into a surface that is covered with asbestos containing material.

002.21 WORK AREA. Is a specific room or physically isolated portion of a room in which asbestos containing material is required to be handled in accordance with the requirements 178 NAC 22. These areas are designated as work areas from the time that the room, or portion of it, is being prepared in order to perform the asbestos project until the time the area has been cleaned free of all visible residue in accordance with applicable Department regulations.

003. BUSINESS ENTITY LICENSE. The following applies to business entities engaging in asbestos projects:

003.01 LICENSE WAIVER. The Department may waive the requirement for a license for a business entity as provided in Neb. Rev. Stat. § 71-6309.

003.02 WORK PRACTICES. A business entity which is licensed or for whom licensure has been waived must follow work practices set out in this chapter or any alternative procedure approved by the Department.

003.03 BUSINESS ENTITY REQUIREMENTS. To obtain or renew a license an applicant must submit a complete application and provide documentation demonstrating that the applicant meets licensing requirements set out in statute and this chapter. An applicant must:

(A) Be owned by or employ a licensed supervisor;
(B) Implement a written plan for a respiratory protection program and a medical surveillance program. The plan must include who is responsible for implementing the programs;
(C) Own or certify immediate and continuing access to the following equipment, in operable condition, for use in each asbestos project in which it proposes to engage:

(i) Two high efficiency particulate air filter-equipped portable exhaust fans with a minimum rated capacity of 500 cubic feet per minute;
(ii) Two high efficiency particulate air filter-equipped vacuuming devices equipped with hoses and attachments necessary for cleaning wet surfaces; and
(iii) Appropriate respirators, with a continuing inventory of at least ten high efficiency particulate air filters specifically designated for use with each respirator, in sufficient quantities to meet all anticipated requirements; and

(D) Require and have documentation onsite that shows all individuals at friable asbestos projects have a valid Nebraska asbestos license, training, physical, and respirator fit test.

003.04 RENEWAL. A licensed business applying for renewal of a license must submit a completed application to the Department at least 30, but not more than 60, days prior to the expiration date in order to avoid a lapse in its license.

004. LICENSURE FOR INDIVIDUALS. To obtain a license, an individual must submit a complete application provided by the Department and provide documentation demonstrating that the applicant meets the requirements set out in statute, 172 NAC 10, and this chapter.

004.01 INITIAL LICENSE. All applicants must submit the following:

(A) The original of a certificate showing successful completion within the prior 12 months of an approved program for initial training in the discipline applied for or the original of a certificate showing successful completion of an approved program for initial training in the discipline applied for and the original of a certificate showing successful completion of approved program of review trainings in the discipline applied for that were taken annually since completion of the initial training;
(B) The original of a certificate showing successful completion of an approved Nebraska law training program if applying pursuant to Neb. Rev. Stat. § 71-6310(3); and
(C) Documentation of an examination by a physician within the

preceding 12 months which includes a declaration by the physician that the applicant is physically capable of working while wearing a respirator for all disciplines except limited project designer and limited management planner.

004.02 REQUIREMENTS FOR LICENSURE IN THE ASBESTOS PROFESSIONS. In order to practice an asbestos profession, the licensee is responsible for ensuring they have a valid Nebraska asbestos license and maintain current training, physical and respirator fit test.

004.03 CONTINUING COMPETENCY REQUIREMENTS. To renew a license an individual who has completed an initial training course must complete an approved annual review course within a year from the date of completion of the initial training course and each subsequent year. An individual who fails to complete a review course for a period of twelve months or longer from the expiration of the initial training must retake the initial training course.

004.04 RENEWAL. All asbestos occupation credentials issued by the Department will expire 24 months after the effective date of issuance. To renew a license to practice an asbestos occupation, the individual must submit a complete application to the Department, meet the continuing competency requirements set out in this chapter, the requirements set out in 172 NAC 10, and in statute.

004.05 UNPROFESSIONAL CONDUCT. Unprofessional conduct is set out in Neb. Rev. Stat. § 38-179 and includes the following:

(A) Failure to keep and maintain adequate records;
(B) In an investigation by the Department of any alleged violation, refusal to cooperate or furnish information requested;
(C) Falsification of records that are required to be kept by 178 NAC 22;
(D) Refusing to provide service to a consumer because of such consumer's race, creed, color, sex, national origin, disability, or familial status; or
(E) Disruptive behavior such as:

(i) Outbursts of rage or violent behavior;
(ii) Throwing of records or objects; or
(iii) Striking, assaulting, or using insulting comments to a consumer, consumer's family member, coworkers, or other individuals while working on an asbestos project.

005. ASBESTOS OCCUPATION TRAINING OR REVIEW COURSES. A training provider must not provide, offer, or claim to provide Nebraska approved asbestos training programs or review courses without applying for and receiving accreditation from the Department.

005.01 COURSE APPROVAL PROCESS. All asbestos occupation training or annual review courses, including a training course on Nebraska law asbestos occupation licensure or license renewal, including lectures, seminars, course materials and other instructional programs, must be reviewed and approved by the Department before they are offered. All applications for approval of

an occupation training or annual review course must be submitted on a form provided by the Department. A separate application for each course for which approval is sought is required. Correspondence courses will not be approved by the Department.

005.02 GENERAL REQUIREMENTS. All course providers must meet the following:

(A) Include instruction on Nebraska Law in accordance with this chapter;
(B) Only use approved instructors to teach training courses;
(C) Ensure that participants completing an initial training course, annual review course or course on Nebraska Law demonstrate at least the minimum acceptable proficiency in tasks or duties connected with each unit of the components set forth in 178 NAC 22-006, and that participants completing the course are given a final written examination in that course including at least the following number of multiple choice questions:

(i) Asbestos Workers - 50 questions;
(ii) Asbestos Supervisors - 100 questions;
(iii) Asbestos Project Designers - 100 questions;
(iv) Asbestos Inspectors - 50 questions;
(v) Asbestos Management Planners - 50 questions;
(vi) Asbestos Project Monitor - 100 questions; and
(vii) Nebraska Law - 50 questions;

(D) Ensure an individual attends all course presentations and passes the final written examination with a score of at least 70% for successful course completion;

(E) Document an individual's successful completion of a course in a numbered certificate or letter, the original of which must be given to the individual no later than 15 days after the date of the final written examination, containing the following information:

(i) The student's name;
(ii) The date or dates that the course was attended;
(iii) The name, address, and telephone number of the course provider, and the location of the course, if different from that of the course provider;
(iv) Discipline of the training course completed;
(v) A statement that the student passed the final written examination with a score of at least 70% and has completed the requisite training for asbestos accreditation under Toxic Substances Control Act Title II, 40 CFR Part 763, and the State of Nebraska asbestos regulations and statutes;
(vi) A unique certificate number;
(vii) Date of examination; and
(viii) An expiration date of one year after the date upon which the person successfully completed the course and examination;

(F) Submit a document to the Department signed by the administrator or operating officer of the course within 15 days after the date of the final written examination the information required in 178 NAC 22-005.02(E);

(G) Maintain attendance information for asbestos occupation courses, as stipulated by 178 NAC 22-005.02(E), for a minimum of three years from the date of completion of each course. Attendance records are subject to review by the Department upon request. If a training provider ceases to conduct training, the training provider must notify the Department and give it the opportunity to take possession of that provider's asbestos training records;

(H) Courses described in this chapter must be based on an eight hour day, including time allotted for breaks and one meal. Full day classes must have a minimum of 6.5 hours of contact time and half day classes must have a minimum of 3.75 hours of contact time in instructional, examination, or workshop activities. Activities must follow submitted and approved curriculum. Meal breaks must be offered at about the midpoint of the full day course;

(I) Courses must meet or exceed the minimum number of hours and the training requirements set forth in this chapter; and

(J) The training site must accommodate course participants comfortably and provide adequate sanitation and safety.

005.03 TRAINING PROVIDER APPLICATION. To apply for approval of an individual asbestos occupation course, the applicant must submit a completed application provided by the Department and provide documentation demonstrating that the applicant meets statutory requirements and the requirements of this chapter.

005.04 ACCREDITATION. Once accreditation for an asbestos occupation course has been granted, the Department need not approve a course for each occasion on which the course is administered, but will make an annual determination of whether or not to extend accreditation. If an accredited course has not been presented by a training provider in a two year period that training provider forfeits its Department accreditation for that particular course two years from the last active course date. Course providers that lose accreditation for particular courses may resubmit an application in accordance with 178 NAC 22-005.02 requirements.

005.05 COMPLIANCE. The course provider of an accredited course must comply with the following:

(A) Notify the Department in writing at least five working days in advance of the dates, times, and location for each presentation of an approved course. Immediately notify the Department by phone or electronic means if any scheduled course is cancelled.
(B) Submit the following information to the Department annually on the

anniversary of course approval:

(i) A report to include the number of occasions the course was given and the numbers attending, negative reports are required; and
(ii) An updated course manual and updates to other course materials.

005.06 ON-SITE INSPECTION. All presentations of an accredited course are subject to on-site inspection by the Department at any reasonable time. When a course is reviewed, the Department will not be assessed an attendance fee.

005.07 COURSE CHANGES. Prior to a course provider making any change to an approved course on any of the items required to be in the original application as listed in 178 NAC 22-005.03, the course provider must inform the Department immediately, in writing, and reapply for course approval in accordance with this chapter.

005.08 SPECIAL ACCOMMODATIONS. If individuals taking the examination for worker licensure or renewal have difficulty reading the examination, for whatever reason, the course provider may make special provisions for that individual as follows:

(A) The only occupation eligible for special examination procedures is an asbestos worker. All other asbestos occupations must be able to read project designs, specifications, and notifications proficiently;
(B) If an individual desires special accommodations, the request must be made to the course provider in advance and be approved;
(C) To accommodate the individual requesting special accommodations the course provider may allow the individual extra time in which to finish taking the examination; and
(D) To accommodate the individual requesting special accommodations, the course provider may provide a reader to read the examination to the individual. Readers may not be provided by the individual taking the examination. In no event will such reader translate or interpret the examination, or indicate the correct answers to the examination questions by voice inflection or any other means. If this method is used, it must be done in a manner or in an area that will not be distracting to other individuals taking the examination.

005.09 RESTRICTIONS. In order to assure the integrity of training received by individuals, providers of approved training courses may not train or issue training certificates to the owners, officers, or stockholders of the training provider or any affiliated company.

005.10 VIOLATIONS. The Department may deny, suspend, or revoke accreditation of an asbestos occupation course, whether initial, renewal or course on Nebraska law, for any of the following reasons:

(A) Fraud or misrepresentation in an application;
(B) Failure to provide notification to the Department of the commencement or cancellation of a training course as required by this

chapter;
(C) Failure to maintain or submit to the Department course information as required by this chapter;
(D) Failure to permit on-site inspections by Department employees or permit inspections of training records;
(E) Fraud or misrepresentation in issuing or obtaining training certificates;
(F) Failure to pay any fee assessed under these regulations, or
(G) Failure at any time to comply with requirements of the Asbestos Control Act or this chapter.

006. ASBESTOS OCCUPATION TRAINING AND REVIEW COURSE CURRICULUM. A training program must meet the minimum training curriculum requirements contained in Neb. Rev. Stat. § 71-6310.01 through 71-6310.02, 40 CFR Part 763 Appendix C and this chapter.

006.01 ASBESTOS OCCUPATION ANNUAL REVIEW COURSES. Each asbestos occupation review course must be specific to each occupation and include, at a minimum, an examination and eight hours of instruction except that a review course for asbestos inspectors must include four hours of instruction.

006.02 CURRICULUM. The curriculum for an asbestos occupation review course must include the following components of classroom instruction:

(A) Current federal, Nebraska, and local requirements, including changes;
(B) Review of key elements of each respective asbestos occupation initial training courses as required in these regulations;
(C) State-of-the-art developments in work practices and engineering controls related to asbestos activities; and
(D) Review of the potential health effects related to asbestos exposure.

006.03 TRAINING COURSE ON NEBRASKA LAW. The training course on Nebraska law must include four hours of instruction, an examination, and the following components of classroom instruction:

(A) Nebraska law relevant to asbestos projects and asbestos occupations including the Asbestos Control Act and the Environmental Protection Act; and
(B) 178 NAC 22, 129 NAC 23, Nebraska Department of Environment and Energy Hazardous Air Pollutants: Emission Standards; and the Administrative Procedure Act.

007. ASBESTOS PROJECT NOTIFICATION REQUIREMENTS. Before initiating any asbestos project, a business entity or individual must submit to the Department a written project notification on a form provided by the Department with all requested information and any required fee. A separate project notification is required for each structure where an asbestos project is performed, except when projects will be performed on or in identical multiple structures, and all of the work will be performed in a continuous manner, then only one project notice will be required. If the project is not planned, but is an emergency which results from a sudden, unexpected event, written notice is not

required prior to project start, but written asbestos project notification with all requested information and any required fee must be provided to the Department within 48 hours of project start. All renovation or demolition work must be inspected for the presence of asbestos containing material prior to the beginning of work. If an inspection for asbestos containing material prior to beginning renovation or demolition was not done, then the discovery of asbestos containing material after work begins does not meet the sudden, unexpected event criteria for an emergency, and abatement of the asbestos containing material cannot be performed as an emergency project.

007.01 NOTIFICATION UPDATES. The Department must be notified of changes to information contained in the project notification or in an update within 24 hours of knowledge of such change and 24 hours prior to work being done on the project. Notice may be given by telephone 402-471-0386, electronically, or written letter. If the business entity wishes to have a verified record that such notice was given it must use certified mail, return receipt requested in submitting its written letter. An updated notice must be given for:

(A) A new start date for a project the Department must receive notification of the new starting date 24 hours before work on the project is begun;
(B) A new work schedule for a project, either days, work shift, or both;
(C) Typographical or clerical errors which would affect the Department's ability to perform an inspection of the project; or
(D) Increasing the size of a project by adding a new location within a structure, such as adding work in a new room on the same floor as the original project or adding work on a different floor. Increasing the size of a project will not require a new project review fee unless the original project was too small to require a project review fee under this chapter and the total of all work done at the project site will now meet or exceed the size requirements for a project review fee set forth in this chapter.

007.02 WORK PRACTICE WAIVER. A licensee or exempt business entity may request a waiver of any of the individual requirements of this chapter for work practices or for approval of an alternative procedure for a work practice by submitting to the Department a complete waiver application form provided by the Department with the project notification. A licensee or exempt business entity may request a waiver of the ten day notification period by submitting a written request which includes the reasons for the request with a project notification. No work can be done on a project until the Department has either approved the waiver or ten days has passed.

008. RECORDS AND INSPECTIONS. Business entities must comply with the requirements listed in this section.

008.01 RECORDKEEPING. Any business entity performing an asbestos project must keep a separate record for each project as set out in Neb. Rev. Stat. § 71-6307 and the following information:

(A) The name and address of the owner of the structure in which the project occurred; and

(B) The results of any clearance air sampling and analysis performed.

008.02 INSPECTION. Any business entity which has submitted a notification for an asbestos project may request the Department to conduct:

(A) A pre-project inspection of a proposed asbestos project by submitting a written request with the project notification; or
(B) A close-out inspection of an asbestos project prior to undertaking the cleaning procedures inside the work area required by 178 NAC 22-012.03 by submitting a written request no less than 48 hours before the requested close-out inspection; provided that any requested close-out inspections will not be considered a final inspection should the Department deem further inspections necessary; and
(C)The business entity will by such pre-project or close-out inspection requests be deemed to have agreed to pay the inspection fees and costs set out in this chapter and to waive the application of the inspection limitations set out in Neb. Rev. Stat. § 71-6303 to such inspections as requested.

009. SCHEDULE OF FEES. Following are the fees for business licenses, individual licenses, and waivers:

(A) For issuance or renewal of a license to engage in an asbestos project, waiver of a license on an emergency basis or waiver of a license for a business entity not primarily engaged in asbestos projects, the fee is $3,000, $300 of which will be a nonrefundable application fee to be retained by the Department as an administrative fee. The fee covers a 12 month period beginning on the effective date of issuance or renewal or waiver thereof. No portion of the fee will be refunded if the license or waiver is suspended or revoked during the 12 month period or if the business entity otherwise discontinues activity within the State during any portion of the 12 month period.

(B) The fee for an initial license, renewal of a license, or waiver of license on an emergency basis is

(i) Worker $110.00
(ii) Supervisor $200.00
(iii) Project Designer $200.00
(iv) Project Monitor $200.00
(v) Inspector $200.00
(vi) Management Planner or Limited Management Planner (Includes Inspector) $300.00

(C) The fee for an initial limited license, renewal of limited license, or waiver of limited license on an emergency basis is:

(i) Project Designer $200.00
(ii) Management Planner $200.00

(D) For project review of each asbestos project notification submitted by a licensed business entity, the fee is $200. No portion of the fee will be

refunded under any circumstance. Should an initial on-site inspection reveal the need for reinspection, an additional fee will be assessed in accordance with 178 NAC 22-009.04. Non-friable projects are not subject to the notification fee.
(E) For on-site inspections or reinspections other than initial inspections, the fee is $150. No portion of the fee will be refunded under any circumstance.
(F) For approval of a training course for any asbestos occupation, the fee is $1,000.
(G) For approval of a review course for any asbestos occupation or a four hour course on Nebraska law, rules and regulations, the fee is $500.

010. WORK PRACTICES FOR GENERAL SECURITY AND MANAGEMENT OF ASBESTOS PROJECTS. The licensed or waivered business entity or licensed individual must establish general security and management work practices for asbestos projects.

010.01 SITE PREPARATION. Prepare the site of the asbestos project as follows:

(A) Demarcate the asbestos project perimeter clearly by roping it off 25 feet outside the work area perimeter:

(i) If a 25 foot perimeter is not possible, demarcate as close to the 25 foot limit as possible; and
(ii) If a containment area is established and managed in accordance with the work practices of 178 NAC 22-011, then use the containment perimeter as the project perimeter;

(B) Post appropriate warning signs prominently at all possible points of entry into the project site; and
(C) For indoor asbestos projects other than demolition, isolate the ventilation system from the work area.

010.02 PERSONNEL. Ensure the following requirements during performance of asbestos project activity:

(A) Have a licensed supervisor to manage the asbestos project on-site, to serve as point of contact and to control access at all times when work is being performed on a project;
(B) Limit project site access only to those individuals whose responsibilities directly require their presence. All individuals engaged in or supporting the asbestos project are to hold a license in an asbestos occupation and have copies of their initial and current training certificate on-site.

(i) Access of other individuals to the work site is limited to those with an immediate need and only when under the direct control of a licensed supervisor; and
(ii) Each individual who enters the project is required to sign in, by legibly writing or printing their name and license number or the purpose for being in the work site along with the signature of the supervisor if the individual is not licensed. Such sign-in sheets must

be maintained at the work area daily for the duration of the project and must be available for inspection by the Department for the day on which the inspection is conducted;

(C) All individuals within the work site are to comply with work safety requirements;
(D) Require all individuals who enter the work area to be qualified on, fit-tested and using an appropriate respirator and wearing appropriate protective clothing; and
(E) Require all individuals, before leaving the work area, to remove or to clean all outer clothing with a high efficiency particulate air filter-equipped vacuuming device or by wet cleaning methods.

010.03 CLEANING REQUIREMENTS. Perform the following tasks prior to completing the project:

(A) Clean all tools and equipment used in the work area free of all visible residue or seal them in six mil plastic before removal from the work area;
(B) Clean the surfaces of all structures, furnishings, equipment and fixtures located on the project site free of all visible debris and residue, including any which existed prior to the start of the project, with a high efficiency particulate air filter-equipped vacuuming device or by wet cleaning methods. Treat such debris and residue as asbestos containing material; and
(C) Dispose of all removed asbestos containing material, plastic sheeting, contaminated materials, waste and debris on the project site in accordance with 178 NAC 22-020.

011. WORK PRACTICES TO ESTABLISH AND MANAGE CONTAINMENT AREAS. The licensed or waivered business entity or licensed individual must construct and manage a containment area for asbestos projects as set out in this chapter.

011.01 WORK AREA REQUIREMENTS. Construct and prepare a work area as follows:

(A) Preclean all moveable furnishings, equipment, and fixtures in the work area with a high efficiency particulate air filter-equipped vacuuming device or by wet cleaning methods;

(i) After cleaning, remove these items from the work area and store in an area which is not subject to contamination with asbestos containing material until the conclusion of the project. If the storage area contains asbestos containing material, reclean items prior to returning items at the conclusion of the project;

(B) Isolate the work area as follows:

(i) Shut down and lock out heating and ventilation and electrical systems serving the work area. If these systems cannot be shut down, make special provisions to assure that:

(1) Airborne contamination from the work area cannot enter the ventilation system and be carried to other areas; and
(2) Measures to minimize electrical hazards, such as use of ground fault interrupters, are provided;

(ii) Install airtight temporary barriers to seal doorways, windows, ventilation system openings, and other openings in the work area. If plastic sheeting is not supported by the structure or structural items, such as walls or pipes, construct and install airtight temporary barriers around the work area, using plastic sheeting not less than 6 mil thick, face smooth surface of the barrier wall to the interior of the work area;

(iii) Install a control curtain in the doorway between the work area and the decontamination facility;

(C) Prepare the work area as follows:

(i) Preclean the surfaces of all structures, other than those from which asbestos containing material is to be removed or those which are to be encapsulated, and all nonmoveable furnishings, equipment and fixtures remaining in the work area with a high efficiency particulate air filter-equipped vacuuming device or by wet cleaning methods;
(ii) Cover and completely seal cleaned surface areas and nonmoveable items with one or more layers of plastic sheeting not less than 6 mil thick, then:

(1) Seal all plastic sheeting seams and all openings around structures, equipment and fixtures penetrating into the perimeter of the work area; and
(2) Use fire retardant sheeting if a fire hazard exists and in fire egress areas;

(iii) Cover floors with at least two layers of plastic sheeting not less than 6 mil thick such that both layers extend up the wall at least 12 inches;
(iv) Securely affix plastic sheeting not less than 6 mil thick on walls to ensure that it will remain in position throughout the length of the project as follows:

(1) Place wall sheeting to the interior of the work area (i.e., over both layers of floor sheeting), so that moisture is shed to the interior of the work area; and
(2) Ensure that wall sheeting overlaps the floor sheeting and seal wall sheeting to floor sheeting to provide a leak-proof barrier.;

(v) Walls or floors from which asbestos containing material is to be abated need not be covered with plastic sheeting as otherwise required; and
(vi) Repair any tears noted in the protective sheeting immediately;

and

(D) Install high efficiency particulate air filter-equipped ventilation fans so that air will be continually removed from all locations within the work area to:

(i) Ensure that the fans have the capacity to replenish the entire volume of air contained in the work area every 15 minutes or less; and
(ii) Discharge the air to be removed from the work area through a duct penetrating the airtight barrier, as follows:

(1) Provide an airtight seal between the duct and the barrier; and
(2) Discharge the air to be removed from the work area outside of the building in an area remote from the air intake and not into an area of the building that is occupied by individuals other than those directly engaged in the project unless such a discharge is permitted specifically by waiver by the Department.;

(iii) Operate the fans in a manner that will establish and maintain a flow of air into the work area from all adjacent areas by:

(1) Demonstrating proper air flow by use of smoke producing tubes, pressure differential readings or other appropriate means; and
(2) Make these determinations and record the results before starting an asbestos project and at the start of each day of operation; and

(iv) Operate the ventilation fans continually throughout the duration of the project until the procedures of 178 NAC 22-011.06 have been completed.

011.02 DECONTAMINATION FACILITY. Provide a decontamination facility as follows:

(A) Make all decontamination facility areas contiguous to each other and the work area unless connected to one another by enclosed passageways that are isolated effectively from areas intended to remain free from asbestos contamination;
(B) Seal decontamination facility areas completely to ensure that the sole source of airflow through these areas originates from uncontaminated areas outside the facility area;
(C) Install control curtains in all connecting doorways and at the entrance to the decontamination facility;
(D) Construct and operate an equipment room as follows:

(i) Locate the equipment room so that it must be traversed before the shower room can be entered from the work area;
(ii) Construct the equipment room using the same requirements as for the work area in 178 NAC 22-011.01(A) through 22-011.01(C);
(iii) Require all individuals, before leaving the work area to enter the

equipment room, to remove or to clean all outer clothing with a high efficiency particulate air filter-equipped vacuuming device or by wet cleaning methods; and
(iv) Provide facilities in the equipment room for temporary storage of tools and equipment used in the work area;

(E) Construct and operate a shower room as follows:

(i) Locate the shower room so that it must be traversed before any individual can move into the clean room from the work area;
(ii) Construct the shower enclosures to be leak-proof and use easily washable or disposable units;
(iii) Provide the shower room with at least one showerhead that is supplied with hot and cold or warm water. Provide adequate quantities of soap, and towels to accommodate each individual who emerges from the work area;
(iv) Require all individuals to shower before entering the clean room;
(v) Drain, collect and filter shower water through a system with the capability to collect particles 5.0 microns in size, at a minimum, and discharge into a sanitary sewer or other State or federally approved waste disposal system. Assure that an air gap is present between the shower water discharge line and any sanitary sewer or approved disposal system; and
(vi) Remove filter cartridges from respirators before leaving the shower and dispose of in accordance with 178 NAC 22-020; and

(F) Construct and operate a clean room as follows:

(i) Locate the clean room so that it will be the last room traversed by any individual exiting the work area;
(ii) Provide facilities in the clean room for removing or donning street clothing, donning respirators, performing positive and negative pressure checks of respirator fit, and donning clean disposable protective clothing or other protective equipment required to be worn in the work area;
(iii) Provide facilities in the clean room if it will be used as a rest and eating area for employees after they have passed through the decontamination process; and
(iv) Do not permit smoking in this room.

011.03 FIRST CLEANING STEP. After asbestos containing material removal or encapsulation is complete, perform the first cleaning step as follows:

(A) Clean all plastic sheeting and surfaces in the work area and decontamination facility, and clean equipment used on the asbestos project free of all visible residue with a high efficiency particulate air filter-equipped vacuuming device or by wet cleaning methods;
(B) If more than one layer of plastic sheeting has been used on walls, this additional layer of sheeting and one layer of sheeting from the floors may be removed and disposed of instead of being cleaned;
(C) Remove any liquid or material that has leaked through these additional layers of sheeting with a high efficiency particulate air filter-

equipped vacuuming device or by wet cleaning methods;
(D) Dispose of the removed plastic sheeting in accordance with 178 NAC 22-020;
(E) Examine the work area and check behind the airtight temporary barriers to determine whether asbestos containing material, dust or debris has been removed. If any asbestos containing material, dust or debris is found, the work area must be recleaned. If an airtight temporary barrier must be breached for cleaning or recleaning purposes, the area behind the breach must be cleaned and the barrier immediately repaired; and
(F) For asbestos removal projects, coat cleaned surfaces from which asbestos containing material has been removed with an effective color-tinted sealing material as follows:

(i) Before applying the sealing material, examine the cleaned surface from which asbestos containing material has been removed to ensure that removal has been complete. Reclean all surfaces where debris and residue are found and reexamine, and reclean if required;
(ii) After the color-tinted sealing material has been applied and dried on the cleaned surfaces from which asbestos containing material has been removed, visually examine the coated surfaces to ensure complete coverage and effective sealing;
(iii) Color-tinted sealing material must be applied in sufficient quantity to effectively prevent residual fibers from becoming airborne as a result of future maintenance, renovation, demolition or functional uses of the building, and so that the sealed surface can be detected readily by building occupants and by visual examination; and
(iv) After the sealant has dried completely, proceed to the second cleaning step.

011.04 SECOND CLEANING STEP. After the first cleaning step required by 178 NAC 22-011.03 is complete, perform the second cleaning step as follows:

(A) Remove plastic sheeting from everything except the control curtains, the airtight temporary barriers around the work area, and the airtight seals over doorways, windows, ventilation system openings and other openings; and
(B) Clean all previously covered surfaces free of all visible residue with a high efficiency particulate air filter-equipped vacuuming device or by wet cleaning methods.

011.05 FINAL CLEARANCE AIR SAMPLING. For projects which are equal to or greater than 260 linear feet or any combination which is equal to or greater than 160 square feet and linear feet, have a third party, in accord with this chapter, perform final clearance air sampling after the second cleaning step required by this chapter is complete and the work area is dry.

011.06 CLEARANCE LEVEL. Retain the airtight seals for the containment area in place and operate the associated high efficiency particulate air filter-equipped ventilation fans until the results of clearance air sampling under

Phase Contrast Microscopy (PCM) show that the airborne contamination level within the work area is not greater than 0.01 fibers per cubic centimeter (0.01 f/cc) as determined by the NIOSH 7400 method or not greater than 70 structures per square millimeter (70 s/mm^2) as determined by the EPA Transmission Electron Microscopy (TEM) method;

011.07 TEAR DOWN. When the actions required by 178 NAC 22-011.06 are complete, disassemble the remaining elements of the containment area and ensure that the surfaces of which existed prior to the start of the project; and,

011.08 WASTE TREATMENT. Treat all removed plastic sheeting, all filters, waste and debris as asbestos containing material and dispose of in accordance with this chapter.

012. WORK PRACTICES TO KEEP ASBESTOS CONTAINING MATERIAL WET. The licensed or waivered business entity or licensed individual must use wet methods for asbestos projects.

012.01 KEEP MATERIAL WET. Saturate all exposed surfaces of the asbestos containing material to be removed with a water solution that contains an effective wetting agent or with a removal encapsulant.

(A) Apply the wetting solution with a low pressure spraying system; and
(B) Determine the effectiveness of the solution in penetrating the asbestos containing material by applying it to a small representative sample of the material before the asbestos project is initiated.

012.02 DO NOT ACCUMULATE MATERIAL. Maintain all asbestos containing material removed, including any fallen residue, in an adequately wet condition to prevent the release of any fibers. Do not allow any visible debris or residue to accumulate.

012.03 DRY MATERIAL. If asbestos containing material does not absorb water or amended water or otherwise must be removed dry:

(A) Obtain approval for dry removal in writing from the Department; and
(B) Remove asbestos containing material using a type-C respirator or a self-contained breathing apparatus.

013. WORK PRACTICES TO BE FOLLOWED FOR ASBESTOS REMOVAL PROJECTS. The licensed or waivered business entity or licensed individual responsible for an asbestos project to remove asbestos containing material in an area which can be expected to be reoccupied or in an area which is or will be accessible from an occupied area must comply with the following unless other applicable work practices outlined in these regulations are followed:

(A) Establish general security and management work practices in accordance with 178 NAC 22-010;
(B) Establish and manage a containment area in accordance with the work practices of 178 NAC 22-011;
(C) Remove asbestos containing material wet in accordance with the work

practices of 178 NAC 22-012; and
(D) Coat cleaned surfaces from which asbestos containing material has been removed with an effective color-tinted sealing material.

013.01 OUTDOOR PROJECTS. In addition to meeting the requirements of 129 NAC 12 “Operating Permit Renewal and Expiration,” Nebraska Department of Environment and Energy, the licensed or waivered business entity or licensed individual responsible for removing asbestos containing material in outdoor areas must comply with the following unless other applicable work practices outlined in these regulations are followed:

(A) Establish general security and management work practices in accordance with 178 NAC 22-010;
(B) To preclude spread of contamination to nearby indoor areas, securely cover each door, window, ventilation duct or other opening into such areas within 25 feet of the work area with plastic sheeting not less than 6 mil thick;
(C) Remove asbestos containing material wet in accordance with the work practices of 178 NAC 22-012; and
(D) Coat cleaned surfaces from which asbestos containing material has been removed with an effective color-tinted sealing material.

013.02 GLOVE BAG. The licensed or waivered business entity or licensed individual using a glove bag for removal of asbestos containing material from the surface of pipes or other similar conduits must comply with the following:

(A) Establish general security and management work practices in accordance with 178 NAC 22-010;
(B) Use plastic leak-proof glove bags not less than 6 mil thick in accordance with the manufacturer's instructions;
(C) Use glove bags only once. Do not "slide" glove bags. Do not reuse for any purpose;
(D) Avoid damaging or disturbing any other asbestos containing material within the work area that is not intended to be removed using the glove bag;
(E) Install the glove bag so as to provide an airtight seal around the area from which the asbestos containing material is to be removed. Maintain this seal continually until all asbestos containing material has been removed and the surface of the item enclosed within the glove bag has been cleaned;
(F) Saturate asbestos containing material to be removed with a water solution that contains an effective wetting agent or with a removal encapsulant. Maintain removed asbestos containing material within the glove bag in a water-saturated condition;
(G) Discontinue activity in the work area immediately if there is any asbestos containing material contamination of the general work area resulting from damage to or improper use of the glove bags, or damage to other asbestos containing material located within the area;

(i) Do not resume project activities until all surfaces in the work area that possibly have become contaminated with asbestos containing

material have been cleaned thoroughly with a high efficiency particulate air filter-equipped vacuuming device or by wet cleaning methods; and
(ii) Notify the Department as specified in 178 NAC 22-007.01C of the date and nature of such occurrence and of the cleanup measures that were used;

(H) After the necessary asbestos containing material has been removed, clean surfaces from which asbestos containing material has been removed;
(I) Coat cleaned surfaces from which asbestos containing material has been removed with an effective color-tinted sealing material;
(J) Remove the glove bag, seal tightly and dispose of in accordance with 178 NAC 22-020; and
(K) Recover or restore cleaned surfaces or securely enclose rough edges of asbestos containing material which remain after glove bag removal. Such action cannot be done with duct tape.

014. WORK PRACTICES TO BE FOLLOWED FOR ASBESTOS ENCLOSURE PROJECTS. To use enclosure as a method of controlling asbestos fiber release from asbestos containing material, the licensed or waivered business entity or licensed individual must comply with the following:

(A) Establish general security and management work practices in accordance with 178 NAC 22-010;
(B) Preclean the area to be enclosed with a high efficiency particulate air filter-equipped vacuuming device or by wet cleaning methods;
(C) Ensure that the area containing the asbestos containing material to be enclosed can be sealed airtight within the enclosure and that the underlying structure can support the weight of the enclosure;
(D) Install the enclosure in such a manner as to minimize disturbance of asbestos containing material; and
(E) Designate enclosed asbestos containing material by labels, signs, charts or color codes in order to warn building maintenance personnel in the event the enclosure must be disturbed.

015. WORK PRACTICES TO BE FOLLOWED FOR ASBESTOS ENCAPSULATION PROJECTS. To use encapsulation as a method of controlling asbestos fiber release from asbestos containing material, the licensed or waivered business entity or licensed individual must comply with the following:

(A) Establish general security and management work practices in accordance with 178 NAC 22-010. Require use of respirators that provide protection against any potentially hazardous chemicals contained in the encapsulant as well as protection set out in definition;
(B) Establish and manage a containment area in accordance with the work practices of 178 NAC 22-011;
(C) Use of encapsulation is subject to the following:

(i) Do not apply encapsulant to fibrous sprayed-on asbestos containing material or to cementitious asbestos containing material that evidences poor adhesion to the surface to which it is to be applied; and

(ii) Do not apply encapsulant to asbestos containing material installed on surfaces subject to frequent abrasion or other physical damage;

(D) Use an encapsulant with flame retardant characteristics;
(E) Prior to starting the project, demonstrate adhesive and penetrating characteristics of a penetrating encapsulant or adhesive characteristics of a bridging encapsulant as follows:

(i) Conduct testing at one or more randomly selected locations within the structure;
(ii) Apply the encapsulant to the surface of the material in the prescribed manner;
(iii) Remove a core sample and examine for adequate penetration and adhesion;
(iv) Repair test core holes immediately after the inspection; and
(v) Document results of the testing;

(F) Repair damaged portions of a surface to which the encapsulant is to be applied with asbestos-free patching material. Ensure the patching material adheres to existing surfaces and provides a base for application of the encapsulant;
(G) Apply encapsulant in accordance with the manufacturers' instructions and in such a manner as to minimize release of asbestos containing material;
(H) Repair immediately any damage to the encapsulant that occurs when fixtures or other items are reinstalled. Clean any asbestos containing material that is released by this damage immediately with a high efficiency particulate air filter equipped vacuuming device or by wet cleaning methods; and
(I) Designate encapsulated asbestos containing material by labels, signs, charts or color codes in order to warn building maintenance personnel in the event the encapsulated material must be disturbed.

016. WORK PRACTICES TO BE FOLLOWED FOR ASBESTOS RELATED DISMANTLING PROJECTS. If structural or equipment items covered with asbestos containing material are intended to be moved without first removing the material, the licensed or waivered business entity or licensed individual must comply with the following:

(A) Do not remove asbestos containing material or dismantle items containing asbestos until a work area is established;
(B) Establish general security and management work practices in accordance with 178 NAC 22-010;
(C) Remove asbestos containing material to expose the surface to be cut using wet methods in accordance with the work practices of 178 NAC 22-012;
(D) Securely enclose in two layers of plastic sheeting not less than 6 mil thick any exposed asbestos containing material remaining on structural items or equipment items before removing from the work area as follows:

(i) Remove material as intact sections or components whenever possible; and

(ii) Lower the enclosed items carefully to ground level and do not drop, throw or slide while handling;

(E) Remove all asbestos containing material from dismantled structural items or equipment items in accordance with 178 NAC 22-013 unless item is to be disposed of with asbestos containing material left in place in accordance with 178 NAC 22-020; and
(F) Before reuse or sale of structural items or equipment items for any purpose, clean all surfaces from which asbestos containing material has been removed free of all visible residue and coat with an effective color-tinted sealing material.

017. WORK PRACTICES TO BE FOLLOWED FOR ASBESTOS RELATED DEMOLITION PROJECTS. A licensed or waivered business entity or licensed individual must not demolish a structure containing friable asbestos containing material or other asbestos which may become friable when cut, crushed, ground, abraded, pulverized, or burned until such material has been removed from the structure. To remove asbestos containing material from a structure scheduled to be demolished, the licensed or waivered business entity or licensed individual must comply with the following unless other applicable work practices set out in this chapter are followed:

(A) Establish general security and management work practices in accordance with 178 NAC 22-010;
(B) Seal airtight each window, door and other direct opening between the work area from which asbestos containing material is to be removed and other areas of the structure which are not to be demolished. Use and securely fasten plastic sheeting not less than 6 mil thick;
(C) Install a control curtain in the entryway designated for access;
(D) Install and operate high efficiency particulate air filter-equipped ventilation fans so that air will be discharged continually from all locations within the work area in accordance with 178 NAC 22-011.01(D) for all projects equal to or greater than 260 linear feet or any combination which is equal to or greater than 160 square feet and linear feet;
(E) Construct and operate the following:

(i) A change room where clothing can be removed before showering in accord with 178 NAC 22-011.02(D);
(ii) A shower room in accord with 178 NAC 22-011.02(E);
(iii) A clean room in accord with 178 NAC 22-011.02(F); and
(iv) Tools will not be required to be kept in the change room, but tools must be cleaned and free of all visible residue or sealed in 6 mil plastic before removal from the work area in accord with 178 NAC 22-010.03(A);

(F) Remove asbestos containing material wet in accordance with the work practices of 178 NAC 22-012;
(G) If any non-essential structural item, equipment, or furnishing which is not a part of the asbestos containing material project is to be salvaged, reused or sold in any manner, clean all surfaces with a high efficiency particulate air filter-equipped vacuuming device or by wet cleaning methods and remove from the building prior to asbestos containing material removal;

(H) If any non-essential structural item or equipment which is a part of the asbestos containing material project is to be salvaged, reused or sold in any manner, clean all surfaces from which asbestos has been removed free of all visible residue and coat with an effective color-tinted sealing material before removing from the work area;
(I) If any essential structural items, such as windows, doors, support columns, etc. are to be removed in order to be salvaged, reused or sold in any manner, remove the item only after final inspection in 178 NAC 22-017.11 has been performed;
(J) While the control curtains and airtight seals over windows, doors, and other openings are still in place, clean all visible asbestos containing material debris and residue with a high efficiency particulate air filter-equipped vacuuming device or by wet cleaning methods; and
(K) At the conclusion of the project, the licensed or waivered business entity or licensed individual responsible for the project must have a third party who is licensed by the Department as a supervisor, inspector, management planner, project monitor, or project designer, and who is independent of the contractor and selected by the owner or operator of the structure on or in which the asbestos project is conducted examine the work area to determine whether asbestos containing material debris has been removed. The individual who examined the work area must provide, prior to demolition of the building, a written report to both the contractor and the Department setting forth their findings along with their name, address and license number.

018. WORK PRACTICES TO BE FOLLOWED FOR PROJECTS IN TUNNELS AND CRAWL SPACES. The licensed or waivered business entity or licensed individual responsible for an asbestos abatement project in a tunnel or crawl space which is or will be directly accessible from an occupied area must comply with the following:

(A) Establish general security and management work practices in accordance with 178 NAC 22-010;
(B) Establish and manage a containment area in accordance with the work practices of 178 NAC 22-011. Such work practices require the use of plastic sheeting drop cloths on the floor immediately beneath the location where asbestos containing material is being actively removed. Such work practices will not include the requirement for performing final clearance air sampling as required by 178 NAC 22-011.05. Preclean all gross contamination and asbestos containing material debris on the floor of the tunnel or crawl space by wet cleaning methods and place directly into 6 mil thick asbestos containing material waste disposal bags in accordance with 178 NAC 22-020 before starting removal;
(C) Remove asbestos containing material wet in accordance with 178 NAC 22-012. Place all asbestos containing material and visible debris and residue removed from surfaces during the project directly into 6 mil thick asbestos containing material waste disposal bags in accordance with 178 NAC 22-020; and
(D) At the conclusion of the project, the licensed or waivered business entity or licensed individual responsible for the project must have a third party who is licensed by the Department as a supervisor, inspector, management planner, project monitor, or project designer, and who is independent of the

contractor and selected by the owner or operator of the structure on or in which the asbestos project is conducted examine the work area to determine whether asbestos containing material debris has been removed.

(i) The individual who examined the tunnel must provide within seven days, a written report to both the contractor and the Department setting forth their findings along with their name, address and license number.

019. WORK PRACTICES TO BE FOLLOWED FOR PROJECTS INVOLVING ASBESTOS CONTAINING MATERIAL FLOOR TILE, SHEET FLOORING, SHINGLES, OR SIDING.

019.01 FLOORING, SIDING, ROOFING. Asbestos projects, other than Asbestos Related Demolition Projects regulated under 178 NAC 22-017, that involve only asbestos containing material floor tile, sheet flooring, shingles, or siding, may be performed using the work practice requirements set out in 178 NAC 22-019. Projects involving asbestos containing material floor tile, sheet flooring, shingles, or siding, require notification in accordance with 178 NAC 22-007 whether performed in a friable or non-friable manner.

019.01(A) PROJECTS PERFORMED IN A NON-FRIABLE MANNER. For a project to not be regulated other than notification to the Department under 178 NAC 22-007, it must be performed in a manner to ensure the material does not become friable. Any process that cuts, crushes, grinds, abrades, pulverizes, or burns, including dropping from a height, will make non-friable asbestos material friable and regulated. If an amount of non-friable asbestos containing material that equals three square feet becomes friable, discontinue removal activity immediately until all surfaces in the work area that possibly have become contaminated with asbestos containing material have been cleaned thoroughly with a high efficiency particulate air filter-equipped vacuuming device or by wet cleaning methods. An amendment to any notification previously submitted to the Department must be made, any applicable fee paid, and the project must be performed in accordance with this chapter.

019.01(B) PROJECTS PERFORMED IN A FRIABLE MANNER. If a project will be performed in a friable manner, only the following requirements will apply to the licensed or waivered business entity or licensed individual:

(i) For indoor projects:

(1) Security: Establish general security and management work practices in accordance with 178 NAC 22-010;
(2) Containment:

(a) Seal airtight each window, door and other direct opening between the work area from which asbestos containing material is to be removed and other areas of the structure which are not to be impacted;
(b) Use and securely fasten plastic sheeting not less than 6 mil thick extending up the wall no less than four feet around the perimeter of the work area as a splashguard; and

(c) Install and operate high efficiency particulate air filter-equipped ventilation fans so that air will be discharged continually from all locations within the work area for all projects equal to or greater than 260 linear feet or any combination which is equal to or greater than 160 square feet and linear feet;

(3) Decontamination:

(a) For worker protection use a double suit and air-lock decontamination method; and
(b) Tools are not required to be kept in the work area but must be cleaned and free of all visible residue or sealed in 6 mil plastic before removal from the work area;

(4) Removal: Remove and maintain asbestos containing material in an adequately wet condition to prevent the release of any fibers;
(5) Disposal: After removal of the asbestos containing material, and clearance if required under 178 NAC 22-019.01(B)(6), is complete, disassemble the containment area and ensure that the surfaces of all structures, furnishings, equipment and fixtures are free of all visible residue, including any which existed prior to the start of the project; except mastic which is to remain and be covered with material. Treat all removed plastic sheeting, all filters, waste and debris as asbestos containing material and dispose of in accordance with 178 NAC 22-020; and
(6) Clearance: For projects which are equal to or greater than 260 linear feet or any combination which is equal to or greater than 160 square feet and linear feet, have a third party, in accord with 178 NAC 22-022, perform final clearance air sampling after the work area is dry. Retain the airtight seals for the containment area in place and operate the associated high efficiency particulate air filter-equipped ventilation fans until the results of clearance air sampling under Phase Contrast Microscopy show that the airborne contamination level within the work area is not greater than 0.01 fibers per cubic centimeter as determined by the NIOSH 7400 method or not greater than 70 structures per square millimeter as determined by the Environmental Protection Agency Transmission Electron Microscopy method; and

(ii) For outdoor projects:

(1) Security: Establish general security and management work practices in accordance with 178 NAC 22-010;
(2) Containment: To preclude spread of contamination to nearby indoor areas, securely cover each door, window, ventilation duct or other opening into such areas within 25 feet of the work area with plastic sheeting not less than six mil thick;
(3) Decontamination:

(a) For worker protection use a disposable coveralls and half-face respirator; and
(b) Tools must be cleaned and free of all visible residue or sealed in 6 mil plastic before removal from the work area;

(4) Removal: Remove and maintain asbestos containing material in an adequately wet condition to prevent the release of any fibers; and
(5) Disposal: After removal of the asbestos containing material is complete, ensure that the surfaces of all structures, furnishings, equipment and fixtures are free of all visible residue, including any which existed prior to the start of the project. Treat all removed plastic sheeting, all filters, waste and debris as asbestos containing material and dispose of in accordance with 178 NAC 22-020.

020. ASBESTOS WASTE DISPOSAL. The licensed or waivered business entity or licensed individual will handle all asbestos containing material waste in accordance with the requirements of 129 NAC 23, Nebraska Department of Environment and Energy Hazardous Air Pollutants: Emission Standards.

020.01 PROCEDURES. The business entity or individual performing an asbestos project must:

(A) Maintain all asbestos containing material solid waste in a wet condition and immediately place in tightly sealed containers;

(i) Use clear plastic bags not less than 6 mil thick for waste containers unless the waste contains rigid or heavy objects likely to tear the bags. Use clear plastic bags only once;
(ii) If bag damage is likely to occur, place the waste in fiber or metal containers lined with plastic bags not less than 6 mil thick and having tight-fitting lids which can be fastened firmly in position;
(iii) For large sections of structural materials, such as pipe or duct work, that have been removed with asbestos containing material left in place and that cannot be placed in containers, tightly wrap the sections in two layers of clean plastic sheeting not less than 6 mil thick for disposal.

(B) Dispose of wastewater and other liquid waste that contains asbestos containing material as follows:

(i) Mix with solid waste materials and place the mixture in tightly sealed containers that comply with the requirements of 178 NAC 22-020.01, items (A)(i) or (B)(i);
(ii) Filter through a system with the capability to collect particles 5.0 microns in size or larger and discharge into a sanitary sewer or other State or federally approved waste disposal system;
(iii) Use any other method of disposal of contaminated wastewater or liquid waste only at a location and in a manner specifically approved in writing by the Nebraska Departments of Health and Human

Services and Environment and Energy;

(C) Clean the exterior surface of each container or individually wrapped object free of all visible residue by wet cleaning methods before removing from the work area;

(i) Attach an asbestos danger label securely to each container or wrapping before removing from the work area;

(D) Handle each waste container carefully to prevent damage, breakage or opening;

(i) If a waste container breaks or becomes unable to completely contain the waste:

(a) Transfer the waste immediately into another container that complies with the requirements of 178 NAC 22-020.01, items (A), (B), or (C);
(b) Immediately saturate with water any asbestos containing material waste that escapes from the original container and place in the replacement container; and
(c) Clean contaminated areas free of all visible residue;

(E) Store any asbestos containing material removed from the work area but not yet delivered to an approved asbestos waste disposal site in a secure holding facility or location accessible only to persons licensed in an asbestos occupation in accordance with 178 NAC 22-004;
(F) Transport waste in vehicles operated by or escorted by a licensed asbestos worker or supervisor;

(i) Use vehicles with completely enclosed cargo areas or completely enclose the cargo area with two layers of plastic sheeting not less than 6 mil thick while the waste is being transported; and
(ii) Immediately clean the vehicle cargo area free of all visible residue using a high efficiency particulate air filter-equipped vacuuming device or by wet cleaning
methods after the waste has been deposited at an approved asbestos waste disposal site;
(iii) Alternatively, if the cargo area has been lined with a disposable plastic liner not less than 6 mil thick, cleaning is not required if the vehicle cargo area is free of all visible residue after the plastic liner is removed;
(iv) Treat all removed plastic sheeting, waste and debris as asbestos containing material and dispose of in accordance with these regulations;

(G) Retain handling responsibility for asbestos containing material waste until the waste is delivered to and accepted by the operator of a Nebraska Department of Environment and Energy licensed and approved asbestos waste disposal site and a written receipt is received and made a part of the project file.

020.02 RECORDKEEPING. The business entity performing an asbestos project will maintain in their records, required under Neb. Rev. Stat. § 71-6307, 178 NAC 22-008, and the following information:

(A) The name and address of the following:

(i) Premises at which the asbestos containing material waste was generated;
(ii) Building owner;
(iii) Business entity performing the asbestos project;
(iv) Each employee or agent who transported or escorted the asbestos containing material waste to an approved asbestos waste disposal site; and
(v) Each approved asbestos waste disposal site to which the asbestos containing material was transported.

(B) The type and amount of asbestos containing material waste designated for disposal, expressed in square or linear feet, number of bags, weight or cubic yards.
(C) The time period over which asbestos containing material waste was transported to the approved asbestos waste disposal site.

021. WAIVER OF PRESCRIBED WORK PRACTICES AND APPROVAL OF ALTERNATIVE WORK PRACTICES. The Department may waive any of the specific requirements established by 178 NAC 22-010 through 22-020 and 22-022 and approve an alternative work practice.

021.01 WAIVER REQUIREMENTS. Waivers must meet the following requirements:

(A) A waiver may be requested for an individual asbestos project by attaching a completed waiver application according to 178 NAC 22-007.01(B) and the information required in 178 NAC 22-007.01(A) for an asbestos project notification.
(B) A waiver may be requested for an individual asbestos project by the project designer or by the owner or operator of the structure in which the asbestos project is planned prior to the selection of a licensed business entity to conduct the asbestos project by completion of waiver including the requirements of 178 NAC 22-007.01(B) and submission of that form with such other information as the Department deems necessary to evaluate the request. A copy of all waivers granted under 178 NAC 22- 021 must be submitted with the project notification for the project to which it applies.
(C) A waiver may be requested for approval of an alternative work practice on a continuing basis for a business entity or individual, or for a particular facility belonging to that business entity or individual, by submitting a completed waiver according to 178 NAC 22-007.01(B).
(D) A waiver may be requested for approval of an exception to a specific worker protection requirement on a case-by-case basis if a business entity submits a written description of the alternative procedure and demonstrates to the Department's satisfaction that the proposed

alternative procedure provides equivalent protection to the health, safety, and welfare of all classes of asbestos occupations and the general public. Any such request must be submitted by completing a waiver according to 178 NAC 22-007.01(B).

021.02 WAIVER SUBMISSION. The business entity or individual requesting a waiver must provide:

(A) A reference to the requirement by section number for which waiver is requested;
(B) A narrative explanation of rationale for requesting the waiver; and
(C) A description of the procedure proposed as an alternative work practice.
(D) The Department will approve or deny waivers in the form of a written notice to the applicant.

022. FINAL CLEARANCE AIR SAMPLING. The licensed individual performing final clearance air sampling must do the following:

(A) All persons performing final clearance air sampling must wear protective clothing and be licensed by the Department as a supervisor, inspector, management planner, project monitor or project designer. All persons performing final clearance air sampling must be independent of the contractor and selected by the owner or operator of the structure on or in which the asbestos project is conducted.
(B) Final clearance air sampling must not be performed until after the contractor has completed the second cleaning step required by 178 NAC-22-011.04 and until the work area is dry.
(C) When final clearance air sampling is performed, the following procedures must be used:

(i) With only airtight temporary barriers in place, the person conducting final clearance air sampling must visually observe the work area and must observe behind the airtight temporary barriers to verify that the business entity has removed all asbestos containing material, dust and debris in the work area as required by 178 NAC 22-011.03(E). If any asbestos containing material, dust or debris is found by the person conducting final clearance air sampling, the work area must be recleaned by the licensed or waivered business entity or licensed individual conducting the project. If an airtight temporary barrier must be breached for cleaning or recleaning purposes, the area behind the breach must be cleaned and the barrier immediately repaired.
(ii) Once the work area has passed a visual observation, the person performing final clearance air sampling must sweep an air stream from a high speed leaf blower or equivalent device across all surfaces.
(iii) Immediately following the activity in 178 NAC 22-022(B), final clearance air sampling must be performed in the work area.

(1) Air samples must be collected by a pump capable of drawing a volume which is equal to or greater than 1,199 liters of air through each 25 millimeter filter at a rate equal to or greater than one liter and less than ten liters per minute if using the Transmission Electron

Microscopy Method or the NIOSH 7400 method may be utilized if using the Phase Contrast Microscopymethod. The flow rate for the pump must be calibrated by a primary or secondary source at the beginning and end of the sampling period.
(2) A minimum of five air samples must be taken inside the containment area.
(3) In order to collect the samples, cassettes must be placed 5 to 6 feet above the floor at a 45-degree angle down. Cassettes must be uniformly distributed throughout the work area. If the work area contains more than one room, place at least one cassette in each room, if the work area contains more than five rooms, select a representative sample of rooms. Each cassette will be subject to normal air circulation, avoiding room corners, obstructed locations, and sites near windows, doors, or vents.

(iv) Air samples will be analyzed for Transmission Electron Microscopy using the Environmental Protection Agency method set forth in Appendix A to 40 CFR 763 or an equivalent method, or will be analyzed for Phase Contrast Microscopy using the NIOSH 7400 method or an equivalent method. The analyst doing a Phase Contrast Microscopy analysis must be NIOSH 582 or 582E trained.
(v) Final clearance air sampling results must be provided within 30 days to the Department by the person who performed the sampling. When the results are submitted, the person who performed the sampling must, in addition, certify the following to the Department:

(1) A visual inspection of the work area was performed prior to final clearance air sampling and the work area was free of asbestos containing material, dust and debris from the material intended to be removed before the samples were taken.
(2) The sampling was performed according to the regulations.
(3) The Phase Contrast Microscopy air samples were analyzed by a person who has been NIOSH 582 or 582E trained. In order that this information may be verified, the name and address of the person, or laboratory, performing the analysis must also be included.