UTAH ADMINISTRATIVE CODE

R392. Health, Epidemiology and Laboratory Services, Environmental Services.
R392-600. Illegal Drug Operations Decontamination Standards.
R392-600-1. Authority and Purpose.

(1) This rule is authorized under Section 19-6-906.

(2) This rule sets decontamination and sampling standards and best management practices for the inspection and decontamination of property contaminated by illegal drug operations.

R392-600-2. Definitions.

The following definitions apply in this rule:

(1) "Background concentration" means the level of a contaminant in soil, groundwater or other media up gradient from a facility, practice or activity that has not been affected by the facility, practice or activity; or other facility, practice or activity.

(2) "Decontamination specialist" means an individual who has met the standards for certification as a decontamination specialist and has a currently valid certificate issued by the Solid and Hazardous Waste Control Board, as defined under Utah Code Subsection 19-6-906(2).

(3) "Chain-of-custody protocol" means a procedure used to document each person that has had custody or control of an environmental sample from its source to the analytical laboratory, and the time of possession of each person.

(4) "Characterize" means to determine the quality or properties of a material by sampling and testing to determine the concentration of contaminants, or specific properties of the material such as flammability or corrosiveness.

(5) "Combustible" means vapor concentration from a liquid that has a flash point greater than 100 degrees F.

(6) "Confirmation sampling" means collecting samples during a preliminary assessment or upon completion of decontamination activities to confirm that contamination is below the decontamination standards outlined in this rule.

(7) "Contaminant" means a hazardous material.

(8) "Contamination" or "contaminated" means polluted by hazardous materials that cause property to be unfit for human habitation or use due to immediate or long-term health hazards.

(9) "Corrosive" means a material such as acetic acid, acetic anhydride, acetyl chloride, ammonia (anhydrous), ammonium hydroxide, benzyl chloride, dimethylsulfate, formaldehyde, formic acid, hydrogen chloride/hydrochloric acid, hydrobromic acid, hydriodic acid, hydroxylamine, methylamine, methylene chloride (dichloromethane, methylene dichloride), methyl methacrylate, nitroethane, oxalylchloride,perchloric acid, phenylmagnesium bromide, phosphine, phosphorus oxychloride, phosphorus pentoxide, sodium amide (sodamide), sodium metal, sodium hydroxide, sulfur trioxide, sulfuric acid, tetrahydrofuran, thionyl chloride or any other substance that increases or decreases the pH of a material and may cause degradation of the material.

(10) "Decontamination" means treatment or removal of contamination by a decontamination specialist or owner of record to

reduce concentrations of contaminants below the decontamination standards.

(11) "Decontamination standards" means the levels or concentrations of contaminants that must be met to demonstrate that contamination is not present or that decontamination has successfully removed the contamination.

(12) "Delineate" means to determine the nature and extent of contamination by sampling, testing, or investigating.

(13) "Easily cleanable" means an object and its surface that can be cleaned by detergent solution applied to its surface in a way that would reasonably be expected to remove dirt from the object when rinsed and to be able to do so without damaging the object or its surface finish.

(14) "Ecstasy" means 3,4-methylenedioxy-methamphetamine (MDMA).

(15) "EPA" means the United States Environmental Protection Agency.

(16) "EPA Method 8015B" means the EPA approved method for determining the concentration of various non-halogenated volatile organic compounds and semi-volatile organic compounds by gas chromatography/flame ionization detector.

(17) "EPA Method 6010B" means the EPA approved method for determining the concentration of various heavy metals by inductively coupled plasma.

(18) "EPA Method 8260B" means the EPA approved method for determining the concentration of various volatile organic compounds by gas chromatograph/mass spectrometer.

(19) "FID" means flame ionization detector.

(20) "Flammable" means vapor concentration from a liquid that has a flash point less than 100 degree F.

(21) "Grab Sample" means one sample collected from a single, defined area or media at a given time and location.

(22) "Hazardous materials" has the same meaning as "hazardous or dangerous materials" as defined in Section 58-37d-3; and includes any illegally manufactured controlled substances.

(23) "Hazardous waste" means toxic materials to be discarded as directed in 40 CFR 261.3.

(24) "HEPA" means high-efficiency particulate air and indicates the efficiency of an air filter or air filtration system.

(25) "Highly suggestive of contamination" means the presence of visible or olfactory signs indicative of contamination, locations in and around where illegal drug production occurred, where hazardous materials were stored or suspected of being used to manufacture illegal drugs, or areas that tested positive for contamination or other portions of the property that may be linked to processing and storage areas by way of the ventilation system or other activity that may cause contamination to be distributed across the property.

(26) "Impacted groundwater" means water present beneath ground surface that contains concentrations of a contaminant above the UGWQS.

(27) "Impacted soil" means soil that contains concentrations of a contaminant above background or EPA residential Risk Based Screening Concentrations as contained in the document listed in R392-600-8.

(28) "LEL/O2" means lower explosive limit/oxygen.

(29) "Negative pressure enclosure" means an air-tight enclosure using a local exhaust and HEPA filtration system to maintain a lower air pressure in the work area than in any adjacent area and to generate a constant flow of air from the adjacent areas into the work area.

(30) "Non-porous" means resistant to penetration of liquids, gases, powders and includes non-permeable substance or materials, that are sealed such as, concrete floors, wood floors, ceramic tile floors, vinyl tile floors, sheet vinyl floors, painted drywall or sheet rock walls or ceilings, doors, appliances, bathtubs, toilets, mirrors, windows, counter-tops, sinks, sealed wood, metal, glass, plastic, and pipes.

(31) "Not Highly Suggestive of Contamination" means areas outside of the main locations(s) where illegal drugs were produced and hazardous materials were stored or suspected of being used that do not reveal obvious visual or olfactory signs of contamination, but may, however, be contaminated by residue from the manufacture or storage of illegal drugs or hazardous materials.

(32) "Owner of record" means (a) The owner of property as shown on the records of the county recorder in the county where the property is located; and (b) may include an individual, financial institution, company, corporation, or other entity.

(33) "Personal protective equipment" means various types of clothing such as suits, gloves, hats, and boots, or apparatus such as facemasks or respirators designed to prevent inhalation, skin contact, or ingestion of hazardous chemicals.

(34) "PID" means photo ionization detector.

(35) "Porous" means material easily penetrated or permeated by gases, liquids, or powders such as carpets, draperies, bedding, mattresses, fabric covered furniture, pillows, drop ceiling or other fiber-board ceiling panels, cork paneling, blankets, towels, clothing, and cardboard or any other material that is worn or not properly sealed.

(36) "Preliminary assessment" means an evaluation of a property to define all areas that are highly suggestive of contamination and delineate the extent of contamination. The preliminary assessment consists of an on-site evaluation conducted by the decontamination specialist or owner of record to gather information to demonstrate that contamination is not present above the decontamination standards or to enable development of a workplan outlining the most appropriate method to decontaminate the property.

(37) "Properly disposed" means to discard at a licensed facility in accordance with all applicable laws and not reused or sold.

(38) "Property" means: (a) any property, site, structure, part of a structure, or the grounds, surrounding a structure; and (b) includes single-family residences, outbuildings, garages, units of multiplexes, condominiums, apartment buildings, warehouses, hotels, motels, boats, motor vehicles, trailers, manufactured housing, shops, or booths.

(39) "Return air housing" means the main portion of an air ventilation system where air from the livable space returns to the air handling unit for heating or cooling.

(40) "Sample location" means the actual place where an environmental sample was obtained, including designation of the room, the surface (wall, ceiling, appliance, etc), and the direction and

distance from a specified fixed point (corner, door, light switch, etc).

(41) "Services" means the activities performed by decontamination specialist in the course of decontaminating residual contamination from the manufacturing of illegal drugs or from the storage of chemicals used in manufacturing illegal drugs and includes not only the removal of any contaminants but inspections and sampling.

(42) "Toxic" means hazardous materials in sufficient concentrations that they can cause local or systemic detrimental effects to people.

(43) "UGWQS" means the Utah Ground Water Quality Standards established in R317-6-2.

(44) "VOA" means volatile organic analyte.

(45) "VOCs" means volatile organic compounds or organic chemicals that can evaporate at ambient temperatures used in the manufacture illegal drugs such as acetone, acetonitrile, aniline, benzene, benzaldehyde, benzyl chloride, carbon tetrachloride, chloroform, cyclohexanone, dioxane, ethanol, ethyl acetate, ethyl ether, Freon 11, hexane, isopropanol, methanol, methyl alcohol, methylene chloride, naphtha, nitroethane, petroleum ether, petroleum distillates, pyridine, toluene, o-toluidine, and any other volatile organic chemical that may be used to manufacture illegal drugs.

(46) "Waste" means refuse, garbage, or other discarded material, either solid or liquid.

R392-600-3. Preliminary Assessment Procedures.

(1) The decontamination specialist or owner of record shall determine the nature and extent of damage and contamination of the property from illegal drug operations by performing a preliminary assessment prior to decontamination activities. Contamination may be removed prior to approval of the work plan as necessary to abate an imminent threat to human health or the environment. If there was a fire or an explosion in the contaminated portion of the property that appears to have compromised its structural integrity, the decontamination specialist or owner of record shall obtain a structural assessment of the contaminated portion of the property prior to initiating the preliminary assessment.

(2) To conduct the preliminary assessment, the decontamination specialist or owner of record shall:

(a) request and review copies of any law enforcement, state agency or other report regarding illegal drug activity or suspected illegal drug activity at the property;

(b) evaluate all information obtained regarding the nature and extent of damage and contamination;

(c) determine the method of illegal drug manufacturing used;

(d) determine the chemicals involved in the illegal drug operation;

(e) determine specific locations where processing and illegal drug activity took place or was suspected and where hazardous materials were stored and disposed;

(f) use all available information to delineate areas highly suggestive of contamination;

(g) develop procedures to safely enter the property in order to conduct a preliminary assessment;

(h) wear appropriate personal protective equipment for the conditions assessed;

(i) visually inspect all portions of the property, including areas outside of any impacted structure to document where stained materials or surfaces are visible, drug production took place, hazardous materials were stored, and burn pits or illegal drug operation trash piles may have been or are currently present;

(j) determine whether the property contains a septic system on-site and if there has been a release to the system as a result of the illegal drug operations;

(k) determine the locations of the ventilation system components in the areas highly suggestive of contamination;

(l) conduct and document appropriate testing for corrosive, flammable, combustible, and toxic atmospheres during the initial entry in the contaminated portion of the property using instruments such as a LEL/O2 meter, pH paper, PID, FID, or equivalent equipment; and

(m) if decontamination is not anticipated due to the lack of supporting evidence of decontamination, collect confirmation samples to demonstrate compliance with the decontamination standards using the methodology specified in this rule.

(3) If the preliminary assessment does not reveal the presence of contamination above the decontamination standards specified in this rule, the decontamination specialist or owner of record may request that the property be removed from the list of contaminated properties as specified in 19-6-903 provided that:

(a) a final report documenting the preliminary assessment is submitted to the local health department by the owner of record and decontamination specialist if one was involved in conducting the preliminary assessment; and

(b) the local health department concurs with the recommendations contained in the report specified in (a).

(4) If the preliminary assessment reveals the presence of contamination, the decontamination specialist or owner of record shall proceed according to R392-600-4 through R392-600-7. The contaminated portions of the property shall be kept secure against un-authorized access until the work plan has been submitted, any required permit is issued, and the property has been decontaminated to the standards established in this rule.

R392-600-4. Work Plan.

(1) Prior to performing decontamination of the property, the decontamination specialist or owner of record shall prepare a written work plan that contains:

(a) complete identifying information of the property, such as street address, mailing address, owner of record, legal description, county tax or parcel identification number, or vehicle identification number if a mobile home, trailer or boat;

(b) if applicable, the certification number of the decontamination specialist who will be performing decontamination services on the contaminated portion of the property;

(c) copies of the decontamination specialist's current certification;

(d) photographs of the property;

(e) a description of the areas highly suggestive of

contamination, and areas that are considered not highly suggestive of contamination, including any information that may be available regarding locations where illegal drug processing was performed, hazardous materials were stored and stained materials and surfaces were observed;

(f) a description of contaminants that may be present on the property;

(g) results of any testing conducted for corrosive, flammable, combustible, and toxic atmospheres during the initial entry in the contaminated portion of the property, such as by a LEL/O2 meter, pH paper, PID, FID, or equivalent equipment;

(h) a description of the personal protective equipment to be used while in or on the contaminated portion of the property;

(i) the health and safety procedures that will be followed in performing the decontamination of the contaminated portion of the property;

(j) a detailed summary of the decontamination to be performed based on the findings and conclusions of the Preliminary Assessment, which summary shall include:

(i) all surfaces, materials or articles to be removed;

(ii) all surfaces, materials and articles to be cleaned on-site;

(iii) all procedures to be employed to remove or clean the contamination, including both areas highly suggestive of contamination as well as those areas that are not highly suggestive of contamination;

(iv) all locations where decontamination will commence;

(v) all containment and negative pressure enclosure plans; and

(vi) personnel decontamination procedures to be employed to prevent the spread of contamination;

(k) the shoring plan, if an assessment of the structural integrity was conducted and it was determined that shoring was necessary, including a written description or drawing that shows the structural supports required to safely occupy the building during decontamination;

(l) a complete description of the proposed post-decontamination confirmation sampling locations, parameters, techniques and quality assurance requirements;

(m) the names of all individuals who gathered samples, the analytical laboratory performing the testing, and a copy of the standard operating procedures for the analytical method used by the analytical laboratory;

(n) a description of disposal procedures and the anticipated disposal facility;

(o) a schedule outlining time frames to complete the decontamination process; and

(p) all available information relating to the contamination and the property based on the findings and conclusions of the preliminary assessment.

(2) Prior to implementing the work plan, it must first be:

(a) approved in writing by the owner of record and, if one is involved, the decontamination specialist who will execute the work plan; and

(b) submitted to the local health department with jurisdiction over the county in which the property is located.

(3) The owner of record, and any decontamination specialist involved in executing the work plan shall retain the work plan for a minimum of three years after completion of the work plan and the removal of the property from the contaminated-properties list.

(4) All information required to be included in the work plan shall be keyed to or contain a reference to the appropriate subsection of this rule.

R392-600-5. Decontamination Procedures.

(1) The decontamination specialists, and owner of record shall comply with all applicable federal, state, municipal, and local laws, rules, ordinances, and regulations in decontaminating the property.

(2) The decontamination specialist or owner of record shall be present on the property during all decontamination activities.

(3) The decontamination specialist or owner of record shall conduct the removal of the contamination from the property, except for porous materials from areas not highly suggestive of contamination that may be cleaned as outlined in sub-section R392-600-5(12).

(4) The decontamination specialist or owner of record shall see that doors or other openings from areas requiring decontamination shall be partitioned from all other areas with at least 4-mil plastic sheeting or equivalent before beginning decontamination to prevent contamination of portions of the property that have not been impacted by illegal drug operations.

(5) Ventilation Cleaning Procedures.

(a) Air registers shall be removed and cleaned as outlined in subsection R392-600-5(12).

(b) All air register openings shall be covered by temporary filter media.

(c) A fan-powered HEPA filter collection machine shall be connected to the ductwork to develop negative air pressure in the ductwork.

(d) Air lances, mechanical agitators, or rotary brushes shall be inserted into the ducts through the air register openings to loosen all dirt, dust and other materials.

(e) The air handler units, including the return air housing, coils, fans, systems, and drip pan shall be cleaned as required in subsection R392-600-5(12).

(f) All porous linings or filters in the ventilation system shall be removed and properly disposed.

(g) The ventilation system shall be sealed off at all openings with at least 4-mil plastic sheeting, or other barrier of equivalent strength and effectiveness, to prevent recontamination until the contaminated portion of the property meets the decontamination standards in R392-600-6(2) and(3).

(6) Procedures for Areas Highly Suggestive of Contamination.

(a) All porous materials shall be removed and properly disposed. On site cleaning of this material is not allowed.

(b) All stained materials from the illegal drug operations shall be removed and properly disposed, unless the decontamination specialist or owner of record determines that cleaning and testing can be performed and can demonstrate based on results of confirmation sampling and testing that the materials meet the decontamination standards contained in subsections R392-600-6(2) and (3). Only smooth

and easily cleanable drug operation material surfaces may be decontaminated on site and only in accordance with R392-600-5(12).

(c) All non-porous surfaces may be cleaned to the point of stain removal and left in place or removed and properly disposed. Only smooth and easily cleanable surfaces may be decontaminated on site and only in accordance subsection R392-600-5(12). After on-site cleaning, the decontamination specialist or owner of record shall test all surfaces to verify compliance with the decontamination standards contained in R392-600-6(2) and (3).

(d) All exposed concrete surfaces shall be thoroughly cleaned as outlined in R392-600-5(12) and tested to meet the decontamination standards contained in R392-600-6(2) and (3) or may be removed and properly disposed.

(e) All appliances shall be removed and properly disposed, unless the decontamination specialist or owner of record determines that cleaning and testing can be performed and can demonstrate based on results of confirmation sampling and testing that the materials meet the decontamination standards contained in subsections R392-600-6(2) and (3). Only smooth and easily cleanable surfaces may be decontaminated on site and only in accordance subsection R392-600-5(12). After on-site cleaning, the decontamination specialist or owner of record shall test all surfaces to verify compliance with the decontamination standards contained in R392-600-6(2) and (3). For appliances such as ovens that have insulation, a 100 square centimeter portion of the insulation shall also be tested. If the insulation does not meet the decontamination standards contained in R392-600-6(2) and R392-600-6(3), the insulated appliances shall be removed and properly disposed.

(7) Structural Integrity and Security Procedures.

If, as a result of the decontamination, the structural integrity or security of the property is compromised, the decontamination specialist or owner of record shall take measures to remedy the structural integrity and security of the property.

(8) Procedures for Plumbing, Septic, Sewer, and Soil.

(a) All plumbing inlets to the septic or sewer system, including sinks, floor drains, bathtubs, showers, and toilets, shall be visually assessed for any staining or other observable residual contamination. All plumbing traps shall be assessed for VOC concentrations with a PID or FID in accordance with Section R392-600-6(7). All plumbing traps shall be assessed for mercury vapors in accordance with Section R392-600-6(10) by using a mercury vapor analyzer unless the results of the preliminary assessment indicate that contamination was unlikely to have occurred. If VOC concentrations or mercury vapor concentrations exceed the decontamination standards contained in R392-600-6(2) and (3), the accessible plumbing and traps where the excess levels are found shall be removed and properly disposed, or shall be cleaned and tested to meet the decontamination standards contained in R392-600-6(2) and (3).

(b) The decontamination specialist or owner of record shall obtain documentation from the local health department or the local waste water company describing the sewer disposal system for the dwelling and include it in the final report. If the dwelling is connected to an on-site septic system, a sample of the septic tank liquids shall be obtained and tested for VOC concentrations unless

the results of the preliminary assessment indicate that contamination was unlikely to have occurred.

(c) If VOCs are not found in the septic tank sample or are found at concentrations less than UGWQS and less than 700 micrograms per liter for acetone, no additional work is required in the septic system area, unless requested by the owner of the property.

(d) If VOCs are found in the septic tank at concentrations exceeding the UGWQS or exceeding 700 micrograms per liter for acetone the following applies:

(i) The decontamination specialist or owner of record shall investigate the septic system discharge area for VOCs, lead, and mercury unless there is clear evidence that mercury or lead was not used in the manufacturing of illegal drugs at the illegal drug operation;

(ii) The horizontal and vertical extent of any VOCs, mercury, and lead detected in the soil samples shall be delineated relative to background or EPA residential risk based screening concentrations contained in the document listed in R392-600-8.

(iii) If any of the VOCs, mercury, and lead used in the illegal drug operations migrated down to groundwater level, the decontamination specialist or owner of record shall delineate the vertical and horizontal extent of the groundwater contamination.

(iv) After complete characterization of the release, the decontamination specialist or owner of record shall remediate the impacted soils to concentrations below background or EPA residential risk based screening concentrations as contained in the document listed in R392-600-8 and any impacted groundwater to concentrations below the UGWQS and below 700 micrograms per liter for acetone.

(v) The contents of the septic tank shall be removed and properly disposed.

(e) The decontamination specialist or owner of record shall also notify the Utah Department of Environmental Quality, Division of Water Quality, if a release has occurred as a result of illegal drug operations to a single family septic system or a multiple family system serving less than 20 people.

(f) All sampling and testing pursuant to this section shall be performed in accordance with EPA sampling and testing protocol.

(9) Procedures for burn areas, trash piles and bulk wastes.

(a) The decontamination specialist or owner of record shall characterize, remove, and properly dispose of all bulk wastes remaining from the activities of the illegal drug operations or other wastes impacted by compounds used by the illegal drug operations.

(b) The decontamination specialist or owner of record shall examine the property for evidence of burn areas, burn or trash pits, debris piles, and stained areas suggestive of contamination. The decontamination specialist or owner of record shall test any burn areas, burn or trash pits, debris piles or stained areas with appropriate soil sampling and testing equipment, such as a LEL/O2 meter, pH paper, PID, FID, mercury vapor analyzer, or equivalent equipment to determine if the area is contaminated.

(c) If the burn areas, burn or trash pits, debris piles, or stained areas are not in a part of the property that has otherwise been determined to be highly suggestive of contamination, the decontamination specialist shall recommend to the owner of the

property that these areas be investigated.

(d) If the burn areas, burn or trash pits, debris piles or stained areas are part of the contaminated portion of the property, the decontamination specialist or owner of record shall investigate and remediate these areas.

(e) The decontamination specialist or owner of record shall investigate burn areas, burn or trash pits, debris piles, or stained areas for the VOCs used by the illegal drug operations and lead and mercury, unless there is clear evidence that mercury or lead was not used in the manufacturing of illegal drugs at the illegal drug operations.

(f) The decontamination specialist or owner of record shall delineate the horizontal and vertical extent of any VOCs, lead, or mercury detected in the soil samples relative to background concentrations or EPA residential risk based screening concentrations as contained in the document listed in R392-600-8.

(g) If any of the compounds used by the illegal drug operation migrated into groundwater, the decontamination specialist or owner of record shall delineate the vertical and horizontal extent of the groundwater contamination relative to the UGWQS and relative to the maximum contaminant level of 700 micrograms per liter for acetone.

(h) After complete characterization of the release, the decontamination specialist or owner of record shall remediate contaminated soils to background or EPA residential risk based screening concentrations as contained in the document listed in R392-600-8, and contaminated groundwater to concentrations at or below the UGWQS and at or below 700 micrograms per liter for acetone.

(i) All sampling and testing conducted under this section shall be performed in accordance with current EPA sampling and testing protocol.

(10) Procedures for areas not highly suggestive of contamination.

(a) Porous materials with no evidence of staining or contamination may be cleaned by HEPA vacuuming and one of the following methods:

(i) Steam cleaning: Hot water and detergent shall be injected into the porous materials under pressure to agitate and loosen any contamination. The water and detergent solution shall then be extracted from the porous material by a wet vacuum.

(ii) Detergent and water solution: porous materials shall be washed in a washing machine with detergent and water for at least 15 minutes. The porous materials shall be rinsed with water. This procedure shall be repeated at least two additional times using new detergent solution and rinse water.

(b) All non-porous surfaces such as floors, walls, ceilings, mirrors, windows, doors, appliances, and non-fabric furniture shall be cleaned as outlined in subsection R392-600-5(12).

(c) Doors or other openings to areas with no visible contamination shall be partitioned from all other areas with at least 4-mil plastic sheeting or equivalent after being cleaned to avoid re-contamination.

(d) Spray-on acoustical ceilings shall be left undisturbed, and shall be sampled and tested for asbestos and for contamination to determine whether ceilings meet the decontamination standards

contained in R392-600-6(2) and (3), and if in need of removal, whether asbestos remediation protocols are applicable. If the materials exceed the standards, the decontamination specialist or owner of record shall properly remove and dispose of them.

(e) All exposed concrete surfaces shall be thoroughly cleaned as outlined in subsection R392-600-5(12).

(11) Decontamination procedures for motor vehicles.

If an illegal drug operation is encountered in a motor vehicle, the decontamination specialist or owner of record shall conduct a Preliminary Assessment in the manner described in this rule to determine if the vehicle is contaminated. If it is determined that the motor vehicle is contaminated and the vehicle cannot be cleaned in a manner consistent with this rule, the motor vehicle may no longer be occupied. The vehicle shall also be properly disposed.

(12) Cleaning Procedure.

For all items, surfaces or materials that are identified as easily cleanable and for which the work plan indicates they will be decontaminated on site, the decontamination specialist or owner of record shall wash them with a detergent and water solution and then thoroughly rinse them. This procedure shall be repeated at least two additional times using new detergent solution and rinse water. The decontamination specialist or owner of record shall test all surfaces where decontamination on site has been attempted to verify compliance with the decontamination standards in R392-600-6(2) and R392-600-6(3).

(13) Waste Characterization and Disposal Procedures.

The Hazardous Waste Rules of R315-1 through R315-101, the Solid Waste Rules of R315-301 through R315-320 and the Illegal Drug Operations Decontamination Standards regulate the management and disposal of hazardous waste and contaminated debris generated during decontamination of an illegal drug operations. The decontamination specialist and owner of record shall comply with these rules and meet the following criteria.

(a) No waste, impacted materials or contaminated debris from the decontamination of illegal drug operations may be removed from the site or waste stream for recycling or reuse without the written approval of the local Health Department.

(b) All items removed from the illegal drug operations and waste generated during decontamination work shall be properly disposed.

(c) All liquid waste, powders, pressurized cylinders and equipment used during the production of illegal drugs shall be properly characterized by sampling or testing prior to making a determination regarding disposal or the waste shall simply be considered hazardous waste and properly disposed, except the waste shall not be deemed to be household hazardous waste.

(d) All impacted materials and contaminated debris that are not determined by the decontamination specialist or owner of record to be a hazardous waste may be considered a solid waste and properly disposed.

(e) All Infectious Waste shall be managed in accordance with Federal, State and local requirements.

(f) The disturbance, removal and disposal of asbestos must be done in compliance with all Federal, State, and local requirements including the requirements for Asbestos Certification, Asbestos Work

Practices and Implementation of Toxic Substances Control Act, Utah Administrative Code R307-801.

(g) The removal and disposal of lead based paint must be done in compliance with all Federal, State, and local requirements including the requirements for Lead-Based Paint Accreditation, Certification and Work Practice Standards, Utah Administrative Code R307-840.

(h) The decontamination specialist and owner of record shall comply with all Federal, State, Municipal, County or City codes, ordinances and regulations pertaining to waste storage, manifesting, record keeping, waste transportation and disposal.

R392-600-6. Confirmation Sampling and Decontamination Standards.

(1) The decontamination specialist or owner of record shall take and test confirmation samples after decontamination to verify that concentrations are below the decontamination standards prior to the submittal of a final report. Samples are not required if a contaminated surface has been removed and replaced, unless there is evidence that the area has been re-contaminated. All decontaminated areas and materials, areas not highly suggestive of contamination, and surfaces that have not been removed shall be sampled for compliance with the standards in Table 1.

(2) If the decontamination standards are not achieved, the decontamination specialist or owner of record shall perform additional decontamination and re-sample to confirm the surface or area meets the decontamination standards specified in Table 1.

TABLE 1

COMPOUND	DECONTAMINATION STANDARD
Red Phosphorus	Removal of stained material or cleaned as specified in this rule such that there is no remaining visible residue.
Iodine Crystals	Removal of stained material or cleaned as specified in this rule such that there is no remaining visible residue.
Methamphetamine	Less than or equal to 0.1 microgram Methamphetamine per 100 square centimeters
Ephedrine	Less than or equal to 0.1 microgram Ephedrine per 100 square centimeters
Pseudoephedrine	Less than or equal to 0.1 microgram Pseudoephedrine per 100 square centimeters
VOCs in Air	Less than or equal to 1 ppm

Corrosives	Surface pH between 6 and 8
Ecstasy	Less than or equal to 0.1 microgram Ecstasy per 100 square centimeters

(3) The decontamination specialist or owner of record shall also conduct sampling and testing for all of the metals listed in Table 2 unless there is clear evidence that these metals were not used in the illegal drug operations. If Table 2 contaminants are present, the decontamination specialist or owner of record shall decontaminate the affected areas and sample until they meet the decontamination standards in Table 2.

TABLE 2

COMPOUND	DECONTAMINATION STANDARD
Lead	Less than or equal to 4.3 micrograms Lead per 100 square centimeters
Mercury	Less than or equal to 3.0 micrograms Mercury per cubic meter of air

(4) Confirmation sampling procedures.

(a) All sample locations shall be photographed.

(b) All samples shall be obtained from areas representative of the materials or surfaces being tested. Samples shall be collected from materials or surfaces using wipe samples and shall be biased toward areas where contamination is suspected or confirmed or was known to be present prior to decontamination.

(c) All samples shall be obtained, preserved, and handled and maintained under chain-of-custody protocol in accordance with industry standards for the types of samples and analytical testing to be conducted.

(d) The individual conducting the sampling shall wear a new pair of gloves to obtain each sample.

(e) All reusable sampling equipment shall be decontaminated prior to sampling.

(f) All testing equipment shall be properly equipped and calibrated for the types of compounds to be analyzed.

(g) Cotton gauze, 3" x 3" 12-ply, in sterile packages, shall be used for all wipe sampling. The cotton gauze shall be wetted with analytical grade methanol for the wipe sampling. The cotton gauze shall be blotted or wiped at least five times in two perpendicular directions within each sampling area.

(h) After sampling, each wipe sample shall be placed in a new clean sample container and capped tightly. Recommended containers are 50-mL polypropylene disposable centrifuge tubes or 40-mL VOA glass vials. Plastic bags shall not be used. The sample container shall be properly labeled with at least the site or project identification number, date, time, and actual sample location. The sample container shall be refrigerated until delivered to an analytical laboratory.

(i) Each sample shall be analyzed for methamphetamine, ephedrine, pseudoephedrine, and ecstasy depending upon the type of

illegal drug operations using NIOSH Manual of Analytical Method (NMAM) 9106 (or the proposed 9106 method if it is not yet approved) or equivalent method approved by the Utah Department of Health.

(5) Confirmation sampling from areas highly suggestive of contamination.

(a) Samples collected from areas highly suggestive of contamination shall be by grab samples that are not combined with other samples.

(b) Three 10 cm. x 10 cm. areas (100 square centimeters) shall be wipe sampled from each room of the property where illegal drug operations occurred, hazardous materials were stored and where staining or contamination are or were present. The three samples shall be obtained from a nonporous section of the floor, one wall, and the ceiling in each room or any other location where contamination is suspected.

(c) Three 10 cm. x 10 cm. areas (100 square centimeters) shall be wipe sampled from different areas of the ventilation system, unless the system serves more than one unit or structure. If the system serves more than one unit or structure, samples shall be collected from a representative distribution of the system as well as the corresponding areas that it serves until the contamination is delineated, decontaminated, and determined to be below the decontamination standards established in this rule.

(d) If there is a kitchen, three 10 cm. x 10 cm. areas (100 square centimeters) shall be wipe sampled from the surfaces most likely to be contaminated including the counter top, sink, or stove top, and from the floor in front of the stove top or any other location where contamination is suspected.

(e) If there is a bathroom, three 10 cm. x 10 cm. areas (100 square centimeters) shall be wipe sampled from the surfaces most likely to be contaminated including the counter top, sink, toilet, or the shower/bath tub and any other location where contamination is suspected.

(f) If there are any appliances, one 10 cm. x 10 cm. area (100 square centimeters) shall be wipe sampled from the exposed portion of each appliance. If multiple appliances are present, each wipe sample may be a composite of up to three 100 square centimeter areas on three separate appliances, provided that the surfaces most likely to be contaminated are tested.

(g) If there is any other enclosed space where illegal drug operations occurred, hazardous materials were stored, or where staining or contamination is present, three 10 cm. x 10 cm. areas (100 square centimeters) shall be wipe sampled from the surfaces most likely to be contaminated.

(h) Each wipe sample shall be placed in a new clean sample container and capped tightly. Recommended containers are 50-mL polypropylene disposable centrifuge tubes or 40-mL VOA glass vials. Plastic bags shall not be used.

(6) Confirmation sampling from areas not highly suggestive of contamination.

Samples shall be collected in a manner consistent with the confirmation sampling described in Section R392-600-6(5). The samples may be combined together to form one sample per room or sampling area.

(7) VOC sampling and testing procedures.

(a) A properly calibrated PID or FID capable of detecting VOCs shall be used for testing. The background concentration of VOCs shall be obtained by testing three exterior areas outside the areas highly suggestive of contamination and in areas with no known or suspected sources of VOCs. All VOC readings shall be recorded for each sample location.

(b) At least three locations in areas highly suggestive of contamination shall be tested for VOC readings. The testing equipment probe shall be held in the sample location for at least 30 seconds to obtain a reading.

(c) All accessible plumbing traps shall be tested for VOCs by holding the testing equipment probe in the plumbing pipe above the trap for at least 60 seconds.

(8) Testing procedures for corrosives.

(a) Surface pH measurements shall be made using deionized water and pH test strips with a visual indication for a pH between 6 and 8. The pH reading shall be recorded for each sample location.

(b) For horizontal surfaces, deionized water shall be applied to the surface and allowed to stand for at least three minutes. The pH test strip shall then be placed in the water for a minimum of 30 seconds and read.

(c) For vertical surfaces, a cotton gauze, 3" x 3" 12-ply, in sterile packages, shall be wetted with deionized water and wiped over a 10 cm. x 10 cm. area at least five times in two perpendicular directions. The cotton gauze shall then be placed into a clean sample container and covered with clean deionized water. The cotton gauze and water shall stand in the container for at least three minutes prior to testing. The pH test strip shall then be placed in the water for a minimum of 30 seconds and read.

(d) pH testing shall be conducted on at least three locations in each room within the areas highly suggestive of contamination.

(9) Lead Sampling and Testing Procedures.

(a) Unless there is clear evidence that lead was not used in the manufacturing of methamphetamine, or ecstasy at the illegal drug operations, lead sampling shall be conducted as follows:

(i) Cotton gauze, 3" x 3" 12-ply, in sterile packages shall be used for wipe sampling. The cotton gauze shall be wetted with analytical grade 3 per cent nanograde nitric acid for the wipe sampling. The cotton gauze shall be blotted or wiped at least five times in two perpendicular directions within each sampling area.

(ii) Three 10 cm. x 10 cm. areas (100 square centimeters) shall be sampled in each room within the areas highly suggestive of contamination; and

(b) After sampling, each wipe sample shall be placed in a new clean sample container and capped tightly. The sample container shall be properly labeled with at least the site or project identification number, date, time, and actual sample location. The sample container shall be delivered to an analytical laboratory that uses EPA Method 6010B or an equivalent method approved by the Utah Department of Health.

(c) The sample shall be analyzed for lead using EPA Method 6010B or equivalent.

(10) Mercury Sampling and Testing Procedures.

(a) A properly calibrated mercury vapor analyzer shall be used

for evaluating the decontaminated areas for the presence of mercury. All mercury readings shall be recorded for each sample location.

(b) At least three locations in each room within the areas highly suggestive of contamination shall be tested for mercury vapor readings. The testing equipment probe shall be held in the sample location for at least 30 seconds to obtain a reading.

(c) All accessible plumbing traps shall be tested for mercury by holding the testing equipment probe in the plumbing pipe above the trap for at least 60 seconds.

(11) Septic tank sampling and testing procedures.

(a) All sampling and testing shall be performed in accordance with current EPA sampling and testing protocol.

(b) The liquid in the septic tank shall be sampled with a new clean bailer or similar equipment.

(c) The liquid shall be decanted or poured with minimal turbulence into three new VOA vials properly prepared by the analytical laboratory.

(d) The VOA vials shall be filled so that there are no air bubbles in the sealed container. If air bubbles are present, the vial must be emptied and refilled.

(i) The sample vials shall be properly labeled with at least the date, time, and sample location.

(ii) The sample vials shall be refrigerated until delivered to the analytical laboratory.

(iii) The sample shall be analyzed using EPA Method 8260 or equivalent.

(12) Confirmation sampling by Local Health Departments.

The local health department may also conduct confirmation sampling after decontamination is completed and after the final report is submitted to verify that the property has been decontaminated to the standards outlined in this rule.

R392-600-7. Final Report.

(1) A final report shall be:

(a) prepared by the decontamination specialist or owner of record upon completion of the decontamination activities;

(b) submitted to the owner of the decontaminated property and the local health department of the county in which the property is located; and

(c) retained by the decontamination specialist and owner of record for a minimum of three years.

(2) The final report shall include the following information and documentation:

(a) complete identifying information of the property, such as street address, mailing address, owner of record, legal description, county tax or parcel identification number, or vehicle identification number if a mobile home or motorized vehicle;

(b) the name and certification number of the decontamination specialist who performed the decontamination services on the property;

(c) a detailed description of the decontamination activities conducted at the property, including any cleaning performed in areas not highly suggestive of contamination;

(d) a description of all deviations from the approved work plan;

(e) photographs documenting the decontamination services and

showing each of the sample locations,

(f) a drawing or sketch of the areas highly suggestive of contamination that depicts the sample locations and areas that were decontaminated;

(g) a description of the sampling procedure used for each sample;

(h) a copy of the testing results from testing all samples, including testing for VOCs, corrosives, and if applicable, lead and mercury, and testing performed by an analytical laboratory;

(i) a written discussion interpreting the test results for all analytical testing on all samples;

(j) a copy of any asbestos sampling and testing results;

(k) a copy of the analytical laboratory test quality assurance data on all samples and a copy of the chain-of-custody protocol documents;

(l) a summary of the waste characterization work, any waste sampling and testing results, and transportation and disposal documents, including bills of lading, weight tickets, and manifests for all materials removed from the property;

(m) a summary of the decontamination specialist or owner of record's observation and testing of the property for evidence of burn areas, burn or trash pits, debris piles, or stained areas;

(n) a written discussion and tables summarizing the confirmation sample results with a comparison to the decontamination standards outlined in this rule; and

(o) an affidavit from the decontamination specialist and owner of record that the property has been decontaminated to the standards outlined in this rule.

(3) All information required to be included in the final report shall be keyed to or contain a reference to the appropriate subsection of this rule.

R392-600-8. Reference.

The document: U.S. Environmental Protection Agency. Region 9: Superfund Preliminary Remediation Goals (PRG) Table, October 2004, is adopted by reference.

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