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PROPOSED AMENDED RULE 1403. ASBESTOS EMISSIONS FROM DEMOLITION/RENOVATION ACTIVITIES

(a) Purpose

The purpose of this rule is to specify work practice requirements to limit asbestos emissions from building and facility demolition and renovation activities, including the removal and associated disturbance of asbestos containing materials Asbestos Containing Materials (ACM). The requirements for demolition and renovation activities include asbestos surveying, notification, ACM removal procedures and time schedules, ACM handling and clean-up procedures, and storage, disposal, and landfilling requirements for asbestos containing waste materials Asbestos Containing Waste Materials (ACWM). All operators are required to maintain records, including waste shipment records, and are required to use appropriate warning labels, signs, and markings.

(b) Applicability

This rule, in whole or in part, is applicable to owners and operators; including, but not limited to, property owners, property lessors, asbestos abatement contractors, demolition contractors, subcontractors, and asbestos consultants, of any demolition or renovation activity, and the associated disturbance of asbestos-containing material, any asbestos storage facility, or any active waste disposal site.

(c) Definitions

For the purpose of this rule, the following definitions shall apply:

- (1) ACTIVE WASTE DISPOSAL SITE is any disposal site that receives, or has received or processed ACWM within the preceding 365 calendar days.
- (2) ADEQUATELY WET is the condition of being sufficiently mixed or penetrated with amended water to prevent the release of particulates or visible emissions. The process by which an adequately wet condition is achieved is by using a dispenser or water hose with a nozzle that permits the use of a fine, low-pressure spray or mist that uses a setting that will not break up the ACM during the wetting operation.

- (3) AMENDED WATER is water to which a chemical wetting agent or surfactant has been added to improve penetration into ACM.
- (4) ASBESTOS is the asbestiform varieties of serpentine (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite (amosite), anthophyllite, actinolite, or and tremolite.
- (5) ASBESTOS CONSULTANT is any person conducting asbestos surveys as described with subparagraph (d)(1)(A).
- (56) ASBESTOS-CONTAINING MATERIAL (ACM) is both friable asbestoscontaining material or any material that contains more than one percent
 (1.0%) asbestos including friable, Class I nonfriable asbestos containing
 material_ACM and Class II Nonfriable Asbestos Containing MaterialACM
 as determined by paragraph (h)(2) in this rule. This includes any material
 that is presumed or assumed to contain more than one percent (1.0%)
 asbestos.
- (67) ASBESTOS-CONTAINING WASTE MATERIAL (ACWM) is any waste that contains commercial asbestos and that is generated by a source subject to the provisions of this rule. ACWM includes, but is not limited to, ACM which is friable, has become friable, or has a high probability of becoming friable, or has been subjected to scraping, sanding, grinding, cutting, drilling or abrading, and the waste generated from its disturbance, such as asbestos waste from control devices, filters from control devices, particulate asbestos material, asbestos slurries, bags or containers that previously contained asbestos, used asbestos-contaminated plastic sheeting and clothing, and clean-up equipment waste, such as cloth rags or mop heads.
- (78) ASBESTOS HAZARD EMERGENCY RESPONSE ACT (AHERA) is the act which legislates asbestos-related requirements for schools (40 CFR 763, Subpart E).
- (82) ASSOCIATED DISTURBANCE of ACM or Class II nonfriable ACM is any crumbling or pulverizing of ACM or Class II nonfriable ACM, or generation of uncontrolled visible debris from ACM or Class II nonfriable ACM.
- (910) CLASS I NONFRIABLE ASBESTOS-CONTAINING MATERIAL is material—ACM, including but not limited to, packings, gaskets, resilient floor covering, and asphalt roofing products containing more than one percent (1%)(1.0%) asbestos as determined by paragraph (h)(2), and that,

when dry, can be broken, crumbled, pulverized, or reduced to powder in the course of demolition or renovation activities. Actions which may cause material to be broken, crumbled, pulverized, or reduced to powder include physical wear and disturbance by mechanical force, such as, but not limited to, scraping, sanding, sandblasting, cutting, drilling or abrading, improper handling or removal or leaching of matrix binders. Class I nonfriable asbestos-containing-material-ACM includes, but is not limited to, fractured or crushed asbestos cement products, transite materials, mastic, roofing felts, roofing tiles, cement water pipes, and resilient floor covering.

- (1011) CLASS II NONFRIABLE ASBESTOS-CONTAINING MATERIAL is all other material containing more than one percent (1%)(1.0%) asbestos as determined by paragraph (h)(2), that is neither friable nor Class I nonfriable.
- (1112) COMMERCIAL ASBESTOS is any material containing asbestos that is extracted from asbestos ore.
- (1213) CUTTING is penetrating with a sharp-edged instrument and includes sawing, but does not include shearing, slicing, or punching.
- (1314) DEMOLITION is the wrecking or taking out of any load-supporting structural member; including, but not limited to, the foundation, roofing, or any exterior wall of a facility and related handling operations or the intentional burning of any facility.
- (1415) EMERGENCY DEMOLITION is a demolition ordered by a governmental agency for the purpose of eliminating peril to the safety of persons, property or the environment resulting from hazards such as collapse, fire, crime, disease, or toxic contamination or other hazard as determined by the Executive Officer.
- (1516) EMERGENCY RENOVATION is any renovation that was not planned and results from a sudden unexpected event that results in unsafe conditions. Such events include, but are not limited to, renovations necessitated by non-routine failures of equipment, earthquake, flood or fire damage. An economic unreasonable financial burden alone, without a sudden, unexpected event, does not give rise to conditions that meet this definition.
- (1617) ENCAPSULATION is the treatment of ACM with a material that surrounds or embeds asbestos fibers in an adhesive matrix to prevent the

- release of fibers, as the encapsulant creates a membrane over the surface (bridging encapsulant) or penetrates the material and binds its components together (penetrating encapsulant).
- (18) END DATE FOR RENOVATION ACTIVITIES is the last day when teardown is complete or, if later, the last day when all accumulated ACWM is removed from the site. END DATE FOR DEMOLITION ACTIVITIES is the last day when the last load of building waste has left the site.
- (1719) ENCLOSED STORAGE AREA means a storage room, drum, roll-off container, other hard-sided container, or fenced area that is designed to be securely closed with a lock.
- (1820) FACILITY is any institutional, commercial, public, industrial or residential structure, installation, building, any ship or vessel, and any active or inactive waste disposal site. A facility is subject to this rule regardless of its current use, or function, age, or date of construction. For example, a facility destroyed by fire, explosion, or natural disaster, including any debris, remains subject to this rule's provisions.
- (1921) FACILITY COMPONENT is any part of a facility including foundations and or utility/commodity pipelines; and equipment such as but not limited to heaters, boilers, HVAC, and motors.
- (2022) FRIABLE ASBESTOS-CONTAINING MATERIAL is <u>any</u> material containing more than one percent (1%)(1.0%) asbestos as determined by paragraph (h)(2), that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure <u>or lacks fiber cohesion</u>, identified by flaking, <u>blistering</u>, water damage, scrapes, gouges, or other physical damage. <u>Friable ACM includes</u>, but is not limited to, sprayed-on or troweled-on <u>fireproofing</u>, acoustic ceiling material and ceiling tiles, resilient floor <u>covering backing</u>, thermal systems insulation, nonasphalt-saturated roofing felts, asbestos-containing paper and joint compound.
- (2123) GLOVE_BAG is a sealed compartment with attached inner gloves used for handling ACM. When properly installed and used, glove bags provide a small work area enclosure typically used for small-scale asbestos stripping operations. Information on glove_bag installation, equipment, and supplies, and work practices is contained in the Occupational Safety and Health Administration's final rule on occupational exposure to asbestos (Appendix G to 29 CFR 1926.1101(g)).

- (2224) HIGH EFFICIENCY PARTICULATE AIR (HEPA) FILTER is a filter capable of trapping and retaining at least 99.97 percent of all monodispersed particles of 0.3 micrometer in diameter or larger.
- (25) HOMOGENEOUS MATERIAL is material that is uniform in color and texture.
- (2326) INSTALLATION is any building or structure or any group of buildings or structures at a single demolition or renovation site that are under the control of the same owner or operator (or owner or operator under central control).
- (2427) ISOLATED WORK AREA is the immediate enclosed containment area in which the asbestos abatement activity takes place.
- (2528) LEAK-TIGHT is the condition whereby any contained solids or liquids are prevented from escaping or spilling out.
- (2629) LOCKED means rendered securely closed and able to be opened only with a key or an access code.
- (2730) NONSCHEDULED RENOVATION OPERATION is a renovation operation necessitated by the routine failure of equipment, which is expected to occur within a given calendar year based on past operating experience, but for which an exact date cannot be predicted.
- (2831) OUTSIDE AIR is air outside of the facility or outside of the isolated work area.
- (2932) OWNER or OPERATOR OF A DEMOLITION OR RENOVATION ACTIVITY is any person who owns, leases, operates, controls or supervises activities at the facility being demolished or renovated; the demolition or renovation operation; or both.
- (33) OWNER-OCCUPANT is an owner that occupies a residential single-unit dwelling as a principal place of residence as demonstrated by an approved claim for the homeowners' property tax exemption or the disabled veterans' property tax exemption.
- (3034) PERSON is any individual, firm, association, organization, partnership, business, trust, corporation, company, contractor, supplier, installer, user or owner, or any state or local government agency or public district or any other officer or employee thereof. PERSON also means the United States or its agencies to the extent authorized by Federal law.
- (3135) PLANNED RENOVATION is a renovation operation, or a number of such operations, in which the amount of ACM that will be removed or

- stripped within a given period of time can be predicted. Individual nNonscheduled rRenovation operations are included if a number of such operations can be predicted to occur during a given period of time based on operating experience.
- (3236) PROJECT is any renovation or demolition activity, including site preparation and clean-up activity.
- (3337) REMOVAL is the taking out of ACM or facility components that contain or are covered with ACM from any facility.
- (3438) RENOVATION is the altering of a facility or the removing or stripping of one or more facility components in any way, including, but not limited to, the stripping or removal of ACM from facility components, retrofitting for fire protection, and the installation or removal of heating, ventilation, air conditioning (HVAC) systems. Activity involving the wrecking or taking out of one or more load-supporting structural members are demolitions.
- (3539) RESIDENTIAL SINGLE UNIT DWELLING is a structure that contains only one residential unit. <u>Duplexes</u>, <u>Aapartment buildings</u>, townhouses, and condominiums are not residential single unit dwellings.
- (3640) RESILIENT FLOOR COVERING is asbestos-containing floor tile, including asphalt and vinyl floor tile, and sheet vinyl floor covering containing more than one percent (1%)(1.0%) asbestos as determined by paragraph (h)(2).
- (41) START DATE is the first date the renovation or demolition activities disturb building materials including, but not limited to, the setting up of containment. This activity does not include staging of equipment.
- (3742) STRIPPING is the taking off of ACM from any part of a facility or facility component.
- (3843) STRUCTURAL MEMBER is any load-supporting member of a facility, such as beams and load-supporting walls; or any nonload-supporting member, such as ceilings and nonload-supporting walls.
- (44) SUPERVISOR is any employee of the owner or operator conducting the demolition or renovation activity who has the required training as described with subdivision (i).
- (45) VISIBLE EMISSIONS are any emissions or evidence of emissions, including but not limited to dust, debris, particles, or fibers, which are visually detectable without the aid of instruments.

- (3946) WASTE GENERATOR is any person who owns or operates a source facility subject to the provisions of this rule according to subdivision (b), and whose act or process produces ACWM.
- (4047) WASTE SHIPMENT RECORD is the shipping document, required to be originated and signed by the waste generator, used to track and substantiate the disposition of ACWM as specified by the provisions of subdivision (f).
- (4148) WORKING DAY is Monday through Friday and includes holidays that fall on any of the days Monday through Friday.

(d) Requirements

A person subject to this rule shall prevent emissions of asbestos to the outside air by complying with the following requirements:

(1) Demolition and Renovation Activities

The owner or operator of any demolition or renovation activity shall comply with the following requirements:

(A) Facility Survey

- (i) The affected facility or facility components shall be thoroughly surveyed by an asbestos consultant as described with subclause (d)(1)(A)(iv), for the presence of asbestos prior to any demolition or renovation activity. The survey shall include the onsite inspection, identification, and quantification of all friable, and Class I and Class II non-friable asbestos-containing material ACM, and any physical sampling of materials as described with subdivision (h). as facility.
- (ii) A thorough survey shall include, at a minimum, identification of all affected materials at the facility, including but not limited to all layers of flooring materials to the joist level, and all material in the wall or ceiling cavities as necessary to identify and sample them.
- (iii) The survey shall be documented with the following information:
 - (I) The name, address, and telephone number of the person who conducted the survey;

- (II) A written statement of the qualifications of the person asbestos consultant who conducted the survey, demonstrating compliance with clause (d)(1)(A)(iv);
- (III) The dates the <u>facility was visited and the</u> survey was conducted;
- (IV) A listing of all suspected materials containing any asbestos, a listing of all samples collected, and a detailed sketch of where the samples were taken, and a unique code or number delineating each sample on the sketch;
- (V) A table of all suspected materials tested, the area of homogeneous material, asbestos content, and percent damage;
- (\forall VI) The name, address, and telephone number of any laboratory used to conduct analyses of materials for asbestos content;
- (VII) A detailed Chain of Custody (COC) document identifying all samples obtained and shall, at minimum, include the following:
 - (1) Person collecting the samples.
 - (2) The location, date, time, and unique identification number or code for each sample that was obtained.
 - (3) When the possession of samples is transferred, both the individual relinquishing the samples and the individual receiving the sample shall sign, print name legibly, date, and include the time on the COC document.
- (VIVIII) A statement of qualification of the laboratory which conducted the analyses, demonstrating compliance with paragraph (h)(2);
- (VIIIX) A list of the test methods used, demonstrating compliance with subdivision (h), including sampling protocols and laboratory methods of analysis, test data, and any other

information used to identify or quantify any materials containing asbestos; and

- (VIIIX) A general description of the condition of the facility, including but not limited to a description of any obvious fire or structural damage.
- (iv) Persons conducting asbestos surveys in accordance with as described in subparagraph (d)(1)(A) shall be certified by Cal/OSHA pursuant to regulations required by subdivision (b) of Section 9021.5 of the Labor Code, and shall have taken and passed an EPA-approved Building Inspector Course and conform to the most recent updated procedures outlined in the Course.

(B) Notification

The District shall be notified of the intent to conduct any demolition or renovation activity. Complete and correct Notifications shall be submitted by the person performing the renovation or demolition in a District-approved electronic format. Emergency Notifications during non-SCAQMD staffing hours shall be made as described in the SCAQMD Rule 1403 Notification Web Application guidelines. - format which may include but not be limited to U.S. mail, telephone, facsimile, digital, internet, and e-mail. Telephone, facsimile, digital, and email notifications shall be confirmed with follow-up written notifications to the District postmarked or delivered to the District within 48 hours from submitting the telephone, facsimile, digital, or e-mail notification. No notification shall be considered received submitted unless it is accompanied by the required fee pursuant to Rule 301, as part of the required written notification and has a status of "submitted" in the Rule 1403 Notification Web Application. Notifications shall be provided in accordance with the following requirements:

- (i) Time Schedule
 - (I) Demolition or Renovation Activities

 The notification shall be submitted to the District no later than 10 working days (14 calendar days) before any demolition or renovation activities other than

- emergency demolition, emergency renovation, or planned renovations involving individual Neonscheduled Renovation Oeperations begin.
- (II) Planned Renovation Annual Notification
 The District shall be notified by December 17 of the year preceding the calendar year for which notice is being given for Pplanned Renovation activities which involve individual Neonscheduled Renovation Opperations.
- (III) Emergency Demolition or Renovation

 The District shall be notified as soon as possible, but prior to any emergency demolition or renovation activity in accordance with clauses (d)(1)(B)(iii) and (d)(1)(B)(iv).
- (ii) Notification Required Information

All notifications shall include the following information:

- (I) An indication of whether the notice is the original or a revised notification;
- (II) Name, address and telephone number of both the site owner and operator of the facility, at least one supervising personsupervisor, and the asbestos removal contractor, owner or operator;
- (III) Address and location of the facility to be demolished or renovated and the type of operation: demolition or renovation;
- (IV) Description of the facility or affected part of the facility to be demolished or renovated including the size (square meters or square feet and number of floors), age, and present or prior uses of the facility;
- (V) The specific location of each renovation or demolition at the facility and a description of the facility components or structural members contributing to the ACM to be removed or stripped from the facility;
- (VI) Scheduled project starting and completion dates of demolition or renovation. Notifications shall also

include the ACM removal starting and completion dates for demolition or renovation; pPlanned renovation activities involving individual Nnonscheduled Rrenovation Ooperations need only include the beginning and ending dates of the report period as described in subclause (d)(1)(B)(i)(II);

- (1) For projects that do not conform to the traditional Monday through Friday work schedule, a Schedule of Work shall be included as part of the notification.
- (2) For projects that suffer a delay due to events outside their control after the Start Date, such as but not limited to, flood, fire, or earthquake, a Schedule of Work shall be submitted as an update to the notification at least 48 hours prior to the next regular work period.
- (VII) Brief description of work practices and engineering controls to be used to comply with this rule, including asbestos removal and waste handling emission control procedures;
- (VIII) A separate estimate for each of the amounts of friable, Class I, and Class II nonfriable asbestoscontaining material to be removed from the facility in terms of length of pipe in linear feet, surface area in square feet on other facility components, or volume in cubic feet if off the facility components. The total as equivalent surface area in square feet shall also be reported;
- (IX) Name and location of waste disposal site where ACWM will be deposited.
- (X) Description of steps to be followed in the event that unexpected ACM is found or Class II nonfriable asbestos-containing material becomes crumbled, pulverized, or reduced to powder;

- (XI) California State Contractors License Certification number;
- (XII) Cal/OSHA Registration number for renovation activities;
- (XIII) Name and location address of off-site storage area for ACWM;
- (XIV) Name, address, <u>Department of Toxic Substances</u>

 <u>Control (DTSC) Registration Number and expiration date</u>, and telephone number of transporters used to transport ACWM off-site;
- (XV) Procedures, including analytical methods, used to detect the presence of friable and nonfriable asbestos-containing material; and
- (XVI) Signed certification that at least one person employed by the renovation or demolition operator trained as required in subparagraph (d)(1)(G) will supervise the stripping and removal described by this notification.
- (XVII) Demolition notifications shall also include, if applicable; the name of the renovation operator that removed ACM; the completion date for the removal of the ACM; and the quantity of ACM removed.
- (XVIII) The name, address, telephone number, and a valid Cal-OSHA certification number of the person who completed the asbestos survey report, and the date of the asbestos survey report.
- (iii) Emergency Demolition Additional Information

 Notification of all emergency demolition activities shall include the following additional information
 - (I) The agency, name, title, telephone number and authority of the representative who ordered the emergency demolition; and
 - (II) A copy of the order, and the date on which the demolition was ordered to begin.

- (iv) Emergency Renovation Additional Information

 Notification of all emergency renovation activities shall include the following additional information:
 - (I) The name and phone number of the responsible manager or authorized person who is in charge of the emergency renovation;
 - (II) The date and hour that the emergency occurred;
 - (III) A description of the sudden, unexpected event;
 - (IV) An explanation of how the event caused an unsafe condition, or would cause equipment damage or an unreasonable financial burden; and.
 - (V) A signed—letter with a valid signature from the person directly affected by the emergency, such as the property owner or property manager, attesting to the circumstances of the emergency. The letter shall contain in the signature section the following statement, "I certify (or declare) under penalty of perjury under the laws of the State of California that the foregoing is true and correct." Both the person affected by the emergency and a person employed by the renovation or demolition operator shall sign the certification or declaration on the same page.

(v) Notification Updates

All notifications shall be updated when any of the following conditions arise:

- (I) Cancellation
 - Projects that will not be conducted as notified shall be cancelled no later than the notified start date.
- (III) Change in Quantity of Asbestos

 A change in the quantity of affected asbestos of 20 percent or more from the notified amount shall be reported to the District as soon as the information becomes available, but not later than the project end date, unless otherwise specified in an approved Procedure 5.
- (Later Starting Date

A delay in the starting date of any demolition or renovation activity shall be reported to the District as soon as the information becomes available, but no later than the original start date.

(IVIII) Earlier Starting Date

A change in the starting date of any demolition or renovation activity to an earlier starting date shall be reported to the District no later than 10 working days before any demolition or renovation activities begin.

(VIV) Completion Date Change

Changes in the completion date shall be reported to the District at least 2 calendar days before the original scheduled completion date. In the event renovations or demolitions are not completed, are delayed or are completed ahead of schedule, the District shall be notified as soon as possible, but no later than the following business day.

(VI) Planned Renovation Progress Report

Notifications for on-going planned renovation operations in which the scheduled starting and completions dates are more than 1 year apart shall be updated, every year of the operation by December 17, unless the most recent written notification update was postmarked or delivered after October 1 of that year and include the amount of ACM removed and the amount of ACM removed.

(C) Asbestos Removal Schedule

Material containing asbestos shall be removed from a facility according to the following schedule:

(i) Burning Demolitions

All ACM and Class II asbestos-containing material shall be removed from a facility prior to any demolition by intentional burning. All demolition by intentional burning shall be performed in accordance with Rule 444 – Open Burning.

- (ii) Renovations and Non-Burning Demolitions
 - (I) All ACM shall be removed from a facility being demolished or renovated before any non-burning demolition or renovation activity begins that would break up, dislodge, or similarly disturb the material or preclude access to the material for subsequent removal.
 - (II) ACM not accessible for testing or not discovered until after the renovation or demolition activities begin may be removed after the start of the renovation or non-burning demolition activities, pursuant to the appropriate procedure in subparagraph (d)(1)(D).
 - (III) Notwithstanding the above, asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products which are not friable and are not crumbled, cut, abraded, or otherwise not damaged and in good condition, may be removed after the start of renovation or non-burning demolition activities if prior approval from the District is obtained (Procedure 5).
 - (IV) If the renovation or demolition activity involves any mechanical force such as, but not limited to, sanding, scraping, sandblasting, cutting, or abrading and thus would render the materials friable, they mustshall be removed prior to the renovation or demolition.
 - (V) If for any reason, any renovation or demolition results in an associated disturbance of ACM or Class II nonfriable ACM outside of a containment or work area then, prior to continuing with any renovation or demolition activity, the owner/operator shall secure, stabilize and survey the affected facility areas and submit and obtain an

approved Procedure 5 plan, prior to any asbestos clean-up.

(D) Removal Procedures

- (i) One or more of the following procedures shall be used when removing or stripping ACM:
 - (I) Procedure 1 HEPA Filtration
 Remove ACM within an isolated work area. The following techniques shall be used during Procedure 1 ACM removal activities:
 - (1) All stationary objects and surfaces not intended for removal or stripping of ACM shall be covered with plastic sheeting;
 - (2) All air passageways, such as doors, windows, vents and registers in the work area, shall be covered and rendered air tight with plastic sheeting or hard wooden barriers with studded support. Air passageways used to provide makeup air for the isolated work space need not be covered;
 - (3) All sources of air movement, including the air-handling system, shall be shut off or temporarily modified to restrict air movement into the work zone;
 - (4) The barriers used for the construction of the isolated work area shall be equipped with transparent viewing ports which allow outside observation of all stripping and removal of ACM;
 - (5) The isolated work area shall be vented, with negative air pressure to a HEPA filtration system, which shall be operated continuously from the commencement of removal activities through the final clean-up of the work area;
 - (6) The HEPA filter shall be free of tears, fractures, holes or other types of damage and

shall be securely latched and properly situated in the holding frame to prevent air leakage from the filtration system; and

- (7) ACM shall be adequately wet during the removal process.
- (II) Procedure 2 Glovebag

Remove by the glovebag method or mini enclosures designed and operated according to 29 CFR Section 1926.1101(g), Appendix G, and current Cal/OSHA requirements.

(III) Procedure 3 - Adequate Wetting

Procedure 3 shall only be used to remove nonfriable asbestos-containing materials, using the following techniques:

- (1) All exposed ACM shall be adequately wet during cutting or dismantling procedures.
- (2) ACM shall be adequately wet while it is being removed from facility components and prior to its removal from the facility.
- (3) Drop cloths and tenting shall be used to contain the work area to the extent feasible.
- (4) Only non-power tools shall be used.
- (IV) Procedure 4 Dry Removal

Obtain written approval from the Executive Officer's designee prior to using dry removal methods for the control of asbestos emissions when adequate wetting procedures in the renovation work area would unavoidably damage equipment or present a safety hazard. Dry removal methods may include one or more of the following:

- (1) Use of a HEPA filtration system, operated in accordance with subclause (d)(1)(D)(i)(I), within an isolated work area;
- (2) Use of a glovebag system, operated in accordance with subclause (d)(1)(D)(i)(II); or

- (3) Use of leak-tight wrapping or an approved alternative, to contain all ACM removed in units or sections prior to dismantlement.
- (V) Procedure 5 Approved Alternative
 - (1) Use an alternative combination of techniques and/or engineering controls. Written approval from the Executive Officer or his designee shall be obtained prior to the use of a Procedure 5 Approved Alternative.
 - (2) The Executive Officer may pre-approve specific combinations of techniques and/or engineering controls in writing, which may be used by any person as a Procedure 5 Approved Alternative, subject to such conditions and limitations as required by the Executive Officer.
 - (3) No person shall use a Procedure 5 Approved Alternative without complying with all of the conditions and limitations set forth therein.
- (ii) Specific procedure requirements
 - (I) No person shall remove or strip ACM or Class II nonfriable ACM that has suffered damage or disturbance from, but not limited to, fire, flood, explosion, or natural disaster without the use of a Procedure 4 or 5 Approved Alternative.
 - (II) Notifications for materials that cannot be assessed for damage such as, but not limited to, subterranean piping, where the asbestos consultant has presumed or assumed the material to be asbestos-containing, shall be submitted as a Procedure 4 or 5 Approved Alternative.
- (E) Handling Operations
 All ACWM shall be collected and placed in transparent, leak-tight containers or wrapping. The following techniques shall be used.

- (i) ACM shall be carefully lowered to the ground or a lower floor without dropping, throwing, sliding, or otherwise damaging or disturbing the ACM;
- (ii) ACM which has been removed or stripped more than 50 feet above ground level and was not removed as units or in sections shall be transported to the ground via leak-tight chutes or containers;
- (iii) ACWM shall be collected, and sealed in leak-tight containers. ACWM shall be adequately wet prior to and during collection and packaging. Alternatively, areas of Class I nonfriable asbestos-containing material which have become friable or have been subjected to sanding, grinding, cutting, or abrading, may be sealed via encapsulation; and
- (iv) All surfaces in the isolated work area shall be cleaned, with a vacuum system utilizing HEPA filtration, wet mopping and wipe down with water, or by an equivalent methods, prior to the dismantling of plastic barriers or sealed openings within the work area.
- (F) Freezing Temperature Conditions

When the temperature at the point of wetting is below 0_oC (32 oF), the wetting provisions of subparagraph (d)(1)(D) shall be superseded by the following requirements:

- (i) Facility components containing, coated with, or covered with ACM shall be removed as units or in sections to the maximum extent possible; and
- (ii) The temperature in the area containing the facility components shall be recorded at the beginning, middle, and end of each workday during periods when wetting operations are suspended due to freezing temperatures. Daily temperature records shall be available for inspection by the District during normal business hours at the demolition or renovation site. Records shall be retained for at least 2 years.
- (G) On-Site Representative Supervisor

At least one on-site representative supervisor, such as a foreman, manager, or other authorized representative, trained in accordance

with the provisions of paragraphs (i)(1) and (i)(3), shall be present during the stripping, removing, handling, or disturbing of ACM. Evidence that the required training has been completed shall be posted at the demolition or renovation site and made available for inspection by the Executive Officer's designee.

(H) On-Site Proof

The following shall be maintained on-site and shall be provided to the District upon request:

- (i) California State Contractor's License certification number;
- (ii) Cal/OSHA Registration number;
- (iii) Ceopies of surveys, conducted pursuant to subparagraph (d)(1)(A); and
- (iv) Ceopies of notifications submitted pursuant to subparagraph (d)(1)(B):
- (v) Copies of the training certificate(s) demonstrating that the on-site supervisor has been trained in accordance with the provisions of paragraphs (i)(1) and (i)(3); and.
- (vi) Copies of all current training certificates demonstrating that workers have successfully completed the Abatement Worker course, or refresher, pursuant to the AHERA.
- (vii) Copies of all supervisor logs or equivalent records

 documenting the demolition or renovation activities at the
 site.

Proof shall be consistent with the most recently updated information submitted in the notification.

(I) On-Site Storage

No ACWM shall be stored on-site except in a leak-tight container. When leak-tight containers are not in use, they shall be kept inside an enclosed storage area. The enclosed storage area shall not be accessible to the general public and shall be locked when not in use.

(J) Disposal

All ACWM shall be disposed of at a waste disposal site that is operated in accordance with paragraph (d)(3) of this rule.

(K) Container Labeling

Leak-tight containers which contain ACWM shall be labeled as specified in subdivision (e).

(L) Transportation Vehicle Marking
Vehicles used to transport ACWM shall be marked, as specified in

subdivision (e), during the loading and unloading of ACWM.

(M) Waste Shipment Records

Waste Shipment Records shall be prepared and handled in accordance with the provisions of paragraph (f)(1).

(N) RecordkeepingRecords shall be kept as specified in subdivision (g).

(2) ACWM Storage Facilities

The owner or operator of any ACWM storage facility shall comply with the following requirements:

- (A) Maintenance and Handling
 - (i) ACWM shall be stored in leak-tight containers;
 - (ii) All leak-tight containers shall be labeled as specified in paragraph (e)(1); and
 - (iii) ACWM shall be stored in an enclosed locked area.
- (B) Transportation Vehicle Marking
 Vehicles used to transport ACWM shall be marked, as specified in paragraph (e)(3), during the loading and unloading of ACWM.
- (C) Waste Shipment Records
 Waste Shipment Records shall be handled in accordance with the provisions of paragraph (f)(2).
- (D) Recordkeeping

 Records shall be maintained as specified in paragraph (g)(2).
- (3) Active Waste Disposal Sites

The owner or operator of any waste disposal site where ACWM is being deposited shall comply with the following requirements:

- (A) Maintenance and Handling
 - (i) ACWM shall be in leak-tight containers;
 - (ii) Warning signs, as specified in paragraph (e)(2), shall be displayed at all entrances and at intervals of 330 feet or less

- along the property line of the site or along the perimeter of the sections of the site where ACWM is being deposited;
- (iii) Access to the general public shall be deterred by maintaining a fence along the perimeter of the site or by using a natural barrier;
- (iv) All ACWM shall be maintained in a separate disposal section;
- (v) ACWM deposited at the site shall be covered with at least six (6) inches of nonasbestos-containing material at the end of normal business hours. The waste shall be compacted only after it has been completely covered with nonasbestos-containing material. A low pressure water spray or nontoxic dust suppressing chemical shall be used for any surface wetting after compaction; and
- (vi) ACWM shall be covered with a minimum of an additional thirty (30) inches of compacted nonasbestos-containing material prior to final closure of the waste disposal site, and shall be maintained to prevent exposure of the ACWM.
- (B) Transportation Vehicle Marking
 Vehicles used to transport ACWM shall be marked, as specified in paragraph (e)(3), during the loading and unloading of ACWM.
- (C) Waste Shipment Records
 Waste Shipment Records shall be handled in accordance with the provisions of paragraph (f)(2).
- (D) Recordkeeping
 Records shall be maintained as specified in paragraph (g)(3).
- (e) Warning Labels, Signs, and MarkingsWarning labels, signs, and markings shall be used to identify asbestos related health hazards and comply with the following requirements:
 - (1) Leak-Tight Containers Leak tight containers shall be labeled according to the following requirements:
 - (A) Warning labels for leak-tight containers and wrapping shall have letters of sufficient size and contrast as to be readily visible and legible, and shall contain the following information, or as specified

by Occupational Safety and Health Standards of the Department of Labor, Occupational Safety and Health Administration (OSHA) under 29 CFR 1910.1001(j)(24) and 29 CFR 1910.1001 (j)(5), or 1926.58(k)(2)(iii), or current Cal/OSHA requirements:

CAUTION

Contains Asbestos Fibers

Avoid Opening or Breaking Container

Breathing Asbestos is Hazardous to Your Health

or DANGER

CONTAINS ASBESTOS FIBERS AVOID CREATING DUST

CANCER AND LUNG DISEASE HAZARD

- (B) Leak-tight containers that are transported off-site shall be labeled with the name of the waste generator and the location at which the waste was generated. The location description shall include the street address. The label shall be clearly visible and readable from the outside of the container.
- (2) Active Waste Disposal Sites

No person shall operate an active waste disposal site unless warning signs are conspicuously posted and meet the following:

- (A) Are displayed in such a manner and location that a person can easily read the legend;
- (B) Conform to the requirements for 51 cm x 36 cm (20 inch x 14 inch) upright format signs specified in 29 CFR 1910.145 (d)(4) and this paragraph;

(C) Display the following legend in the lower panel with letter sizes and styles of a visibility at least equal to those specified in this subparagraph:

Legend	Notation
Asbestos Waste Disposal Site	2.5 cm (1 inch) Sans Serif, Gothic or Block
Do Not Create Dust	1.9 cm (3/4 inch) Sans Serif, Gothic or Block
Breathing Asbestos is Hazardous to Your Health	14 Point Gothic

; and

- (D) Have spacing between any two lines at least equal to the height of the upper of the two lines.
- (3) Transportation Vehicles

Markings for transportation vehicles shall:

- (A) Be displayed in such a manner and location that a person can easily read the legend;
- (B) Conform to the requirements for 51 cm x 36 cm (20 inch x 14 inch) upright format signs specified in 29 CFR 1910.145 (d)(4) and this paragraph; and
- (C) Display the following legend in the lower panel with letter sizes and styles of a visibility at least equal to those specified in this paragraph:

Legend	Notation
DANGER	2.5 cm (1 inch) Sans Serif, Gothic or Block
ASBESTOS DUST HAZARD	2.5 cm (1 inch) Sans Serif, Gothic or Block
CANCER AND LUNG DISEASE HAZARD	1.9 cm (3/4 inch) Sans Serif, Gothic or Block
Authorized Personnel Only	14 Point Gothic

; and

(D) Have spacing between any two lines at least equal to the height of the upper of the two lines.

(f) Waste Shipment Records

(1) Waste Generators

A waste generator shall comply with the following:

- (A) Waste shipment information shall include, but not be limited to, the following:
 - (i) The name, address, and telephone number of the waste generator;
 - (ii) The name, address, and telephone number of the South Coast Air Quality Management District;
 - (iii) The quantity of ACWM in cubic meters or cubic yards;
 - (iv) The name and telephone number of the disposal site owner and operator;
 - (v) The name and physical site location of the disposal site;
 - (vi) The date transported;
 - (vii) The name, address, and telephone number of the transporter; and
 - (viii) A signed certification that the contents of this consignment are fully and accurately described by proper shipping name and are classified, packed, marked, and labeled, and in proper condition for highway transport according to applicable federal, state, and local regulations.
- (B) A copy of the Waste Shipment Record shall be provided to the disposal site owner or operator at the same time the ACWM is delivered to the disposal site.
- (C) If a copy of the Waste Shipment Record, signed by the owner or operator of the designated disposal site, is not received within 35 days of the date the ACWM was accepted by the initial transporter, the transporter and/or the owner or operator of the designated disposal site shall be contacted to determine the status of the waste shipment.
- (D) If a copy of the Waste Shipment Record, signed by the owner or operator of the designated disposal site, is not received within 45 days of the date the ACWM was accepted by the initial transporter,

a written report shall be submitted to the District and shall include the following:

- (i) A copy of the Waste Shipment Record for which a confirmation of delivery was not received; and
- (ii) A signed cover letter explaining the efforts taken to locate the ACWM shipment and the results of those efforts.
- (2) Storage and Active Waste Disposal Facilities

 The owner or operator of any storage facility or active waste disposal site shall comply with the following requirements:
 - (A) Waste shipment information shall be filled out on the Waste Shipment Record forms provided by the waste generator, for all ACWM received from an off-site facility, and shall include, but not be limited to, the following:
 - (i) The name, address, and telephone number of the waste generator;
 - (ii) The name, address, and telephone number of the transporter;
 - (iii) The quantity of ACWM received in cubic meters or cubic yards; and
 - (iv) The date of receipt.
 - (B) No shipment of ACWM shall be received from an off-site facility unless it is accompanied with a completed Waste Shipment Record signed by the waste generator.
 - (C) If there is a discrepancy between the quantity of ACWM designated in the Waste Shipment Record and the quantity actually received, and if the discrepancy cannot be resolved with the waste generator within 15 days of the date the ACWM was received, a written report shall be filed with the District. The report shall include the following:
 - (i) A copy of the Waste Shipment Record; and
 - (ii) A signed cover letter explaining the discrepancy, and the attempts to reconcile it.
 - (D) If any shipment of ACWM is not properly containerized, wrapped, or encapsulated, a written report shall be filed with the District. The report shall be postmarked or delivered within 48 hours after the shipment is received, or the following business day.

(E) A signed copy of the Waste Shipment Record shall be provided to the waste generator no later than 30 calendar days after the ACWM is delivered to the disposal site.

(g) Recordkeeping

(1) Demolition and Renovation Activities

The owner or operator of any demolition or renovation activity shall maintain the following records for not less than three (3) years and make them available to the District upon request:

- (A) A copy of all survey-related documents;
- (B) A copy of all submitted notifications. A copy of the most recently updated written notification submitted in accordance with the provisions of this rule shall be maintained on-site;
- (C) A copy of all written approvals obtained under the requirements of subparagraph (d)(1)(D);
- (D) A copy of all Waste Shipment Records;
- (E) All training informational materials used by an owner or operator to train supervisors or workers for the purposes of this rule; and
- (F) A copy of all supervisors and workers training certificates and any annual reaccreditation records which demonstrate EPA-approved or state accreditation to perform asbestos-related work.

(2) Storage Facilities

The owner or operator of any storage facility shall maintain a copy of all Waste Shipment Records on site for not less than three (3) years and make them available to the District upon request.

(3) Active Waste Disposal Sites

The owner or operator of an active waste disposal site shall maintain the following information on site for not less than three (3) years and make them available to the District upon request:

- (A) A description of the active waste disposal site, including the specific location, depth and area, and quantity, in cubic meters or cubic yards, of ACWM within the disposal site on a map or diagram of the disposal area;
- (B) A description of the methods used to comply with waste disposal requirements; and
- (C) A copy of all Waste Shipment Records.

- (4) In lieu of the requirements of paragraph (g)(1), the owner or operator of a renovation activity at any facility, in which less than 100 square feet of surface area of ACM on facility components is removed or stripped, may instead elect to maintain the following information for a period of not less than three (3) years, and make it available to the District upon request:
 - (A) A copy of all survey-related documents;
 - (B) Records containing an estimate of the amount of ACM removed or stripped at each renovation subject to this paragraph;
 - (C) Type of removal controls used for each renovation; and
 - (D) A copy of all Waste Shipment Records.

(h) Sampling Protocols and Test Methods

- (1) Sampling of materials suspected to contain asbestos, to comply with this rule, shall be conducted following the provisions of 40 CFR Part 763.86. as follows:
 - (A) A minimum of three bulk samples shall be collected from each area of homogeneous material that is 1,000 square feet or less;
 - (B) A minimum of five bulk samples shall be collected from each area of homogeneous material that is >1,000 square feet but <5,000 square feet;
 - (C) A minimum of seven bulk samples shall be collected from each area of homogeneous material that is ≥5,000 square feet but ≤10,000 square feet;
 - (D) A minimum of nine bulk samples shall be collected from each area of homogeneous material that is >10,000 square feet;
 - (E) Composite sampling of layered material, such as, but not limited to, wall systems (wallboard, joint compound, and joint tape) or stucco (base and scratch coat) is prohibited for quantification of asbestos content. All separable layers shall be analyzed separately.
- (2) Analysis of materials for asbestos, to comply with this rule, shall be determined by using SCAQMD Method 300-91 as detailed in the District's Laboratory Methods of Analysis for Enforcement Samples manual, or by using the Method specified in Appendix A, Subpart F, 40 CFR Part 763, Section 1, Polarized Light Microscopy. Asbestos analyses performed to comply with this rule mustshall be undertaken by laboratories accredited

by the National Voluntary Laboratory Accreditation Program (NVLAP). ACM shall be determined as follows:

- (A) If the amount of asbestos determined by Polarized Light Microscopy appears to be less than 10%, the facility owner or operator may direct the asbestos consultant to presume or assume the amount to be greater than one percent (1.0%) asbestos and treat the material as ACM, or verify the amount by 400-point counting or an equivalent method;
 - (i) A sample in which no asbestos is detected by polarized light microscopy (PLM) does not have to be point counted.

 However, a minimum of three slide mounts shall be prepared and examined in their entirety by PLM to determine if asbestos is present;
- (B) If any analysis is performed which shows a sample greater than one percent (1.0%) ACM, then an asbestos consultant may forego analysis of subsequent samples and presume or assume subsequent samples are greater than one percent (1.0%) ACM.

(i) Training Requirements

The owner or operator performing a demolition or renovation activity shall provide asbestos-related training as follows:

- (1) On-site supervisory personnel Supervisors shall successfully complete the Asbestos Abatement Contractor/Supervisor course pursuant to the Asbestos Hazard Emergency Response Act (AHERA), and obtain and maintain accreditation as an AHERA Asbestos Abatement Contractor/Supervisor.
- (2) Workers shall successfully complete the Abatement Worker course pursuant to the AHERA.
- (3) Supervisory Supervisors personnel and workers shall be trained on the provisions of this rule as well as on the provisions of 40 CFR Part 61.145, 61.146, 61.147 and 61.152 (Asbestos NESHAP provisions) and Part 763, and the means by which to comply with these provisions.

(j) Exemptions

(1) The notification requirements of subparagraph (d)(1)(B) and the training requirements of subdivision (i) shall not apply to renovation activities,

- other than <u>Pplanned Removation</u> activities which involve <u>Neon-scheduled</u> <u>Removation Operations</u>, in which less than 100 square feet of surface area of ACM are removed or stripped.
- The notification requirements of subparagraph (d)(1)(B) and the training requirements of subdivision (i) shall not apply to Pplanned Renovation activities which involve Nnon-scheduled Renovation Opperations, in which the total quantity of ACM to be removed or stripped within each calendar year of activity is less than 100 square feet of surface area.
- For asbestos survey reports where the material is presumed or assumed to be ACM by the asbestos consultant, Clauses subclauses (d)(1)(A)(iii)(V), (d)(1)(A)(iii)(VI), and (d)(1)(A)(iii)(VII) and subclause (d)(1)(B)(ii)(XV) shall not apply to the owner or operator of any renovation or demolition activity, when the suspected material is treated as ACM when being removed, stripped, collected, handled, and disposed of in accordance with the provisions of this rule. The asbestos consultant shall state in the asbestos survey that the material is presumed or assumed to be ACM.
- (4) The portion of clause (d)(1)(A)(iv) which requires Cal/OSHA certification shall not apply to persons performing work not subject to the certification requirement established by regulations pursuant to the Labor Code, Section 6501.5.
- (45) Subclause (d)(1)(B)(ii)(XI) and clause (d)(1)(H)(i), requiring a California State Contractors License Certification number, shall not apply to persons performing work not subject to the certification requirement established pursuant to the Business and Professions Code, Section 7058.5.
- (56) Subclause (d)(1)(B)(ii)(XII) and clause (d)(1)(H)(ii), requiring Cal/OSHA registration, shall not apply to persons performing work not subject to the registration requirement established pursuant to the Labor Code, Section 6501.5
- (67) The provisions of subparagraph (f)(2)(E) shall not apply to storage facilities that do not meet the definition of an active waste disposal site as defined by paragraph (c)(1).
- (78) The handling requirements of phrases subclauses (d)(1)(D)(i)(I)(2), (d)(1)(D)(i)(I)(5), and (d)(1)(D)(i)(I)(6), the training requirements of paragraphs (i)(1) and (i)(2), the reporting of training certificate requirement of subclause (d)(1)(B)(ii)(XVI), and the on-site proof of training requirement of subparagraph (d)(1)(G) and subdivision (i) shall

- not apply to the exclusive removal of asbestos-containing packings, gaskets, resilient floor covering and asphalt roofing products which are not friable, have not become friable, and have not been subjected to <u>scraping</u>, sanding, grinding, cutting, or abrading.
- (98) The provisions of this rule shall not apply to an owner-occupant of a residential single-unit dwelling, as defined in subdivision (a), who personally conducts a renovation activity at that dwelling.
- (9) The District-approved electronic notification requirements of subparagraph (d)(1)(B) shall not apply to an owner-occupant of a residential single-unit dwelling, as defined in subdivision (a), who personally conducts a demolition activity at that dwelling. Notification shall be submitted by paper only.
- (10) The survey requirements of subparagraph (d)(1)(A) shall not apply to renovation activities of residential single-unit dwellings, as defined in subdivision (a), in which less than 100 square feet of surface area of ACM are removed or stripped.