



**HOUSEHOLD HAZARDOUS WASTE
SUPERVISOR MANUAL
CP2015**

06-23-09 V5

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HHW Collection Guidelines V13
HHW Supervisor Manual V5



HOUSEHOLD HAZARDOUS WASTE COLLECTIONS

SITE NAME: _____

SITE ADDRESS: _____

PLAN DATE: _____



HOUSEHOLD HAZARDOUS WASTE COLLECTIONS GUIDELINES

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HOUSEHOLD HAZARDOUS WASTE COLLECTIONS GUIDELINES

1. INTRODUCTION

- Household Hazardous Waste (HHW) Collections pose potential health and safety hazards to community residents and workers at these events, as well as risks to the environment. Community residents may unknowingly bring substances that are extremely volatile, flammable, toxic or unstable. To minimize the potential for a mishap, Clean Harbors Environmental Services, Inc. (CHES) has established this Health and Safety Guideline for HHW operations. Although this guideline presents general requirements for HHW operations, additional requirements may be imposed based on client bid specifics.
- This guideline attempts to address the issues involved with the handling of HHW in order to minimize potential human exposure to or injury from handling HHW, as well as to reduce the potential for any environmental contamination.

2. TRAINING

2.1. General Requirements

All CHES employees participating in HHW collections must have successfully completed the appropriate training as outlined in this section. Also see HHW Personnel Training Matrix in Appendix 9. The training will enable the employee to safely perform her/his function, as well as satisfy the operational objectives of the HHW collection.

2.2. Project Managers/Supervisors

Employees involved with the supervision of operations, waste-related decision making, lab packing wastes, and completion of paperwork must have the following training; 40-Hour HAZWOPER Training, CleanPack Training (if CP Training has not been completed, you must get approval from the TS Manager of Chemist Training Development), Clean Harbors HHW Training Program for Project Managers and Supervisors, Current 8-Hour Annual OSHA Refresher, and Hazardous Materials Identification Training. Medical surveillance coverage, and respirator fit testing all must be current.

2.3. Chemist

Field Chemist must have successfully completed 40-Hour HAZWOPER Training, CleanPack Training, and, the HHW Orientation Training.

2.4. Technicians

Technicians must have at a minimum, 24-Hour OSHA training to perform pour-off operations. All Technicians must have completed Clean Harbors HHW Orientation Training. In order to perform other functions, their training must meet the specifications identified per job function. Their OSHA training, medical surveillance coverage, and respirator fit testing all must be current.

2.5. Other Employees Handling Wastes

Employees involved in any other waste handling operations (i.e. off-loading cars, stacking paints) must have completed HHW Orientation Training and attended the Project Site Safety Briefing. Any employee involved in any facet of preparing hazardous materials for transportation must have been trained and be current with DOT 8 hour training.

- 2.6. Site Safety Meeting
 - 2.6.1. After site setup, the CHES Site Supervisor must conduct a site safety meeting. The purpose of this meeting is to assure each crew member is aware of the following:
 - A. Requirements of the Clean Harbors HHW Guidelines;
 - B. Each Person's Role in the HHW Collection;
 - C. Location of Safety Equipment;
 - D. Contingency Plans;
 - E. Waste Packing Guidelines & Unacceptable Materials;
 - F. Chemical/Physical Hazards Associated with the Wastes and Collection Activities;
 - G. Personal Protective Equipment Requirements; and
 - H. Safety Precautions/Work Practices.
 - 2.6.2. The Site Supervisor will utilize the Site Safety Meeting Checklist and Acknowledgment in Appendix 3 to document the meeting. All individuals who will enter work areas must participate in the meeting and sign-off on the Acknowledgment. Other people at the site associated with the HHWC (local officials, volunteers, EPA personnel, etc.) also should be included in the safety meeting.

3. SITE REQUIREMENTS

3.1. Site Placement

Site placement requires careful consideration in order to ensure the safety of the operations, as well as the prevention of environmental contamination. Adequate room for collection activities, equipment, waste containers, and vehicle access/exit must be maintained. The following must be considered when determining the appropriate location of the waste collection area:

- 3.1.1. Appropriate sized operational area should be established to perform the project safely and efficiently.
- 3.1.2. Location: Open areas are preferable because of increased air movement (aids in dispersion of vapors);
- 3.1.3. Adequate space to allow access for emergency equipment (Fire trucks, ambulance, etc.).
- 3.1.4. Smooth traffic flow for entrance/egress of participants;
- 3.1.5. Adjacent property lines (i.e., homes, businesses) must be a safe distance from the collection area;
- 3.1.6. The nearest public highway must be a minimum of 25 feet from the collection area;
- 3.1.7. Car off-loading area at least 35 feet from the pour off or squisher operations;

- 3.1.8. No ignition sources within 35 feet if flammables/combustibles are being poured/squished; Proximity to a ground source for grounding if flammables/combustibles are being poured and/or paints squished;
 - 3.1.9. No smoking or underground storage tanks within 35 feet of consolidation area;
 - 3.1.10. Proximity to potable water and a telephone;
 - 3.1.11. Proximity of fire hydrants; Location where waste compactor truck (if applicable) can safely dump load in the event of an emergency (e.g. fire);
 - 3.1.12. Storage area for waste flammable/combustible drums and packed flammable/combustible materials at least 35 ft. away from potential fire sources, including waste compactor truck and/or roll-off containing empty containers from pour off or squisher operations.
- 3.2. Site Preparation

To further reduce the likelihood of environmental contamination and limit the migration of spilled material, the following site preparation must be performed:

- 3.2.1. Seal all storm drains; exceptions may be authorized by the Project Manager due to inclement weather;
 - 3.2.2. Lay poly in locations where waste will be handled. Include vehicle lanes if required by client. The use of plywood is optional for foot traffic areas. (Plywood may be re-used. Store outside in case of vapor generation. Plywood grossly contaminated or having a strong odor should be discarded properly.);
 - 3.2.3. Work tables will be set up by placing poly-covered plywood on top of 55 gallon drums;
 - 3.2.4. Designate emergency and spill equipment stations. (See Sections 4.3 and 4.4);
 - 3.2.5. Designate decontamination area;
 - 3.2.6. If applicable, restrict access to the collection and waste handling areas with caution tape;
 - 3.2.7. Indoor collection sites should be set up with general room ventilation;
 - 3.2.8. Indoor collection sites with pour-off and/or paint squishing areas will require local ventilation;
 - 3.2.9. Identify location where waste compactor truck (if used) can be dumped in the event of a fire within the truck and dumping becomes necessary (e.g. ordered by Fire Dept.). Location should be selected to minimize likely runoff of water during fire fighting activities, or alternately a location where containment material could easily be deployed by on-site personnel.
 - 3.2.10 Set up HHW Packing Compatibility Posters in readily visible locations
- 3.3. Site Setup



Five locations will be established to accept, consolidate and pack household hazardous waste: Off-loading; Segregation/packing; Pour-off/squishing; Command center; and Employee break area.

3.3.1. Off-Loading

- A. This is the location where household waste is removed from stationary vehicles and placed on segregation tables. Several lanes may be used. Poly should not be placed such that vehicle tires will ride over it, unless requested by the client. The traffic flow must be regulated to avoid overcrowding in the off-loading area. A clear lane must always be left open to allow emergency access in the event of an emergency. Designate the vehicle travel lanes with traffic cones. Residents should be encouraged to stay in their vehicles for their own safety.
- B. Certain materials are not acceptable for disposal at a HHW collection. (Refer to Appendix 1 for a list of the specific materials not acceptable at the collection event in question.) Waste should be inspected for unacceptable materials while still in the resident's vehicle and the resident informed of any waste, which cannot be accepted. Reactive materials (peroxidizables, multi-nitrated compounds, etc.) also should be identified at this point and handled per Appendix 5.
- C. Tables should be used for placement of waste containers removed from vehicles. Plastic or metal trays may be used to carry containers from vehicles to segregation tables to prevent spilling and contain any leaks. The tray capacity should be sufficient to hold the volume of the largest container being carried. The segregation tables should be covered with poly to protect surfaces. Caution tape should be set up to restrict access to the waste handling areas by residents or other non-CHES personnel.
- D. In the event of a leaking or spilled container in a vehicle, notify the Site Supervisor. The spilled material should be identified by labels, markings, or through customer questioning before handling. CHES is not responsible for spill cleanup in vehicles due to leaking containers and, therefore, will not perform any vehicle decontamination, unless a CHES employee has caused the spill. Absorbents (i.e. 3M pads, speedi-dry) and other cleaning supplies should be kept readily available in the unloading area for quick response to spills outside of vehicles.

3.3.2. Segregating/Packing

- A. This is the location where HHW is identified and then more specifically categorized for lab packing or pour-off/ squishing.
- B. Tables separating off-loading and segregating should be covered with poly and accommodate the following categories:
 - 1. Paints and Paint-Related Products;
 - 2. Solvents/Oils;
 - 3. Aerosols;
 - 4. Pesticides;
 - 5. Batteries;

5. Lab Packs; and,
 6. Others
- C. **Every loose packed and lab packed container requires a signed packing list.**
- D. A CleanPack-trained employee(s) will be located behind the receiving (off-loading) tables to supervise the segregation and placement of materials into packing containers according to the packing specifications. (See Appendix 4.) This employee must sign off on the packing list for each container that they supervise the packing of.
- E. Lab pack drums/flex bins will be arranged in the same manner as the receiving tables to minimize movement. Plywood will be used to cover the personnel traffic areas to increase traction and prevent rips in poly.
- F. Unidentified containers should be fingerprint tested by a CleanPack Chemist utilizing an unknown's kit in a designated area away from personnel. See the CleanPack Chemist Handbook for procedures. "Unidentified" is defined as an unlabelled container the resident has some knowledge of the identity of the contents. If the resident has no knowledge of the container contents, then the container will be considered an unknown and will not be accepted.

3.3.3. Pour-Off/Squishing

- A. This is the location where wastes capable of being consolidated on site are collected and consolidated via a pour-off operation. Also, paints may be consolidated via a hydraulic squisher device. A CleanPack-trained employee will supervise these operations and screen all containers to ensure only acceptable materials are poured/squished. Containers to be poured or squished will be transferred to poly-covered tables adjacent to the operation. Containers will then be opened and poured into a receptacle fitted over a collection drum or placed into the squisher. With the exception of motor oil, any pourable materials not in their original containers will be set aside for pH/oxidizer testing and separate consolidation utilizing compatibility ("bucket") testing.
- B. The setup should include the following:
1. Refer to Paint Squisher Work Plan (attached) for set up of and operation of squisher;
 2. Compatibility testing will be performed for pourable materials not in their original containers (exception: motor oil). Test buckets will be located in a drip pan;
 3. Absorbent will be readily available in the area;
 4. Proper bonding and grounding procedures (refer to the CHES Grounding and Bonding Guidelines) will be employed for pouring all flammable and combustible materials.
 5. A local exhaust blower will be set up to control/reduce employee exposure to vapors from flammable/combustible materials, if the operation is conducted indoors. The blower also will be properly grounded;

6. Restrict access to the pour area with caution tape;
7. A "Roll-off" or "trash compactor truck" may be located adjacent to the pour-off area for placement of discarded original containers. Refer to the CHES Confined Space Entry Guidelines for their possible applicability; and,
8. All filled flammable/combustible containers must be moved to a storage location at least 35 ft. away from pour-off/consolidation, and compactor truck or roll-off containing empty pour-off/consolidation containers. This is to minimize fire hazard in the event truck/roll-off or pour-off equipment catches fire.

3.3.4. Command Center/Main Emergency Response Station

A table will be set up as command center (CC) for the entire HHW collection. The location of the CC will be determined by the Site Supervisor and should be based on the layout of the other operations. The CC will be the location of first aid equipment and the main emergency response station (see Section 4.3 for specific equipment), as well as all the paperwork processing and other information associated with the HHW collection.

3.3.5. Employee Break Area

An area will be established by the Site Supervisor as an employee break area, where personnel can go to eat, drink, smoke, and rest. The area will be located 50 feet from any waste handling operations. The area should be established in a shaded location when the ambient temperature is above 80°F. Personnel must remove any PPE in the decontamination area before entering the break area and wash before they eat, drink, smoke, etc. Personnel must notify the Site Supervisor upon going to and returning from the break area.

4. EQUIPMENT REQUIREMENTS

- The following is a list of minimum equipment that will be required to set up and conduct HHW site activities. The amount of equipment will vary depending on the anticipated waste volume.
 - 4.1. Site Set Up
 - 4.1.1. 6 mil. or thicker poly sheeting. (Table covers, ground cover, etc.);
 - 4.1.2. Duct tape;
 - 4.1.3. Poly and steel 55-gallon 17H drums, 16-gallon kiln packs, and poly 5-gallon pails;
 - 4.1.4. 85-gallon overpacks;
 - 4.1.5. 1/2-inch plywood (Receiving tables, lay over poly in traffic areas etc.);
 - 4.1.6. Packing materials (vermiculite, etc.);
 - 4.1.7. Parafilm, Poly bags, 2 gallon buckets for damaged containers;
 - 4.1.8. Wind Sock or comparable indicator of wind direction;

- 4.1.9. Canopy tent for chemical handling areas may be required due to contact or inclement weather;
- 4.1.10. Site location may warrant caution tape and warning signs to be posted;
- 4.1.11. Command Center table to locate first aid and other emergency equipment and to display contingency plans, hospital directions, phone numbers, etc.;
- 4.1.12. "No Smoking" signs;
- 4.1.13. Traffic cones.
- 4.1.14. Packing Compatibility Posters
- 4.2. Pour-Off/Squisher Area
 - 4.2.1. Flexible grounding and bonding cables, including dip rods for bonding bottles/containers being poured;
 - 4.2.2. Iron or steel rod to install as ground source, if existing source not available (Refer to CHES Grounding/Bonding Guides.);
 - 4.2.3. Wire brush, scraper or sand paper;
 - 4.2.4. Continuity tester;
 - 4.2.5. Explosion-proof exhaust blowers required if operations are conducted inside closed facilities or non-ventilated areas. Duct to direct exhaust outside, downwind. Generator or compressor to power blower, if no power on site;
 - 4.2.6. Ground-fault interrupter circuit (GFCI) if generator or other electrical equipment is used;
 - 4.2.7. 2 x 20lb ABC-rated fire extinguisher;
 - 4.2.8. 17H steel 55 gallon drums;
 - 4.2.9. Secondary containment media;
 - 4.2.10. Pour screens or funnels;
 - 4.2.11. Metal 5 gal. pails for compatibility ("bucket") testing;
 - 4.2.12. Absorbent materials (speedi-dry, 3M pads);
 - 4.2.13. Non-sparking (brass) bung wrenches, shovel, and hand tools, when handling flammables;
 - 4.2.14. Opener for paint cans;
 - 4.2.15. Broom and dustpan;
 - 4.2.16. "No smoking" signs;
 - 4.2.17. Caution tape.

4.3. Command Center/Main Emergency Response Station

Safety Information Package: HHW Guidelines, emergency phone numbers, hospital directions and reference sources (Chemical Dictionary, DOT ER Guidebook & NIOSH Pocket Guide, CleanPack H&S Field Manual, Emergency Response Plan blank);

- 4.3.1. First aid kit;
- 4.3.2. Eye wash solution;
- 4.3.3. Hand-held air horn for emergency alarm signal;
- 4.3.4. Immediate access to telephone communications;
- 4.3.5. Wind sock (or comparable device) visible to all ops areas;
- 4.3.6. Combustible gas meter and organics meter required if operations are conducted inside closed facilities or non-ventilated areas.
- 4.3.7. Poly-Tyvek,
- 4.3.8. Chemical resistant gloves (i.e. nitrile, PVA, PVC and neoprene gloves);
- 4.3.9. Chicken boots or rubber overboots;
- 4.3.10. Duct tape;
- 4.3.11. 1 x 20 lb ABC-rated;
- 4.3.12. 1 x 30 lb D-rated fire extinguishers, or 5 gallon pail of dry sand/lime/salt;
- 4.3.13. Absorbent materials (speedi-dry, 3M pads, etc.);
- 4.3.14. Acid/base neutralizing materials;
- 4.3.15. Broom and non-sparking shovel or dust pan.
- 4.4. Spill Stations

There should be a minimum of two additional spill stations located in the off-loading area.

- 4.4.1. Absorbent materials. (speedi-dry, 3M pads, etc.)

4.5. Employee Break Area

- 4.5.1. Hand cleaning supplies, if not available on site;
- 4.5.2. Towels, if not available on site;
- 4.5.3. Cooler with water or other non-caffeinated beverage;

5. PERSONAL PROTECTIVE EQUIPMENT

5.1. Site Set-up/Breakdown

Personnel setting up and breaking down the HHW collection site will be dressed in Level D personal protection, which will include:

- 5.1.1. Work uniform;
- 5.1.2. Steel-toe shoes;
- 5.1.3. Safety glasses with sideshields;
- 5.1.4. Work gloves (if no chemical contamination) or PVC.
- 5.2. Off-Loading/Segregating/Packing

Personnel off-loading vehicles, segregating, and packing materials will be in modified Level "D" personal protection to include:

- 5.2.1. Tyvek disposable white coveralls or CPFI apron w/sleeves;
- 5.2.2. Steel toe shoes;
- 5.2.3. Puncture resistant gloves with nitrile inners;
- 5.2.4. Safety glasses w/sideshields or chemical splash goggles;
- 5.2.5. An increased level of respiratory protection and PPE may be warranted in specific situations. Leaking containers, spills or other instances where potential exposure may occur may require upgrading with the guidance of the Site Supervisor.
- 5.3. Pour-Off/Squisher Operations

Because of the handling of open containers, pour-off personnel shall don Level C personal protection. Minimum PPE for pour-off operations includes:

- 5.3.1. Full-face air purifying respirator with GMC-H or GME-H cartridges (Not required for personnel solely opening containers outside pour-off/squisher area or for personnel loading closed containers into squisher). Face shield w/safety glasses when respirator not used;
- 5.3.2. Poly-Tyvek suit or CPFI apron with sleeves;
- 5.3.3. Nitrile gloves - inner;
- 5.3.4. PVC or Nitrile - outer
- 5.3.5. Chicken boots or rubber overboots;
- 5.3.6. Steel toe shoes;
- 5.3.7. Hard hat for paint squisher loading.

In addition, all the gloves will be securely taped to further reduce the possibility of skin contact. Outer boots also will be taped in cases where a full suit is used.

6. CONTINGENCY PLAN

- 6.1. Introduction

- 6.1.1. To prepare for potential releases, spills or emergencies, a contingency plan must be developed. Prior to the HHW collection, the Site Supervisor or other CHES representative should visit the site to gather site-specific information, which will be included in Appendix 2. A traffic flow plan must be established that will allow emergency equipment (Fire Department, ambulance, etc.) access to the site in the event of an emergency. The proposed layout of the site in relation to neighboring structures and properties must also be identified. Location of fire hydrants, or lack thereof, must be identified. The fire department should be prepared in the event the site has no readily available hydrants.
- 6.1.2. Remember to keep access lanes to the site clear at all times. In the event of an emergency, Responders need to have direct access to the site. Traffic lanes should be prearranged so there is an open path at all times.
- 6.1.3. The Site Supervisor will serve as the Emergency Coordinator in the event of an emergency situation.

6.2. Emergency Information

Emergency information will be located at the Command Center table. The information will be placed on the table with the job folder. Information to be present should include a copy of the HHW Collection Guidelines containing the site specific information (contingency plan, emergency phone numbers, hospital directions, etc.) and safety references (Chemical Dictionary, DOT ER Guidebook, NIOSH Pocket Guide and any other emergency and safety contact information as specified in Appendix 2). The following services shall be included on the emergency phone list: Fire department, ambulance, hospital, poison information center, police department, state police, local CHES service center, and local CHES H&S Rep.

6.3. Emergency Actions

6.3.1. Spill or Chemical Release

In the event of a spill or release, the Site Supervisor will evaluate the situation and evacuate the site if necessary. A continuous blast of an air horn will signal the evacuation of the site. The Site Supervisor, with the assistance of the local H&S Representative, will decide how to respond to contain and clean up the spill/release. Ensure that wind direction is noted in determining evacuation assembly areas: locate upwind.

6.3.2. Flammable Conditions

Flammable conditions are not anticipated during this project. Pour-off operations will be conducted in well-ventilated areas. In the event that ventilation decreases and accumulation of flammable vapors occurs, the following actions will be taken:

- A. Cease all pour-off operations and evacuate the pour area.
- B. Eliminate all ignition sources. No Smoking.
- C. Stop the flow of cars into the area and have all cars in the unloading area exit immediately.
- D. If vapors do not dissipate in a short period of time (five minutes), notify the local official on site and the Fire Department. Contact the local CHES H&S Rep for assistance on how to proceed.

- E. Operations will not resume until the atmosphere is safe and the LEL is below acceptable limits.

6.3.3. Fire

In the event of a fire, an appropriate fire extinguisher may be used to fight a fire if it is in the incipient stage. The following additional actions should be taken:

- A. Cease all operations and evacuate the area of all unnecessary personnel. Ensure that wind direction is noted in determining evacuation assembly areas: locate upwind;
- B. Eliminate all ignition sources;
- C. Stop the flow of cars into the area and have all cars in the unloading area exit immediately;
- D. Notify the local official on site, the Fire Department and the local CHES H&S Rep.

6.3.4. Reaction

In the event of a reaction during pouring, the following actions should be taken:

- A. Cease the pour-off operations and evacuate the area. Ensure that wind direction is noted in determining evacuation assembly areas - locate upwind;
- B. Notify the Site Supervisor and the local CHES H&S Rep immediately;
- C. The Site Supervisor will evaluate the situation, evacuate the site if necessary, and decide on any further action.

6.3.5. Employee Injury or Exposure

- A. If an employee becomes injured or ill (i.e., heat-related illness), provide first aid and seek medical attention, if necessary. Notify the Site Supervisor and the local CHES H&S Representative immediately. If there is an injury involving blood, be sure to follow the CHES Bloodborne Pathogens Exposure Control Plan.
- B. If an employee experiences signs or symptoms of exposure to a chemical or physical hazard, remove the employee from the exposure situation. Decontaminate the victim, if necessary. Administer first aid and seek medical attention, if necessary. Notify the Site Supervisor and the local CHES H&S Rep immediately.

6.3.6. Evacuation

- A. In the event an evacuation of the work areas is deemed necessary by the Site Supervisor (also acts as the Emergency Coordinator), he/she will sound the air horn to signal the evacuation (signified by one long blast). All personnel will immediately cease working and evacuate to the assembly area designated in the site-specific information (See Appendix 2). Employees in the unloading area will stop the flow of cars into the area and have all cars already in the area exit immediately. The Site Supervisor will take a headcount in the assembly area to



account for all personnel. Ensure that wind direction is noted in determining evacuation assembly areas: locate upwind.

- B. Once the evacuation is complete, local law enforcement and on-site town officials will take over the security of the site and limit access. After it has been determined that the site is safe by town officials and the Site Supervisor, the "all clear" signal will be sounded with the air horn (signified by three short blasts).

7. AIR MONITORING

7.1. Employee Exposure

Air monitoring for employee exposures may be necessary. This will be determined by Health & Safety on a case-by-case basis. This may include, but is not limited to, monitoring with detector tubes, combustible gas meter, organics meter, or personal sampling.

7.2. Recording of Results

When specified, the Site Supervisor will be responsible for ensuring adequate air monitoring is conducted and the results recorded properly: direct reading instrument results shall be recorded on a CHES Health & Safety Atmospheric Monitoring Log and personal sampling data on a CHES Air Sampling Worksheet.

8. SITE SPECIFIC INFORMATION

- Site-specific information will be gathered prior to the start of the collection and reviewed by the Site Supervisor with the crew during the site safety meeting. Refer to the Site Specific Information Form in Appendix 2 for details on the HHW collection in question.

9. OPERATIONAL GUIDELINES

- At a minimum, the following steps must be followed during collection operations. It is the Site Supervisor's responsibility to ensure that all employees understand and follow the appropriate guidelines.

9.1. Off-Loading

9.1.1. When a vehicle enters the off-loading area, the resident will be instructed to remain in their vehicle. A CHES employee will then unload the vehicle. Carrying trays or carts may be used to transport the waste containers from the vehicles to the segregating tables.

9.1.2. Waste should be inspected for unacceptable materials while it is still in the resident's vehicle. Unacceptable waste, per Appendix 1, shall not be accepted. High hazard materials (peroxidizables, multi-nitrated compounds, etc.) will be handled per Appendix 5. ENSURE THAT THE PROCEDURES DISCUSSED IN APPENDIX 5 ARE REVIEWED WITH CLIENT PRIOR TO THE COLLECTION. If a large volume of waste is in closed bags or boxes, they may be brought to the segregation tables for unpacking. The resident should not be allowed to leave until the waste has been screened.

9.1.3. In the event of a leaking or spilled container in a vehicle, the material should be identified by labels, markings, or through customer questioning before handling and then overpacked appropriately. The vehicle owner is responsible for decontaminating the vehicle. Only if a CHES employee is responsible for the

spilled material in the vehicle should CHES perform any decontamination. Notify the Site Supervisor in either case. After a CHES decon has been completed, the Site Supervisor should inspect the car.

- 9.1.4. All containers should be checked for labels and the driver asked to confirm the contents. If there is no label and the driver can identify the container's contents, it must be written on the container.
- 9.1.5. In the event an unidentified container is received; it should be fingerprint-tested by a CleanPack Chemist utilizing a fingerprinting kit in a designated area away from personnel. See the CleanPack Chemist Handbook for procedures. Fingerprinted containers must be lab packed for incineration, not poured off. "Unidentified" is defined as an unlabelled container the resident has some knowledge of the identity of the contents. If the resident has no knowledge of the container contents, then the container will be considered an unknown and not be accepted.
 - A. The Site Supervisor should be available to make decisions on what materials are acceptable for collection. Also, refer to Appendix 1 for a list of unacceptable materials.
 - B. Immediately overpack any leaking containers according to the CleanPack Packing Guidelines.
 - C. If a spill occurs, all operations should stop until the situation is under control and the spill is cleaned up. (See Section 6.2.1, Contingency Plan).
 - D. Containers should not be opened in vehicles for any reason.
 - E. When placing collected waste on segregation tables, check to make sure each piece is in the correct category. Any questions on the appropriate category should be directed to the CleanPack Chemist or the Site Supervisor.
- 9.2. Segregating
 - 9.2.1. Personnel segregating and packing wastes should be CleanPack trained or under the direct supervision of personnel who have completed said training.
 - 9.2.2. Ensure drums are labeled, segregated, and staged properly. Drums should be arranged in the same manner as the receiving tables to reduce movement and handling.
 - 9.2.3. Ensure containers are packed according to the packing specifications given in Appendix 4.
 - 9.2.4. Immediately overpack leaking containers according to the CleanPack Packing Guidelines.
 - 9.2.5. If a spill occurs, all operations should stop until the situation is under control and the spill is cleaned up (See Section 6.2.1, Contingency Plan).
- 9.3. Pour-Off/Squishing
 - 9.3.1 Personnel pouring/squishing will be supervised by an employee who has completed CleanPack Training. They will oversee this operation and screen all containers to ensure only acceptable materials are poured or squished.

- 9.3.2. It is recommended that the pour-off/paint squishing area be located 35 ft. from the car unloading area, potential ignition sources, and the nearest public way; and recommend 50 feet from adjacent property lines if the site allows for that.
- 9.3.3. Set up the paint squishing operations according to the Paint Squisher Work Plan. (See Appendix 8, attached.)
- 9.3.4. Establish one collection drum for each waste stream being consolidated as indicated in the packing specifications in Appendix 4. Ensure secondary containment is in place.
- 9.3.5. If the pour-off or paint squishing operations are conducted indoors, set up the blower to remove vapors. Direct the discharge duct to the outside at least 5 ft. above ground and downwind, away from personnel and ignition sources.
- 9.3.6. Assure bonding and grounding wires are attached to a clean, non-corroded, non-painted metal surface on the collection drums and/or the squisher. Use wire brush or other device to remove rust or paint from drums to attach grounding wires. Also ground the blower, if utilized, and the bucket for compatibility testing. Refer to the CHES Grounding and Bonding Guidelines.
- 9.3.7. Establish a ground source. Examples of ground sources, which may exist on site, include fire hydrants, utility pole grounds, electrical system grounds, and cold water pipes. If no existing ground source is present, establish a ground by sinking a ground rod 3 ft. below surface or by submerging a ground rod at least 1 ft. under water in any natural body of water (i.e., stream, pond, etc.). Wet the ground around the rod if it is dry. Check bonding continuity with test device to ensure the resistance of the connections is low (<20 ohms) or shows as being acceptable on test device.
- 9.3.8. Prior to opening or consolidating any materials, don PPE.
- 9.3.9. With the exception of motor oil, any pourable materials not in their original containers will be set aside for pH/oxidizer testing and separate consolidation utilizing compatibility ("bucket") testing. Monitor for any possible reaction between materials (smoking, fuming, spattering, heat generation, etc.). If a material reacts, do not pour it. Lab pack the container for incineration and start a new bucket test.
- 9.3.10. After solvent containers are opened, insert bonding wire/rod and bond to the collection drum, then begin pour off.
- 9.3.11. If direct-reading instrumentation or personal air monitoring is specified by Health & Safety, monitor the area while pour off/squishing operations are conducted. Document readings.
- 9.3.12. As soon as a drum is full, it should be closed and labeled before another drum is started. Full drums should be moved to the designated storage area.
- 9.3.13. Keep ample absorbents (speedy dry, 3M pads) in area and clean up all spills immediately.
- 9.3.14. Chemists and pour-off personnel should ensure that non-pour off containers (e.g. empty cans or containers brought in by homeowners) are not thrown into the compactor truck or roll-off if there is any possibility they may contain residual chemicals, (e.g., oxidizers) which could react with flammables/combustible material, or cause other reaction. Any containers with any residual material will be lab packed.

- 9.4. Packing/Shipment
- 9.4.1. Pre-transportation and transportation requirements will be adhered to for packing and shipping all waste containers generated at the HHW collection.
- 9.4.2. All lab pack containers shall be packaged with appropriate absorbent material per standard lab pack procedures.
- 9.4.3. Reference packing specifications in Appendix 4 for specific requirements of waste stream packaging for the contract.
- 9.4.4. All drums generated from the pour off and paint squishing operations shall be checked to ensure container integrity and no exterior contamination.
- 9.4.5. All containers shall be checked to ensure proper DOT labeling and other appropriate waste stream information is communicated properly.
- 9.4.6. All waste must be packaged and labeled in accordance with the applicable special permit where required.
- 9.4.7. A drum count will be taken to ensure accuracy before shipment. (Use of a standard count sheet to reflect piece size and quantity is recommended.)
- 9.4.8. The Site Supervisor (or the designated person responsible for the generation of appropriate manifests, shipping documents, and other associated documentation) will review all shipping documents with the driver(s) before departure to ensure the completion of all forms as required including packing lists signed by packing supervisors verifying proper packaging. This person will also ensure with driver(s) that appropriate vehicle placarding is in place and load is secure.
- 9.4.9. If requested, the Site Supervisor will phone destination plant to communicate the size of the inbound shipment.
- 9.5. Listed DEA Controlled Substances will NOT be accepted at HHW events.
- 9.5.1. Controlled substances are defined by the Controlled Substances Act of 1970, as “a drug or other substance, or immediate precursor, included in Schedules I - V of part B of this title.” (See 21 CFR 1308.11 through 1308.15). See Appendix 10 for detailed list of Schedule I – V DEA Controlled Substances.
- 9.5.2. Criteria for Schedules are as follows:
- Schedule I
Criteria for listing:
- High potential for abuse
 - No currently accepted medical use in treatment in the U.S.
 - Lack of accepted safe practices for use under medical supervision
- Schedule II
Criteria for listing:
- High potential for abuse
 - Currently accepted for medical use in treatment in the U.S. with severe restrictions
 - Abuse may lead to severe psychological or physical dependence

Schedule III

Criteria for listing:

- Moderate potential for abuse (less than Schedule I or II)
- Currently accepted for medical use in treatment in the U.S.
- Abuse may lead to moderate to low physical or high psychological dependence

Schedule IV

Criteria for listing:

- Low potential for abuse (less than Schedule III)
- Currently accepted for medical use in treatment in the U.S.
- Abuse may lead to limited physical or psychological dependence (less than Schedule III)

Schedule V

Criteria for listing:

- Low potential for abuse (less than Schedule IV)
- Currently accepted for medical use in treatment in the U.S.
- Abuse may lead to limited physical or psychological dependence (less than Schedule IV)

9.5.3. In the event a DEA Regulated Substance is discovered when unpacking offloaded material, the HHW Project Manager/Supervisor is to be immediately notified. The HHW Project Manager/Supervisor will then work with the on site customer contact to immediately surrender this material to law enforcement authorities.

9.6 Segregation

9.6.1 All trucks must be loaded in accordance with 49 CFR 177.848.

9.6.2 Exceptions to this table are only allowed if materials are packaged in accordance with 49 CFR 173.12 as it relates to acids, cyanides, and 4.2 materials or if a DOT special permit is utilized.

9.6.3 Whenever a DOT special permit is utilized, the SP number must be identified on the manifest and a copy carried aboard each vehicle. In addition, all terms and conditions of the special permit must be followed.

9.7. Each vehicle must be loaded and secured to ensure that:

- The floor and walls of the trailer are inspected to ensure there are no sharp objects that could puncture/damage a package.
- Each pallet that is used is free of protruding nails/screws, is sized for the container(s) being placed on it (i.e. a flex bin, 4 drums, etc.) and there are no broken or damaged components.
- Under normal transportation conditions (this includes hard braking, turns, uneven road surface, evasive maneuvers, etc.) the containers will be secured to prevent movement in any direction – this includes double stacked loads. This includes both forward and rearward movement and side to side. Particular attention must be placed on the types and size containers loaded. For example, a poly drum between steel presents a crush and rupture hazard. Smaller containers placed either in front of or behind larger containers will need load locks on both sides to prevent tipping (even light tipping) as a vehicle accelerates or decelerates. This action can cause damage to drums when they return to the upright position.

- Particular care must be taken to ensure both axle and gross weight restrictions are not exceeded.
- There may be no loose or unsecured loading in any vehicle (e.g. propane cylinders, E-wastes, etc).

9.8. Double Stacking may only be employed as outlined in the transportation manual

When double stacking containers within a transport vehicle, the following requirements must be followed:

1. Only vehicles that are equipped with secondary containment may be used for shipments containing double stacked containers;
2. Containers may not be stacked more than 2 high;
3. Liquids (other than labpacks) may not be stacked on top of other containers;
4. U.S. Department of Transportation segregation requirements found in 49 CFR 177.848 must be followed. Under no circumstances may Class 8 material be loaded next to, adjacent to or above Class 4 or 5 materials;
5. Class and Divisions 2.1, 2.2, 2.3 (except for aerosols packaged in accordance with the limited quantity exemption found in 49 CFR 173.306) 4.2, 4.3, 5.2, 6.1 (poisonous by inhalation materials) and PCB's are prohibited from being double stacked;
6. All containers must be adequately blocked and braced to prevent any movement between containers;
7. Vehicle weight limits (both gross vehicle weight and axle weights) must be within regulatory limits;
8. All shipments must be accompanied by a completed load preparation checklist;
9. No container may be double stacked which will crush or damage the container it is loaded above (i.e. Flex bins and Cubic yard sacks).
10. Flex bins may be double stacked on 4/55 gallon steel drums.

10. MISCELLANEOUS

10.1. Additional Information

10.1.1. Refer to the following CHES Health & Safety Programs/Guidelines for additional guidance and information.

- A. Paint Squisher Work Plan
- B. Heat/Cold Stress
- C. Drum Handling
- D. Decontamination
- E. Grounding and Bonding Guidelines
- F. Physical Hazard Control Checklists
- G. Asbestos Handling
- H. Respiratory Protection
- I. Personal Protective Equipment (PPE)
- J. Blood borne Pathogen Exposure Control Plan for First Aid Responders
- K. Confined Space Entry Guidelines

10.2 Media Relations

10.2.1 If there is potential for media coverage of the event, contact Public Relations at Corporate in advance for assistance. The following should be utilized in addition to guidance from Corporate:

- Only the Site Supervisor should interact with the press.
- Stick to simple, straight answers.
- No statements on the company's behalf unrelated to HHW events. (Do not discuss pricing or costs).
- Press may contact Corporate Office for any other company related questions.
- Photographs of the event are allowed - No unauthorized people should be in the work area (behind tables, pour-off area, paint-squisher area).

10.3 Bulk Containers from Households (Drums)

10.3.1 CHES facilities require a profile to receive materials that exceed Lab Pack quantities. We may not accept any bulk wastes during collection events unless the drum matches a CHES profiled waste for the HHW. If the drum cannot be taken, instruct the customer to contact CHES directly for disposal information. Write the license plate number of the vehicle on the drum before customer leaves with it to allow identification in case of illegal disposal..

10.3.2 Drums must be inspected to ensure they are DOT shippable, i.e. no residual material on external surfaces, all original closures in place, DOT rated containers, etc.

10.3.3 Salvage drums must be kept on-site. In the event that the use of a salvage drum is required it must be prepared, marked, and labeled appropriately. See DOT Manual for guidance.

10.4 Billing the Collection

10.4.1 Pricing Issues

- Know the contract amount and pricing before collection begins and keep track of it. If you don't have contract pricing information ask your RCC before the collection begins
- Attempt to discuss all pricing issues with the Municipal representative.
- We must get a signed **Change Order Form** if we are going to exceed the contract price for the collection event!
- Authorized representatives of the municipality must approve exceeding the contract amount and must sign off on the Change Order

10.4.2 Job Sheet

- The customer must sign the Job Sheets!
- In the event of multiple job sheets, list all disposal on first job sheet
- Capture all personnel (including subs), equipment, supplies used, regardless of what items we are billing for. Use multiple job sheets if necessary
- All Clean Harbors Employees must appear on the job sheet to get paid.



APPENDIX 1: Unacceptable Materials List for HHW Collections

NOTE: The Unacceptable Materials procedures must be reviewed with the client contact prior to the initiation of the HHW to ensure client is well aware of protocol to be followed.

CHES can handle the majority of waste generated in households; however, some waste materials are not acceptable. CHES reserves the right to decline to accept for disposal material which it can not dispose of in a lawful manner or without risk of harm to public health or the environment. When off-loading personnel encounter a material that is unacceptable for collection at HHW events, the site supervisor should be notified immediately. The site supervisor should notify the HHW sponsor and have them make the decision to reject.

Common unacceptable materials may include:

- Biological/Infectious Waste (i.e. sharps)
- Radioactive Materials
- Unknowns
- Tires
- Appliances
- Non-Propane Cylinders
- Fire extinguishers
- Smoke Detectors
- Fireworks/Explosives/Ammunition
- Reactive Materials Requiring Stabilization
- DEA Regulated Substances
- Any Item Restricted from the Receiving CHES Facility
- Any item prohibited from transportation per DOT and CHES

As well as the below listed items specific to _____ HHW Collection _____ (date)

At _____ (Location)



APPENDIX 2: Site-Specific Information for HHW Collections (or equivalent form)
(Page 1 of 3)

SITE NAME: _____

SITE LOCATION: _____

COLLECTION DATE: _____

SITE SUPERVISOR: _____

SETTING: _____ OUTDOOR _____ INDOOR

SURROUNDING AREA:

_____ URBAN _____ RURAL _____ RESIDENTIAL _____ INDUSTRIAL
_____ OTHER (Specify) _____

BODIES OF WATER NEIGHBORING SITE:

_____ STREAM _____ RIVER _____ POND _____ LAKE _____ BAY _____ OCEAN
_____ OTHER (Specify) _____

PROPERTIES/OPERATIONS ABUTTING THE SITE & CURRENT USE:
(NOTE: SPECIFY APPROXIMATE DISTANCES TO WORK AREAS)

North: _____

South: _____

East: _____

West: _____

CLIENT SITE OPERATIONS:

LOCATION OF GROUND FOR SOLVENT POUR OR SQUISHER OPERATION:

LOCATION OF EVACUATION ASSEMBLY AREA:

LOCATION OF EMPLOYEE BREAK AREA:
