



# Guidance Manual for Paint Reuse Programs

Prepared by the:

Paint Product Stewardship Initiative Facilitated by the Product Stewardship Institute, Inc.

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# I. Preface

ince December of 2003, the Product Stewardship Institute, Inc. (PSI) has facilitated a national dialogue aimed at reducing the generation of leftover paint, while increasing reuse and recycling opportunities. The ultimate goal of the Paint Product Stewardship Initiative (PPSI) is to develop a nationally-coordinated leftover paint management system. With the avid support of dialogue participants from over 60 companies, industry associations, and government agencies, these discussions have resulted in a Memorandum of Understanding (MOU). The MOU is a bold agreement among partners with varying views on how to manage leftover paint in a way that is both cost-effective and protective of the environment. The MOU outlines work on 11 projects over 18 months that will become the basis for developing a nationally coordinated paint management system. It was determined by PPSI stakeholders that the highest and best use of leftover paint is reuse, which led to the preparation and distribution of this Guidance Manual as one of the eleven projects to be implemented.

It is hoped that this document will encourage new paint reuse opportunities, which will ultimately reduce the volume of leftover paint that requires higher levels of management, thereby reducing the cost of a nationally coordinated system to manage leftover paint.

Background information for this project, as well as the other MOU projects and the PPSI as a whole can be found on the Product Stewardship Institute's website at:

http://www.productstewardship.us/prod\_paint\_nat\_d ia.html.

The PPSI group has also developed a Consumer Paint Management Guidance, which is available as an appendix to this document. NPCA also established a website in partnership with Earth 911. This site provides guidance on the management of leftover paint, including linking visitors, by zip code, to paint reuse facilities. Please visit the Earth 911 website at:

www.Earth911.org/recycling/paint-recycling/.

If you are able to start a paint reuse project as a result of the information provided in this document, please do two things:

- ✓ List the reuse facility with Earth 911 by calling 480-889-2650.
- ✓ Contact PSI at 617-236-4855 for documentation and performance purposes.

To remain current and useful, this document may be updated in the future. Please call NPCA at 202-462-6272 or PSI at 617-236-4855 for the current paint project contact. For the most current edition of this manual, go to PSI's website (<a href="www.productstewardship.us">www.productstewardship.us</a>) or NPCA's website (<a href="www.paint.org">www.paint.org</a>).

# **II.** Introduction

he development of effective, economical programs for the proper management of post-consumer paint is in the best interests of government, industry, and the public. One type of program that has been successful for states, municipalities, non-profits, and other organizations is a reuse program. There are many benefits to having paint reuse programs:

- ✓ The donation of surplus materials, such as paint, provides companies and individuals with a nocost method to support nonprofit agencies and their communities.
- ✓ By donating surplus materials to be redistributed, resources can be conserved.
- ✓ Reuse programs serve to educate the public about the proper use and disposal of hazardous household materials generally.
- ✓ Reuse programs encourage good consumer habits and an overall consciousness about environmental stewardship.

The purpose of this Reuse Guidance Manual (Manual) is to provide interested stakeholders with the resources necessary to establish a successful paint reuse program and to provide existing reuse programs with best practices for more effective operations. The Manual outlines various program models along with benefits and perceived barriers to starting reuse programs; highlights successful programs already in place; describes the factors that must be considered when starting a reuse program; and links the user to more detailed resources for particular programs. The detailed appendix contains a wealth of information from leading paint reuse programs in the United States. These case studies will offer specific approaches that are outlined more generally throughout the Manual.

While the types of reuse programs vary, the basic premise – that large quantities of usable paint that would otherwise be disposed of can be reused – provides the backdrop for this Manual. Post-consumer paint has been identified as a top concern for state and local agencies based on its high volume in the

waste stream, subsequent costs to manage, and high potential for increased recovery, reuse, and recycling. Leftover paint presents unique opportunities in that it is a product that, when fully used, can be completely diverted from end-of-life management challenges. A safe and effective reuse program can achieve maximum diversion of reusable paint from disposal or otherwise costly end-of-life management options. Furthermore, a safe and effective reuse program can realize significant cost savings as compared to the traditional management of postconsumer paint. A carefully planned reuse program can reduce the quantity of waste to be managed as waste, particularly household hazardous waste (HHW), thereby reducing the cost of current state and local government waste management programs. This Manual outlines reuse programs that include straight donation, exchange, and consolidation and reblending of post-consumer paint. For the purposes of this Manual, however, reuse does not encompass recycling of post-consumer paint.

For the purposes of this document, the following definitions apply:

**Reuse** – paint that remains in the original can and is given to someone else to use, or paint that is collected and simply mixed and then sold or given away without any virgin materials added.

**Reblending** – consolidation or blending of leftover paint without further reprocessing.

**Recycling** – reprocessing of paints that are collected, filtered, and processed using virgin materials that are added to ensure high-quality end product.

This Manual outlines the general aspects of successful reuse programs and describes some factors to be considered when starting or running a program. The information contained in this document is believed to be reliable and accurate. However, neither the National Paint and Coatings Association, Inc. nor the Product Stewardship Institute, on behalf of the Paint Product Stewardship Initiative (PPSI), can assume any liability for actions taken or reliance on information contained herein.

DISCLAIMER: This Manual is a guidance document only, and no warranty, representation, or guarantee is made by NPCA or PSI as to the correctness or sufficiency of any information or recommendation contained herein. The Manual should not be considered legal advice, and legal counsel should be consulted to answer specific legal questions regarding the application of law to you or your organization.

# **III. Types of Paint Reuse Programs**

There are various types of paint reuse programs, including, exchanges, donations, and resale, as well as reblending and recycling operations. For the purposes of this Manual, reblending is defined as paint consolidation – emptying paint out of the original containers into larger containers, where it is blended without the addition of virgin materials or further processing. Recycling operations, by contrast, are those operations that reprocess leftover paint, blending old and virgin paint (or other virgin materials) to produce a percent recycled content paint product. This Manual only covers traditional reuse operations and does not include paint recycling operations. For a list of recycled paint manufacturers, see PSI's website, at

http://www.productstewardship.us/displayPage.php? pageid=73. For paint recycling programs in your area, contact Earth 911, at http://www.earth911.org/recycling/paint-recycling/

# A. Paint Exchanges/Drop and Swap

Paint exchanges, also known as "drop and swap" offer a low-cost and low-tech option for diverting reusable paint from the waste disposal stream. At a paint exchange, people drop off paint products at a designated location and others pick up useable paint products. Good quality latex and oil based paint can be given away for reuse in their original containers. Paint exchanges can be held as separate events or in conjunction with other events, such as community and nonprofit events and household hazardous waste (HHW) program events. These exchanges can significantly reduce the total volume of paint otherwise set for disposal, as provided in the case studies conducted for this Manual, which ranged from 9%-60%. This is true especially in areas with increased community awareness and participation.

# Benefits of a Paint Reuse Program

- ✓ Significant cost savings to community program and consumers;
- ✓ Provides an outlet for unwanted but usable leftover paint;
- ✓ Can substantially reduce the amount of leftover paint that is needlessly disposed;
- ✓ Saves consumers money;
- ✓ Provides an outlet for donations of leftover paint to worthy civic and community causes and organizations;
- ✓ Is relatively free of regulatory barriers;
- Relatively easy to conduct especially in conjunction with regular household hazardous waste collection;
- ✓ Is good for the environment; and

It's the highest and best use for leftover paint!

# Perceived Barriers to Starting a Reuse Program and Possible Solutions to Overcome Them:

Risk management concerns such as getting sued

Solution: California's AB 2202 provides a blanket indemnity for these programs if there is a quality assurance plan developed and liability waiver forms are used – this legislation is provided in the Attachments, as well as sample waiver forms.

2 Paint exchanges that are not part of HHW events can lead to negative publicity because people come to drop-off materials and are sent away and will sometimes illegally dump it.

Solutions: 1) Having specific advertisements so it is very clear that it is a paint reuse facility only and that other materials can be brought to other locations; 2) New Hampshire has pamphlets they give to people that bring improper materials to the paint reuse program, so they can easily find the facility that does accept those materials.

- **3** Insufficient staff to monitor the site. **Solution:** Promote the facility using existing staff by trying to co-locate the reuse area with other programs that have staffing, such as a transfer station, retail store, reuse store, HHW facility, landfill load-check area, or other program.
- 4 Not all paint left is reusable, which can lead to the facility becoming an HHW generator and having expensive management problems.

  Solution: Train staff to reject unusable paint and/or have a working relationship with an HHW facility so the site can accept paint that cannot be reused.
- on-site because they are considered hazardous material. In California for example, oil-based paint cannot be stored outside of an HHW facility.

  Solution: Don't accept non-paint products for reuse at the site of exchange collect the material at an HHW facility. For example, San Mateo County, California has a warehouse to give away HHW that is physically separate from where it was accepted at the HHW program. Another solution is to consider accepting paint at the landfill load-check site where they have proper storage areas for all HHW.

# **B.** Paint Donation/Resale

Paints and coatings are often needed from community groups and non-profit reuse organizations. Smaller amounts of paints can be useful for theater groups, schools, churches, and other similar community members. Larger amounts may be required for housing agencies, civic organizations, graffiti abatement groups, and nonprofit reuse organizations. Those who donate to nonprofit organizations may be eligible for a tax deduction and should check with their accountant. In the case of reuse organizations, the donated paint is offered for free or at a low cost to provide affordable building materials for housing and community improvement projects. Donation and resale of usable paint can significantly redirect materials bound for disposal and put them back into productive use.

# C. Paint Consolidation

Paint consolidation or paint bulking can be used to make transportation, storage, and distribution of large quantities of paint easier and more efficient. Similar grades and colors of paint from one gallon and smaller containers can be consolidated into 5 gallon or 55 gallon drums. This also facilitates recycling of the empty paint containers as well. By consolidating the paint into larger containers and blending into uniform colors, it is generally easier to find end users that will regularly accept the paint. Reuse organizations, graffiti abatement groups, and housing agencies often prefer having the paint bulked, as it provides a relatively consistent source for larger projects. As mentioned above, paint consolidation is different from paint recycling, which takes added steps to reprocess the leftover paint into a new paint product with recycled paint content. Paint recycling operations, on the other hand, prefer that the leftover paint be kept in its original container and not bulked. This Manual does not address paint recycling operations.

# IV. Establishing A Program

Establishing a reuse program requires several steps and decisions that are interrelated. Each step should be evaluated to ensure that all aspects of the program are considered and well integrated. Existing programs can benefit from this evaluation, and can ensure that programs are being run as effectively and efficiently as possible. A successful program should have well established goals and performance measures; an adequate infrastructure; meet all state and federal regulatory requirements; address potential liability concerns; meet operational needs; have a developed paint sorting and container recycling plan; and establish an appropriate marketing plan.

# How to Run a Reuse Program: Run it like a business Write a business plan Establish your goals and performance measures Use partners such as volunteers, community groups, and local businesses View reuse as an opportunity for environmental, social, and economic success Hire dedicated staff who are loyal to the mission Market your services

# A. Establish Goals

Program goals should include the type and number of participants you wish to include, the types of products you want to include, the quantity of the products, and the percent of diversion and/or the cost savings you wish to achieve. A good first step after reading through the Manual is to review the programs outlined in the case studies provided in Appendix A.

# 1. Products

The type of product provides a basis for the program's operational scope and goals. Carefully analyze whether the program will offer oil, latex, and aerosols products, or limit the product line to latex or non-aerosols only, for example. Develop

stringent criteria in order to adhere to your goals. Oil based paints, as stated below, are considered hazardous waste and must be handled accordingly. Aerosol paints must also be handled differently in order to address their specific properties as well as certain anti-huffing and graffiti regulations. Once the type of product or products is identified, a protocol must be established to determine what products in that category will be accepted. The amount of paint left in the original container, the age and condition of the leftover paint, and the condition of the label and container are all aspects to be taken into consideration when determining a protocol. A sorting protocol for some programs must also be established, especially for programs that accept all three types of paint and for consolidation programs. Sorting is discussed below at paragraph (g). Lastly, programs must recognize that a portion of the materials received will no longer be useable, and will have to be accounted for. Although unusable as paint, some paint products can continue to be diverted from the waste stream through recycling opportunities and alternative disposal options, but ultimately, paint that is received through a reuse program that cannot be reused should be managed as a waste.

# How to tell if your paint is Latex or Oil?

# 1. Read the Label

- For solvent-based paint, you'll often see the words "alkyd" or "oil-based" on the label.
- If the Clean-up instructions say to use mineral spirits or turpentine to clean your brush or roller, it is oil; if it says to use soap and water, it is latex.

# 2. Check the Paint

 Put a small amount of paint in a jar or cap and mix with water, if it is latex it will mix; if it is oil it will not.

# a. Types of Paint

The categories of paint vary from architectural to specialty to original equipment manufacture. In addition, paints can be divided into the following types – water-borne or latex paints, solvent-borne or oil-based paints, and aerosol or spray paints. For the purposes of this Manual, only architectural paints – latex, oil, and aerosol – are considered, as these are the types of leftover paint that are typically generated by the consumer.

### i. Latex

A significant percentage by volume of leftover paint that is collected is latex or water-based paint. While approximately 80 percent of current sales of architectural coatings are latex paint, about 60 percent of the leftover paints returned for collection are latex. These paints might also be called vinyl or acrylic based paints depending on the ingredients used. Water is the solvent. As it evaporates, the color remains. They contain four basic components: resins, which form a film or coating on the surface; solvents, which keep the resins liquefied until the paint is applied; pigments, which provide the color; and additives or fillers, which are used as driers, thickeners, antimicrobials, and anti-foaming agents. Water-based latex paints are easy to apply, fast drying, have little to no odor and vapors, can be easily cleaned-up with soap and water, are non-flammable and non-toxic, and are generally considered non-hazardous material for the purpose of collection, transportation, treatment, and recycling or disposal. While heavy metals such as lead and mercury have been banned for use in paint, older latex paints may still contain these constituents, which require handling as a hazardous waste.

# ii. Oil

A shrinking percentage by volume of leftover paint that is collected is oil or solvent-based paint. While approximately 20 percent of current sales of architectural coatings are oil-based paints, about 40 percent of the leftover paints returned for collection are oil-based. As their name indicates, solvent-based paints, sometimes referred to as "oil-based" or "alkyd" paints, contain a significantly higher level of organic solvents than water-based paints. They often have a strong odor, take a longer time to dry, and must be cleaned up with mineral spirits or turpentine. Oil-based paints are hazardous because they are ignitable, and the collection, transportation, treatment, and disposal are governed by a host of federal and state regulations. In addition, the higher the solvent content the greater amount of Volatile Organic

Compound (VOC) content. When released into the environment, VOCs react to form low-level ozone or smog. Thus, oil based paints present a greater challenge to manage and reuse than latex paints. Again, older paint formulations may still contain heavy metals and other constituents that require additional careful handling and management.

# iii. Aerosol

Aerosol paints or spray paint as it is commonly referred to, can be oil or latex paints. Spray paint uses an additional ingredient as a propellant for the delivery of the paint. Aerosol propellants contribute to low level ozone development or smog, and older paints may contain fluorocarbons as the propellant, which contributes to the depletion of the ozone layer. The propellant also creates an inhalation hazard. Thus, safety precautions must be followed in the collection, transportation, management, and disposal of aerosol paints. There are also certain state and local sale and use restrictions that govern aerosol products specific to anti-huffing and graffiti regulations.

# 2. Customers

Determine who can receive the reused paint products. While there are certain procedures that apply to all types of recipients, many aspects of a program will vary depending on the type of recipient, such as the types and amounts of products accepted, staff time, liability issues, marketing aspects, and the type of management infrastructure.. Types of customers may consist of municipal employees local businesses and contractors, non-profit organizations, specific citizen populations (such as city or county residents), or the general public.

Reuse programs can focus on selected businesses and similar end users. Programs can identify in advance certain business needs and collect those products and the quantities requested, contacting the businesses as the products are collected. This is often the case with anti-graffiti programs, housing and community development programs, and other reuse and surplus organizations. Some HHW reuse programs focus on employees within the same municipality or county to take reusable products for their own home use. This is often a good way to gain experience with a product reuse program and build confidence in the screening process, while minimizing the likelihood of a liability claim. Some programs merely offer paint products for municipal

or county departments for use on government property. Parks and recreation departments use paint for fields, stadiums, and other recreational areas. Public works departments use paint for fences, garages, and warehouses. And school departments use it on school structures and theater sets. These local options enable a program to gain operational experience for possible future expansion, while limiting liability.

If a reuse program is going to be open to the general public, additional measures are recommended to ensure program efficiency and operational effectiveness, such as specific hours of operation, detailed advertisement and informational messages, increased staff oversight, and expanded liability protection. You may also wish to restrict the type of public allowed. Often, HHW programs limit the public customers to residents of the local or regional area that they serve. Non-profit reuse organizations may use classification restrictions, ranging from public citizens to private business to other non-profit organizations and government programs, and will charge membership fees based on the customer category.

### 3. Performance Measures

Setting program goals and clarifying program operations and product acceptance criteria establishes a benchmark by which the program's effectiveness can be evaluated. Programs can focus on a variety of factors, including source reduction, waste reduction, increased participation, increased awareness, changes in consumer behavior, or cost savings. While waste reduction is generally the primary goal of a reuse program, an effective reuse program can assist source reduction efforts as well. First, it may attract an entirely new group of participants who you can educate with source reduction information and, second, the information may reach these participants at a time when they are receptive to its messages. Thus, it is essential to develop appropriate materials, market a reuse program to new sectors of the community, and provide those participants with relevant information on the products being offered.

For paint, source reduction should focus on buying only the paint you need – reducing the chance of having any paint leftover in the first place. It should also focus on proper paint storage and on tips for using all the paint purchased for the specific job or other jobs around the house. For example, as outlined in the Leftover Paint Management

Guidance Document in Appendix D, consumers can be instructed on tips for storing paint so that it lasts for years and can be effectively used for touch-up or as primer for subsequent painting projects. Educating consumers to avoid creating waste from the start should be the first step in a source reduction objective. An ancillary source reduction benefit of a reuse program is that participants who use up partially full containers of paint are not buying new virgin products, so they conserve the resources required to manufacture, transport, and distribute those virgin products.

Increased participation and increased awareness are other performance objects used to measure the success of reuse programs. As stated above, reuse programs may attract participants who have never brought materials to an HHW facility, or to surplus or donation organizations. Thus, a carefully targeted reuse program, attracting participants to a "good bargain" can significantly increase participation rates and build support for the program within new sectors of the community. And, while participants may have different motivations for coming to the program, effective reuse programs should use the opportunity to provide the participant with information on why the program exists (e.g., why the product is being offered for reuse); why the community seeks alternatives to disposal for the product: source reduction and waste diversion objectives: and the use of such programs for other similar household products. Again, Appendix D can be used to increase the participation and awareness of leftover paint management options.

As participation and awareness increase, the long term buying habits of participants may change. Thus, changing consumer behavior by increasing participants' awareness of the comparative health and environmental consequences of different products is another performance measure. While more difficult to measure, the long term effects of consumer education on purchasing behavior is important and cannot be discounted. Lastly, many programs measure success by cost savings. For HHW programs, this is often measured by waste diversion cost savings or a decrease in program budgets for disposal. For non-profit reuse organizations, it is often measured by selfsufficiency – being able to maintain the program without the need for outside or supplemental funding. For some government programs, the cost is measured as a function of material and supply savings – in reusing paint and surplus materials as

compared to purchasing new products. More often than not, a number of these factors, as well as others, are taken into account when measuring performance – but whatever the measurement, it is important to tie it to your goals in order to set a benchmark by which the program's effectiveness can be evaluated and continually improved.

# **B.** Choose an Infrastructure

Several approaches to setting up a reuse program are available and can generally be separated into two groups, permanent facilities and temporary events, which incorporate mobile events as well as temporary or one-day operations. Each of these approaches has different funding, staffing, equipment, and time requirements, which are important factors to consider when establishing a reuse program. Again, as with the other program elements, a combination of approaches can be used to maximize results. For example, temporary or mobile paint collection events can be sponsored as a part of a permanent facility, or mobile or temporary collection centers that feed into nonprofit reuse centers or private donation sites.

# 1. Permanent Facility

To increase convenience and community participation in paint collection programs, an increasing number of permanent collection sites are being established at fire stations, landfill sites, transfer stations, recycling centers, retail establishments, and at traditional HHW collection facilities. Although permanent facilities can initially be more expensive to set up, overall operating costs are usually lower. They are also more effective than one-day collection events because they allow residents to pick up and drop off at their convenience. There are advantages to including a reuse program with a permanent program, such as a transfer station, HHW facility, or landfill, in that any

materials that are collected that cannot be reused can immediately be managed as a waste. Permanent facilities, whether waste management centers or private organizations, also have better opportunities to establish contacts and contracts for paint donation, resale, recycling, or disposal. The proximity of reuse programs to permanent disposal or donation sites makes transporting products and wastes more economical. In addition, permanent staff can be more appropriately trained in handling and identifying hazardous materials and prepared to respond to any accidents or spills. Another advantage to having permanent reuse sites is that some information and consumer education publicity can be shared. A disadvantage to this type of program, however, is that, by collecting materials together,, the marketing, consumer education, and reuse goals can be diluted. Furthermore, as some participants will only be dropping off and others will only want to pick up, while still others may participate in both activities, people and product flow can be challenging.

# 2. Temporary Event

Temporary events include scheduled collection events (one-day events), periodic events (annual, semi-annual or seasonally scheduled events) and satellite events (permanent locations with varied operational dates and times). Similar participant and material flow challenges exist when establishing one or multiple day events in conjunction with HHW events. Many of the reuse program participants are coming only to take away free products and will want to bypass the waste drop off area. Reuse participants will need space to park cars while browsing the products available, and this should not impede access to the drop off location. Similarly, the area should be set a safe distance away from the drop off area to protect the public participants and not impede access by emergency personnel should this be necessary.

### 2. Check List for Temporary One-Day Event: Manage residual waste Site Procedures Staff Materials Requirements • Traffic Educational **Flyers** • Products • Tents/Tarps • Sorting Tables Screwdrivers • Eye goggles Rubber gloves Signs

At the end of the event, products that have been set out for reuse but not collected need to be transferred to the waste management area. A reuse program that is not part of a permanent collection facility can be held on designated days at designated community sites and or offered by mobile collection programs. These programs can be just collection events with a designated outlet or exchanges open to the public. Depending on the population served and the level of participation, there may be a need to hold several paint collection or exchange events in the same community. Nonprofit reuse centers, charities, and private organizations can be approached prior to the event in order to establish an outlet for collectiononly events. An outlet for reusable paint that is leftover after an exchange event should also be established through previously determined relationships. Paint can be sorted in original containers or bulked for final distribution.

Regardless of the type of temporary paint program established, a site must be secured and staffed to ensure that other types of products are not dropped off. Also, without the advantage of a waste disposal site nearby, participants need specific information on what paint products will be accepted and what will not be accepted. Having gone to the trouble of bringing in leftover paint products, participants may not want to bring rejected items back home. The most important steps in establishing temporary paint events, therefore, is to advertise to participants with specific instructions on product acceptability and to establish end users for materials that are either not offered or not collected by the general public. Good upfront planning can make the difference between having a significant portion of the materials leftover after the event and having it all swapped.

# C. Meet Federal, State and Local Requirements

Various state and federal requirements will pertain to reuse programs. Household hazardous waste is generally exempt from federal Resource Conservation and Recovery Act (RCRA) regulations, including post-consumer paint, although some states may have specific regulations governing the disposition of leftover paint. Similarly, while latex paint is considered non-hazardous under the federal scheme, some states regulate paint products more stringently than the federal government, including latex paints. The extent of regulation under the

federal standards will depend on what type of program is established, as nonprofit and private reuse centers may be regulated differently than county and municipally run programs. In addition, the type of program for paint, whether straight exchange or consolidation, or whether the program is paint-only or will include other types of products, will dictate certain regulations. Lastly, the type of product offered, whether latex or oil or aerosol, will trigger specific regulatory considerations. There are regulatory considerations common to all types of reuse programs, however, such as permitting considerations, worker health and safety requirements, and spill, fire, and environmental contamination prevention and response.

Thus, before establishing a reuse program or expanding an existing program, it is important to check with state authorities for specific state requirements, as well as any federal requirements that might apply. The types of regulations that might apply depending on the type of program established are provided in this Manual as examples only and are not intended to cover all situations or replace the need for a thorough and independent review by a regulatory authority. While RCRA also exempts conditionally exempt generator waste from requirements even if commingled with household hazardous waste, if the reuse program is being offered by a nonprofit or private company, whose combined quantity of wastes meets or exceeds the RCRA thresholds, additional requirements may be triggered. Similarly, municipal or county programs should ensure that the leftover paint being received from businesses is actually exempt. One way to do this is to only accept a limited amount of paint from business participants.

When collecting oil-based paints, certain fire prevention regulations must be adhered to owing to their flammability. Also, aerosol paints need special consideration due to their combustibility. Similarly, while spill prevention must be practiced for all types of paint, special consideration must be given to oil based paints as they cannot be cleaned-up in the same manner as latex paints. Worker health and safety precautions will also be different depending on the type of program, products collected, and program infrastructure. A program that is permanent will have full-time employees subject to various occupational health and safety training requirements. Those programs handling oil-based paints may also

be subject to worker hazardous waste training requirements. At temporary events and mobile events, where volunteer workers are used, different requirements for worker safety and training will apply. Lastly, mobile events may be subject to transportation regulations, especially in the case of oil-based paints. The following section on addressing liability concerns outlines several avenues to minimize potential liability with reuse programs, but as a start, all federal and state requirements must be meet.

# **D.** Address Liability Concerns

It is important to understand the types of liability that are of concern for reuse programs, the available approaches to minimize liability, and the experience of other programs. Liability issues take several different forms – environmental, health and safety, and product – and can be mitigated by contracting arrangements. Sharing information on potential liability and steps to minimize risk through risk managers, insurers, or other officials, can help ease any resistance to starting or expanding reuse programs.

## 1. Environmental

Liability for environmental contamination under the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), or Superfund, applies regardless of the waste or product type. This type of liability cannot be eliminated, but is minimized by a reuse program, which diverts the product from disposal as the product is used for its original, intended purpose. CERCLA will apply, however, to the final disposition of any leftover paint not collected at the reuse program or to any spills or release of the products that result in environmental contamination. If an environmental problem arises that is attributable to the reuse program, operators are held jointly and severally liable with any other parties to the program for the clean-up costs. This potential liability exists for a nearly unlimited time frame.

# 2. Health and Safety

Satisfying proper health and safety precautions while leftover paint is being examined, sorted, and consolidated is a major concern associated with handling waste paint material. While the precautions will differ depending on the product type, paint labels should be consulted for general precautions relating to protective measures in handling and use. In addition, it is advisable to think carefully about

what additional measures need to be taken to ensure the health and safety of everyone handling waste paint. It is important to remember that oil-based products, as well as mislabeled and potentially hazardous materials, may turn up even at latex-only events. Thus, an operations plan, a health and safety plan, and an emergency response plan should be completed in order to provide contingency measures for potential emergencies. In addition, proper ventilation should be accounted for when collection programs are located in closed structures or buildings, such as tents or warehouses. Adequate air movement is needed to reduce solvent inhalation by workers and participants. Doors and windows should be open to allow air circulation. All ignition sources should be eliminated if oil-based paint and/or aerosols are offered as part of the program due to their flammable and combustible nature.

# Factors to Consider When Organizing a Reuse Program:

- ✓ Safety and Health
  - Ventilation
  - Protective Clothing
  - Paint Identification Protocol
  - Traffic Control
- ✓ Liability
  - Emergency Contacts
  - Spill Plans
  - Waiver Forms
  - Product Storage
- ✓ Contractual Agreements

Proper clothing and ergonomic considerations are also recommended. Clothing such as gloves, boots, protective eyewear, and respirators are recommended to help protect collection workers from paint vapors and from other household waste materials that may have been mixed with paints. Protective clothing also prevents accidental paint spills from splashing onto workers clothes. The types of clothing recommended will depend on the type of program and type of paint. For example, at exchanges where only latex paint is handled, only minimal protection may be needed, such as gloves. At consolidation programs and where both latex and

oil-based paint are available, more detailed protection plans and equipment such as protective eyewear, boots, clothing, and respirators may be required. Also, when a large volume of paint is being sorted or bulked, ergonomic considerations should be evaluated. A single worker (even volunteers) may be required to read labels, open lids, and remove the content of hundreds of gallons of paint a day leading to repetitive-motion injuries. Permanent facilities or long-term collection and consolidation programs may want to consider mechanical equipment, such as can crushers or paint scrapers, to reduce worker handling. Temporary events and paint-only exchanges may reduce injuries by scheduling shorter shifts or limit the amount of time workers repeat tasks, by rotating the type of tasks performed or by establishing work/rest intervals. Traffic safety management plans should also be employed in order to protect workers, participants, and recipients. This is particularly significant for temporary or one-day events, and is discussed further under operational needs — site and space considerations.

# 3. Product

With a reuse program, there is often concern over product liability, either the possibility of being held liable for harm due to contaminated, misused, or mislabeled materials, or the potential liability for old or unopened products that do not perform as expected. Traditionally, vendors of second-hand products are not responsible for strict product liability, where the product that has been opened may have been contaminated and cause harm to the recipient. Similarly, in a reuse program, where products are distributed at a low cost or for free, the program should not be held responsible for product liability. Furthermore, where a recipient may seek to recover damages caused by the non-performance or poor performance of a product, programs are generally not held liable. In order to ensure that neither form of liability attaches to a reuse program, product acceptance guidelines should be used, as well as labels and waiver forms. The use of specific product acceptance and sorting protocols will minimize the likelihood that non-performing or contaminated products will be given away through the reuse program. Program operators can, in addition, minimize the likelihood of liability by labeling the products as second hand and using waiver forms.

Fewer concerns are associated with giving away unopened products if they are legally and currently sold in stores, particularly if the manufacturer's label is still intact. However, potential liability increases when paint is bulked and put into new containers. Thus, nearly all types of programs use waiver forms that address the uncertainties inherent in reusable products. Sample waiver forms are provided at Appendix C-2. The waiver form should contain a complete description of the product, as well as statements discounting guarantees that the container contents are what the label indicates, or that the product is of the quality appropriate for the intended use – statements intended to waive all product warranties, either expressed or implied. Some programs use stickers on the products that state that the product is second-hand, sold in "as is" condition and not warranted as labeled, and that the program is not liable for product warranties, misuse, or contamination. Care must be taken to place these labels so as not to cover vital product information contained on the manufacturer's label. Programs that bulk paint should consider re-labeling the product clearly.

While waiver forms and labeling do not eliminate the risk of liability claim, it is an important way to inform recipients of their responsibility for the products they accept and provides a defense against any claim that might arise. Some programs use restrictions on recipients, which can also reduce potential liability. Restricting participation by minors, for example, is necessary, as their signature on waiver forms is not legally binding and the sale of aerosol products to minors is prohibited in many jurisdictions. Other programs restrict recipients to government, nonprofit, or private organizations and do not allow the general public to receive products. Nonprofit and private reuse centers often restrict use by "memberships," whereby participants pay a fee and adhere to specific guidelines, including waivers, in order to use the program. Lastly, limiting the amount of product that can be received can reduce the chance that leftover paint will end up being resold or diverted for some illegal purpose.

# 4. Contracting Arrangements

As stated above, organizations can be held liable for an injury to workers, accidental release of paint at the reuse center or during transport of the product, or for unsound paint disposal practices. Contractual arrangements can be used to minimize these potential liabilities and any associated costs. Insurance contracts covering general liability (damage to property or bodily harm), motor vehicle insurance (damaged caused by vehicles), in-transit insurance (environmental restoration and bodily harm compensation), pollution liability (environmental restoration), and worker compensation insurance are recommended depending on the type of reuse program established. Depending on the property owner where a reuse program is established, public liability insurance can be obtained. HHW programs, particularly those run by municipal and state governments that contract with private parties to run the reuse program, should ensure that the contractor's insurance coverage is appropriately in place. Volunteers should be asked to sign a waiver form to prevent liability, since most insurance programs do not cover volunteers.

When using a contractor for any portion of the program, a written contract between both parties should include an indemnification clause stating that the sponsor is blameless in the event of contractor negligence, acts of omission, or wrongdoing. The contract should also include and clearly define each party's duties and responsibilities; ownership of leftover paint that is not collected; ultimate disposal responsibility; subcontractor arrangements; permitting and license needs; and changes and contingency plans for the program and party responsibility. At a sponsor-operated program, contracts are usually only entered into for ultimate transport and disposal of unusable paint. The sponsor is responsible for establishment of the program, oversight and product selection criteria, management of the reuse program, and the removal of any leftover items. At contractor-operated, sponsor-owned program, the sponsor's staff or the contractor's staff, or a combination of both, may operate the reuse program, so it is important to establish operational responsibilities and to obtain those commitments as part of the initial proposal.

At contractor-operated and contractor-owned programs, where the facility is entirely the responsibility of a contractor operating on behalf of a sponsor, a contract must specify all aspects of the program, from the goals of the program to specific paperwork and staffing requirements, hours of operation, product acceptance and disposal guidelines, and requirements for, or restrictions on, product recipients. In addition, the contract should specify who is responsible for marketing and promotional materials, as well as incentives. For programs run by and at waste, treatment, storage, and disposal facilities, the contract should provide a balance between incentives that encourage diversion of reusable paint from disposal and the minimization

of any potential liability to the sponsor and contractor. Similar considerations must be taken into account for contractor-operated reuse programs located at temporary events, or through mobile programs. In some cases "recycling guarantees" are used, where the contractor certifies that a certain portion of the leftover paint is diverted from disposal to legitimate recycling programs.

Potential contractors should be screened and required to meet minimum qualification criteria prior to being awarded a contract. An assessment of a contractor's qualifications may occur prior to solicitation of bids or proposals, or may be included as part of the requests. To qualify the contractors, evaluate them based on factors such as experience, insurance coverage, staffing capabilities, financial strength, and compliance history. Contractors should be required to identify subcontractors, and sponsors should retain the right to evaluate and reject subcontractors.

# E. Meet Operational Needs

The storage and handling of reusable products by county and municipal reuse programs may have many of the same safety and training requirements as those for managing HHW programs in your state. By contrast, nonprofit and private reuse programs are generally operated in accordance with retail store storage and handling procedures. The initial planning for a collection event site or collection facility should include the space and traffic flow needs of the reuse program. Some states require some form of approval prior to operating an HHW program, but do not require a separate permit to operate a reuse program. Stand-alone reuse events will most likely need at least a license to operate. Some states even have specific guidelines as to how reuse programs are to be operated. The local fire inspector, at a minimum, may need to approve a storage plan and building layout, particularly for reuse programs accepting oil-based paints and aerosols.

# 1. Site/Space

A reuse program provides a location where usable paint and other household products are collected and then offered for reuse after initial screening for acceptability. Because of the potential need to manage residual or rejected materials as HHW, a reuse program is often located within or as part of an HHW program or collection event, or at a landfill or other treatment, storage, and recycling/disposal site.

A preferred location will allow the reuse program to share staff and other resources. Some HHW programs, as well as other reuse programs, such as nonprofit or private surplus programs, have set aside separate areas that are part of a larger materials reuse or recycling program. Others, like paint exchanges, focus solely on one product and attempt to distribute all products they accept. Each of these locations will have different implications for site and space needs. As stated previously, at any location open to the public a reuse program provides a good opportunity to educate the public about HHW, so make sure that a table is provided for educational materials to be easily seen and distributed.

In designing a reuse program at, or in conjunction with, a permanent facility, important considerations include the facility standards, whether or not the public will be allowed in the reuse program area, integration into the overall facility layout, size of the storage area, visibility, and parking accessibility. A primary concern is to make the designated product storage area safe for the public. Consider having impermeable flooring, "no-smoking" signs, safety and emergency equipment, such as fire extinguishers and first aid kits, secondary containment for spill control, and cleanup equipment. It is extremely important that the building complies with local zoning, fire, and building codes, even for product storage only. Programs in permanent facilities usually have a separate area set aside to store excess products until users take them. The paint reuse program area can range from a separate room or shed to shelving or tables within a facility. It is important that facilities that engage in other HHW or waste management activities locate the reuse program away from the high activity areas, such as the waste collecting and sorting areas. This separation will minimize the chance that a member of the public would be exposed to hazardous products without proper protective equipment or interfere with the handling of waste materials. The separation will also help prevent waste from being accidentally placed with reusable products and minimize the chance of a participant taking the wrong items.

Space requirements vary with the amount intended to be stored and the rate at which it is redistributed, but larger spaces allow more materials to be set aside and allow participants to readily identify products of interest. Extra space also allows for products to be displayed in an appealing and accessible manner. Visibility and merchandising is

also important. If located at an HHW or other waste management facility, the reuse area should be staffed separately, or in close proximity to other areas of the facility so that staff can easily observe the activity of the program. An ideal reuse program layout will allow staff to continue to work nearby while recipients scan the area for available items, but also close enough to observe the recipient and available to answer questions. When a recipient is ready to leave, staff should designate an area to review the items that are being taken and ensure the required paperwork has been completed.

Reuse programs also need ample parking, with direct access into the reuse program if located at an HHW or other waste management facility, so that participants do not interfere with traffic and operations at the rest of the site. A primary concern at reuse programs should be public safety. Thus, the parking and retail area should be located away from the collection and sorting areas. This separation, however, will require the transfer of accepted products from the receiving area to the reuse area. The use of a rolling table or cart is recommended to facilitate the movement of the products from area to area. These same considerations must be evaluated for temporary or day program events. The site should be conveniently located and easy to find, suitable for handling a large number of cars, and able to limit the environmental damage potential from any accident or spill. It should have a large paved area, with ample parking space and available for set up at least one day before the event. Running water, a telephone, and sanitary facilities should be available, as they would be at a permanent facility. In certain areas, mobile facilities are used to collect and redistribute reusable products, including paint. Modified buses and other mobile containers, as well as curbside collection and temporary retail distribution, are among the type of programs established. In these cases, site and space considerations are minimal, but transportation, storage, and distribution issues are of paramount importance. When storing and transporting latex paint in colder climates, steps must be taken to prevent the paint from freezing. The most efficient way to run these types of programs is to contract with second-hand or surplus stores or with contractors to provide storage containers, collection services, transportation, and ultimate distribution of the paint prior to a mobile or temporary event.

# 2. Materials and Equipment

Sponsors can often be recruited to help fund reuse program and donate supplies. Local paint stores might donate materials and equipment such as wooden paint mixing sticks, can openers, electric paint mixers, and paint can scrapers. Other materials and equipment depend on the type of infrastructure chosen. At paint exchanges, materials needed are usually limited to tables for collection, sorting, and display for paint pick-up, but could also include can openers and mixers to ensure that the paint is acceptable for reuse. For consolidation operations, can scrapers, electric paint mixers, and empty containers, as well as safety, storage, and other equipment will be necessary.

Generally, for temporary or one-day events, it is necessary to have tents or tarps to cover work areas, as well as for ground cover, carts for transporting products, tables or shelves for displaying products, and cleaning and containment materials. For larger, permanent facilities, material and equipment decisions should be part of your space/site and operational evaluation. Sorting protocols and the type of products collected will dictate many of these factors. For example, for paint consolidation operations, empty containers can range from 5 gallon buckets to 55-gallon drums – and both require specialized tools for securing lids. Additionally, the 55-gallon drums require special machinery, such as a forklift or dollies, to move them. The containers and mixers are necessary to blend the bulked paint. Screens are also recommended for consolidation programs to strain large particles and solids from consolidated paint.

Traffic signs and cones are also recommended to manage the flow of participants. If paint is to be stored overnight or for any length of time, a secured area or storage bin must be available for security purposes.

### 3. Personnel

It is important to develop standard operating procedures for a reuse program and to train staff appropriately. Operating procedures should be developed regarding product selection criteria, placement of reusable products, dating and inspecting the products, record keeping, managing waste, spill response, and staff roles. Staff should also be aware of the hazards associated with each type of product and should have training equivalent to that required for staff handling HHW. Operating procedures include, but are not limited to, a sorting

protocol, product management, record keeping and administration, dating and inspection of products, waste management, and program evaluation. When a participant is examining a product, staff should be on hand or in the general area of the paint reuse area. Staff should be available to answer questions, and hand out and collect waiver and other forms necessary for product receipt. Staff can also be used for marketing and product identification. All staff need to be trained appropriately on the operational procedures, and in some cases on the management and disposal of hazardous materials.

# a. Volunteers

Volunteers can perform almost all of the jobs at a paint reuse program. Prior training is necessary, however, to screen, accept, and sort products, and for health and safety considerations. When dealing with hazardous products or unusable products that must be managed as a hazardous waste, additional training is necessary. Generally, those duties are left to the responsibility of permanent or hired personnel. Sponsors can be recruited to donate labor, and paint stores or professional painters are good sources for volunteer personnel. Other organizations that are a good source for volunteers are civic groups such as Kiwanis and Elks, as well as fire department staff, the Scouts, and environmental groups. For permanent programs, volunteers can be recruited from senior groups or specialty community groups such as senior programs and worker training programs. Check with recruiting organizations, state labor regulators, and your insurance carrier to ensure that volunteer staff are used properly and liability concerns are addressed.

# b. Paid Staff

Paid staff or hired contractors with the proper official hazardous material safety training should be used for hazardous waste management and the disposal of products that cannot be reused but must be managed as hazardous waste. For temporary and permanent programs, record keeping should also be assigned to paint staff. Paid staff or permanent volunteers should track waiver forms, product inventory, and performance measures (e.g., the amount of product received and reused, cost savings, etc.).

# F. Develop a Paint Sorting Protocol

Sorting paint products is an essential part of every paint management program. This is usually done on site, and involves separating paint from non-paint products, sorting latex, oil and aerosols, checking for acceptability, and then stocking or blending based on paint color and type. The program criteria should be established and staff trained prior to any event. To avoid personal injury or property damage, make sure the products are what they appear to be – be very selective about the products the program will offer for reuse and stringent in relying on the protocol. General acceptability criteria include, but are not limited to, products that are currently legal and available for sale (e.g., no banned pesticides); products that have containers in good condition with labels that are complete, readable, and intact; products that are unopened or opened but at least partially full with no visual or immediate signs of

contamination; and products that do not require special training to sort (e.g., restricted use pesticides, strong acids). More detailed criteria can then be instituted for paint products.

If the reuse program is held at, or in conjunction with, an HHW or waste management facility then a mixture of household waste may be collected. Similarly, nonprofit and private reuse stores accept various types of reusable products. Even programs that only accept paint may inevitably receive a variety of non-paint products in paint-type cans unless a thorough paint screening process is conducted before acceptance.

### Paint Sorting Protocol Unusable or non Check Label recyclable This Sample Paint Stains. Varnish. Sorting Protocol is Oils, etc. available at Appendix E. Paint? Check labe Don't accept Haz. Waste Disposal Solvent-based? Water Based? Unopened Check Labe Check Label or Unopened? and Can and Can Reusable? Opened? Opened vap Tabl Table but Unusable? Recycle Recycle OK for **Potential** Recycling? Contamination, PCBs or Dry out Metals? and Solid Waste Gaylord Disposal Storage Don't accept Haz. Waste Recycling Disposal Market

Some of the more common products that need to be separated and either not accepted or diverted to disposal are adhesives, mastics, wood preservatives, lacquers, varnishes, and paint thinners. Then, depending on the type of products accepted by the program, latex, oil-based, and aerosol paints need to

be distinguished and separated. Aerosol containers should be checked outside or in a well-ventilated area away from participants to ensure that the nozzle is still working. After checking paint aerosols, invert the can and spray out some propellant to clear the nozzle. Read the label to determine if the aerosol contains a pesticide in order to ensure proper handling. Aerosols using chlorofluorocarbons as propellants should not be offered for reuse.

A more detailed evaluation of latex and oil-based paint containers needs to take place. The first step is to check the labels. Latex paints generally have the word "latex" or "water-based" as part of the product name, will indicate that the method of clean-up is water, and list ingredients such as water and ethylene or propylene glycol. Oil-based paints often have the word "alkyd" as part of the product name, will indicate "caution" and "flammable," or "combustible," will indicate that the method of clean up requires paint thinner, mineral spirits, or turpentine, and list ingredients such as petroleum distillate or mineral spirits. Any containers that are not in good condition should be rejected (e.g., leaking, rusted, lid does not stay on, etc.). Further label checks are needed to screen out older paints, which may contain heavy metals such as mercury, lead, and polychlorinated bi-phenols (PCBs). Paint produced prior to 1978 may contain lead. Interior paints produced prior to 1990 and exterior paint produced prior to 1991 may contain mercury. Marine coatings and pool paints may contain PCBs. Other industrial type products, such as auto paint and wood preservatives, should be screened, as they may contain heavy metals and registered pesticides.

A visual inspection is also necessary for opened cans of paint to determine the amount and quality of the product. This is particularly true with latex paints, as several factors can cause the emulsion to be unusable, including freezing, souring or bacterial spoilage, drying out, or contamination by foreign debris. If the paint looks grainy or like cottage cheese, and cannot easily be re-mixed to a smooth consistency, it is no longer useable. Some programs use paint sticks for this test, while others use electric drills with mixing adapters. Opened cans of oil-based paint should be checked for quantity and potential contamination. Oil-based paint should also re-mix smoothly if it has not been contaminated with a foreign substance or has not dried out.

The last step, particularly when consolidating paint, is to separate interior versus exterior and colors. Oilbased paint consolidation for reuse is generally not done because of the complexity and incompatibility of paint formulations, although it can be consolidated for disposal, as discussed below. Latex paints are generally sorted by interior and exterior use, as higher antimicrobial and pesticide levels are tolerated for exterior use paints and these formulations often have specific performance properties for exterior application. Some consolidation programs merely label all blended paint for exterior use only as a way to avoid potentially harmful constituents from being used indoors. Finally, color sorting is done in order to present the reusable paint appropriately to participants or to bulk it for specific color properties. A common simple sort is to separate paint products into interior dark and light, and exterior dark and light. A small sample of the original or bulked color should be painted on the lid or side of the product's container, without interfering with label information, to inform the user of the color.

Unacceptable products must be properly managed. If the reuse program is not offered at, or in conjunction with, an HHW or other waste management facility, do not accept the product, and instruct the participant to take the product to the next HHW program event or to the nearest waste management facility if it is a hazardous material. For unusable latex paint, if it is already dried out, it can generally be managed as non-hazardous solid waste. Participants can also be instructed on how to safely dry out latex paint for non-hazardous solid waste disposal. See the Leftover Paint Management Guidance Document (Paint Wise, Buy the Right Size) in Appendix D for more information on disposal options for unusable latex paints.

A reuse program should have a disposal plan for products that are mistakenly accepted or not collected at the end of the collection period. As stated previously, unusable oil-based paint must be managed as a hazardous waste and sent to a waste-to-energy facility (for fuel blending), or to a hazardous waste incinerator or landfill. Unusable aerosol containers must also be managed as a hazardous waste. Some unacceptable latex paint can be sent to cement and concrete companies for use as an alternative fuel or as a raw material. In many cases, there are paint recyclers who facilitate this process. Landfills and waste management companies

can also use leftover latex paint as alternative daily cover. Otherwise, latex paint is generally managed in non-hazardous landfills. It is best to contract with waste management companies when disposing of unacceptable product.

# G. Develop a Container Recycling Program

Paint and aerosol cans — when empty and dry are just as recyclable as the more commonly collected steel food and aluminum beverage cans, and should be included in recycling programs with proper education. Paint and aerosol cans require preparation for environmental safety, and participants should be given information on this when receiving paint products for reuse. Paint cans must be emptied so that there is no liquid layer of paint at the bottom of the can. A thin skin of dry paint on the sides and bottoms of the can may be left; they do not have to be scrubbed clean, but the skin of paint inside must be dry. In some cases, consumers can then include their empty steel and plastic containers with curbside recycling (caps and lids off) or take them to recycling drop-off locations.

# 1. Steel

Normally, empty steel paint and aerosol cans are collected along with a mix of other steel products through residential curbside programs or drop-off recycling programs, or by HHW and other waste management programs through contracts with recyclers or scrap dealers. Nonprofit and private reuse programs can also take advantage of drop-off recycling programs, as well as contractual arrangements. When containers have not been fully emptied through normal use, however, the unused contents prohibit their direct recycling. At consolidation operations, where partially full or full steel cans are emptied into new containers, cans may also be flattened manually or mechanically. Product residuals are captured for appropriate disposal or, in some cases, reuse. Propellant gases may be captured and compressed for reuse or other disposition. Since most propellants and oil-based products are flammable, appropriate venting, non-sparking tools, and other fire and health and safety precautions must be incorporated into design considerations for any purchased or self-fabricated equipment.

Steel food, beverage, paint, and aerosol cans, and steel lids and closures on other containers are recycled into new steel products. Among these are new cans, automobiles, appliances, construction materials, tools, and toys. End markets for steel cans include steel mills and foundries. Since new steel is made with a certain percentage of old steel, all of today's steel products contain recycled steel and are recyclable. The Steel Recycling Institute's (SRI) mission is to promote and sustain steel recycling across the United States, and to serve as an information and technical resource to those who are interested in recycling steel. Contact SRI at <a href="http://www.recycle-steel.org/database/main.html">http://www.recycle-steel.org/database/main.html</a>, or 800-876-7274 x201, for the nearest steel paint can recycling option.

# 2. Plastic/Hybrid

As formulations for paint have moved from oil based to water based, new containers and hybrid containers have been developed. Since the majority of latex paint is water, it causes steel paint cans and lids to rust. Thus, there is an increasing amount of plastic cans and containers on the market. In addition, there is an increasing amount of hybrid cans, with plastic bottoms and steel rims, or steel bottoms and plastic rims, which are now on the market. Unfortunately, this makes recycling more difficult, as these components must be first separated before recycling. In addition, there is less of a market for plastic recycling than steel. There are three associations that focus on plastics recycling, the American Plastics Council (APC), the National Association for PET Container Resources (NAPCR), and the Association of Post Consumer Plastic Recyclers (APR).

# H. Establish a Marketing Strategy

It is very important for reuse programs to develop a coherent plan to publicize the existence of their programs, and to market their products to consumers. The publicity and marketing plan for a reuse program will be significantly different and may be more aggressive than a plan developed for HHW collection or waste management programs. Often, the need for advertising diminishes significantly once a customer base has been established; however, initial marketing is essential for program success.

For temporary or one-day events, it is necessary to advertise the program well in advance since it is for a limited timeframe – early and duplicate notices allow those interested to appropriately schedule participation. For permanent programs, it is necessary to advertise the availability of the reuse

program to ensure that products do not remain on the shelf too long and to maximize the amounts reused. The level of effort and type of approaches needed to market a reuse program will be determined, to some extent, by the types of materials accepted. The initial marketing effort may be considerable but, because the products are given away free or at a low cost, it takes less effort to maintain interest.

Part of your marketing strategy can include distribution of paint information to participants of the reuse program, such as the Paint Product Stewardship Initiative's "Best Management Practices for Leftover Paint Products"

# THE 5 SIMPLE STEPS ARE:

- 1. Buy the correct amount of paint for the project
- 2. Store paint to keep it fresh
- 3. Use up leftover paint
- 4. Reuse or recycle
- 5. Dispose of paint properly

More information on these steps is contained in Appendix D

Detailed interactive information is contained on the website at www.earth911.org

Advertising the reuse program for the general public can be accomplished as part of a broader campaign for HHW programs or other reuse programs, or separately for paint-only exchange programs. Reuse programs, both HHW as well as privately run programs, can advertise on the Internet, through their own websites, and through list serves that

specialize in waste exchange and material reuse, such as "Craig's List." They can also be listed as part of a growing database of reuse programs on Earth 911's "Paint Wise" website at "www.earth911.org." Commonly, programs advertise not only the date, time, and hours of operation, but specific types of products that are accepted and available for pick-up. It may be worthwhile to conduct separate advertising targeted at people interested in the reuse program, which may be different from those people who traditionally participate in HHW programs. The implications in marketing terms are important – publicity materials should emphasize the importance of a reuse program in diverting good, usable goods from disposal. It should also emphasize that, while the products are offered for free or at a low cost, they are not inferior products and will generally perform as well as virgin products.

The messages can be presented through a medium that is likely to reach intended customers, such as talk radio, neighborhood newspapers and newsletters, and direct consumer marketing outlets, such as utility bill flyers and coupon books. Schools, social service agencies, religious affiliations, and community groups can also assist with advertising the program. Low-cost or free publicity is often available through local newspapers, and public radio, and community groups, schools, and religious affiliations can be used to distribute flyers. Local and regional newspapers often have "garage sale" sections appropriate for this use. Direct marketing contacts are also crucial for reuse programs, especially consolidation operations. Finding users for large amounts of paint, such as governments, community and housing organizations, or local business programs can significantly reduce the cost of reuse programs, as well as the potential for leftover reusable product.

# **APPENDIX A-1**

# ALACHUA COUNTY HAZARDOUS WASTE COLLECTION PROGRAM ALACHUA COUNTY, FLORIDA



Jurisdiction: Alachua County Environmental Protection Department, Hazardous Waste Collection Program, serving the residents and small businesses in Alachua County Florida.

Contact: Kurt Seaburg 352-334-0440, e-mail: kseaburg@alachua.fl.us

**Purpose**: Operate a permanent hazardous waste collection center for household and small business hazardous waste disposal, as well as five permanent collection centers in the rural areas for the county. Publicity and education component is also handled by the program. The goals of the hazardous waste program are to provide safe, convenient drop off locations for hazardous waste, to promote recycling and reuse of products and to educate residents regarding safer alternatives for household products and chemicals.

**Description**: Alachua County is located in North Central Florida, and is a mix of rural and urban community settings. The major city in the county is Gainesville with a population of over 100,000, and is the home to the University of Florida.

The permanent Hazardous Waste Collection Center has been operational for six years and is open 54 hours per week for households and small business disposal. The program is free for households and on a fee basis for small businesses. The five Solid Waste Collection Centers also accept household hazardous waste and are open for households 40 hours per week. Mobile household hazardous waste collection events are held in ten outlying locations annually.

Implementation: Latex paint collected by the program is managed in a number of ways. The most desirable paint is placed in the recycle/reuse area at the HHW Center, typically full gallons of paint with the labels attached. Additional first tier paint is bulked into 55 gallon drums, mixed, poured in five gallon pails and provided for free to groups such as Keep Alachua County Beautiful and other not for profit agencies for house painting and graffiti abatement programs. The second tier paint, primarily less than a full gallon, rusted cans or without labels are placed in metal Gaylord containers. The paint is shipped to Scott Paint in Sarasota, Florida for reblending/reformulation into recycled latex paint. Appendix A-1

The remaining latex is bulked into 55 gallon drums for shipment by a hazardous waste transporter, where it is solidified and disposed at a class I, lined landfill.

"Second tier paint" has been prepared for and is awaiting shipment to Scott Paint in Sarasota, Florida for reblending into recycled latex paint.



**Funding**: The paint program is county funded by the Solid Waste Assessment Fee for property owners and as part of utility bills. There is no current problem with sustaining annual operating funds. The county has not applied for any grants for this particular program.

**Results**: The first tier paint distributed at the reuse/recycle area and to not-for-profit agencies are free for participants. The annual amount distributed since 1999 has been approximately 7,000 gallons. The paint that is shipped to Scott Paint averages 7,500 gallons per year. Scott charges \$0.18 per pound to process the latex, for an additional \$2.50 per gallon; the paint is packaged into five gallon pails, labeled and shipped back to the HHW Center. For the past 10 years, Alachua County has bought 4,000 gallons per year, and holds an annual recycled latex paint giveaway program, free of charge to people with special needs and charitable organizations. The third tier paint that is shipped for solidification costs \$0.12 per pound; the program annually ships out between 2-3,000 gallons. Small businesses are charged \$2.50 per gallon to properly dispose of latex paint.

- ✓ Alachua County feels that the paint program has met the desired goals by:
- ✓ Promoting the recycling of a valuable commodity
- ✓ Providing the opportunity for residents to take pride in their property by obtaining needed paint at no cost
- ✓ Diverting significant amounts of paint from the solid waste stream
- ✓ Providing a disposal option for small businesses
- ✓ Reducing overall program costs by offering paint at the reuse/recycle area
- ✓ The goodwill and positive media coverage received for the recycled latex paint giveaway program

# **APPENDIX A-2**

# WILSON COUNTY, CITY OF WILSON, KEEP WILSON COUNTY BEAUTIFUL (KWCB/KAB), NORTH CAROLINA

**Jurisdiction**: Wilson County, City of Wilson, Keep Wilson County Beautiful (KWCB/KAB), North Carolina

**Contact**: Lu-Ann Monson, recycling coordinator, City of Wilson, (252) 399-2466, lmonson@wilsonnc.org



**Purpose**: To reduce waste and provide for the proper disposal of usable and unusable paint.

**Description**: Wilson County, located in eastern North Carolina, is a diverse county with both rural and urban / suburban populations. The county's overall population is 75,374 and the City of Wilson has a population of roughly 46,000. Twice a year (spring and fall) the KWCB sponsors a one-day paint swap. Initiated in 1995, the program was originally offered once per year. In 2001, KWCB began offering the program semi-annually.

Paint swaps are held in the parking lot of a local Lowe's Home Improvement Center (previously held at the local shopping mall). Lowe's does not charge for use of the site, and offers a 10 percent discount on supplies needed for the event. Supplies regularly purchased include: 5-gallon buckets and lids, hardware cloth (wire mesh), plastic sheeting, kitty litter, trash bags and duct tape. Stir sticks (5- gallon and 1-gallon sizes) and openers are provided gratis. Other tools and supplies, including tents, tables, chairs, wire cutter, gloves, mixing trough and shovel, hammer, 5-way paint scrapers and openers, are maintained by the city and county for each event. An open trailer is also used for carrying trash to the landfill. KWCB board members and other volunteers staff the event.

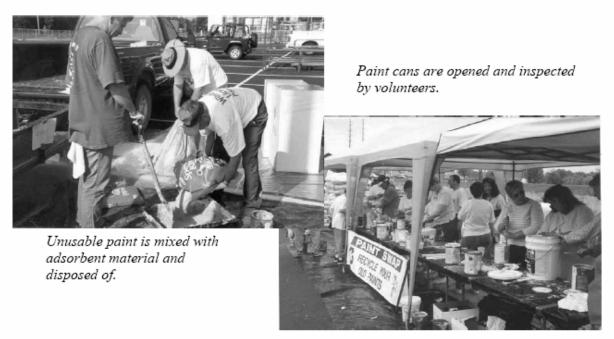
**Implementation**: The Paint Swap site is near the entrance to Lowe's parking lot, typically one lane over from the main traffic aisle.

- ✓ 1 week before, a sign is placed in front of Lowe's announcing the event (ads or notice may be placed in the local paper and school newsletters as well).
- ✓ Volunteers spread plastic sheeting and paint tarps over the area, and duct tape them to the pavement.
- ✓ One to four 8' tables are set up on the plastic.
- ✓ The trailer is pulled to the back edge of the plastic.
- ✓ A shade tent is used to cover the table area in warm weather.
- ✓ 3' wide plastic sheeting is taped to the tabletop for protection.
- ✓ Mixing area is set up between the tables and trailer. This includes the trough, shovel and kitty litter on one end, and the 5-gallon buckets with hardware cloth on each (15"squares) set on top, on the other end.

# **Process:**

- ✓ Vehicles drive up, and latex paint is unloaded to the front of the table (any size containers).
- ✓ Cans are counted.
- ✓ Volunteers at the table open cans, stir and inspect to determine usability.
- ✓ Good paint is sorted by color, and strained though hardware cloth as it is poured into 5-gallon buckets.
- ✓ Bad paint is sent to the trough, mixed with kitty litter, containerized and bagged.
- ✓ 5-gallon buckets are filled, mixed thoroughly, a color sample placed on the lid, and set to the side for consumer pick up. (Very dark colors are left in original containers until the end of the event or for special requests, at which point they may be blended.)

The quantity of remixed paint is recorded, although the quantity disposed is not. Any paint remaining at the end of the event is taken to the "swap shop" at the county landfill where it can be picked up by residents or non-profit organizations.



**Funding**: Paint swaps are designed to be low-cost events; a free site and volunteer labor contribute to its success.

Organizers estimate about \$300 of supplies are purchased by the city and the county, with the greatest cost being 5-gallon buckets. Unopened or unused supplies are returned at the end of the event.

**Results**: Event organizers feel the program is very successful. Unused paint is removed from the waste stream (699 buckets in April 2005), and made available for free (the average cost of 5 gallons of paint is \$100). Statistics indicate the amount of paint recovered each year has ranged from 50 gallons to 533 gallons (the greatest recovery reflects an event held in conjunction with a Hazardous Waste Collection).

Since 1998, KWCB has recovered 1,575 gallons of paint and distributed 888 gallons during the events. Although event-day distribution since that time only represents 56 percent of the paint received, in the past two years, the give-away rate is 89% and the overall volume is greater. It is unknown how much of the paint is picked up after the event occurs.

Each paint container brought in averages approximately 0.31 gallons, and each donor averages 7.18 containers. It should be noted that the number of containers per participant has grown each year from 2.6 to 8.2 in 2005.

The number of volunteers and volunteer hours needed has also grown dramatically. During the first three years of the event, roughly 10 volunteers were needed and total number of volunteer hours needed per event was 40 or less. During the program's most successful event (also HHW collection) in April 2003, 29 volunteers worked a total of more than 150 hours.

Although the spring events are most successful, event organizers believe that fall scheduling must take the North Carolina State Fair and home (college) football games into consideration when selecting a date.

# **APPENDIX A-3**

# HOUSEHOLD HAZARDOUS WASTE FACILITY FARGO, NORTH DAKOTA

**Jurisdiction**: City of Fargo residents and small businesses, as well as surrounding communities and individuals that use the city's Municipal Solid Waste (MSW) landfill for solid waste disposal.

**Contact**: Chris Locken, Household Hazardous Waste and Safety Technician, 701-281-8915, email: clocken@cityoffargo.com, Web site: <a href="www.cityoffargo.com/solidwaste">www.cityoffargo.com/solidwaste</a>

**Purpose**: The City of Fargo operates a regional landfill, solid waste collection operations, recycling programs and household hazardous waste (HHW) program. We also handle publicity and education aspects of these programs. The specific goal of the Household Hazardous Waste Facility is to remove HHW from the landfill. The North Dakota Department of Health approved a liner variance on the condition that the city implements a measurable plan to remove toxic materials from the landfill's waste stream. By removing HHW and creating a Reuse Room, the program allows area residents to take advantage of free usable products while decreasing costs related to management of these materials.



Providing a reuse room allows area residents to take advantage of free usable products, while decreasing the cost related to the management of these materials and diverting them from the landfill.

Three areas of the reuse room – one for stains and varnishes, one for spray paints and one for latex paints – makes it easy for residents to find what they are looking for.

**Description**: Fargo is located in the Red River Valley of eastern North Dakota, bordering Minnesota. Fargo is the largest community in the state with a population of approximately 95,000 and a regional population of 125,000. From 1993 – 1998, the city offered annual household hazardous waste events. The city built and opened a permanent facility in 1999. The facility is open from April – October three days per week and one Saturday morning each month. Hazardous waste from small businesses and HHW from residents is accepted by appointment from November – March.







**Implementation**: A press release is sent each spring and fall announcing the opening/closing of the HHW facility. A 30-second commercial is also run two weeks prior to the facility opening. Occasionally an advertisement is placed in the local newspaper.



# **Process:**

- ✓ Vehicles drive to the facility and household hazardous waste items are unloaded onto carts.
- ✓ Customers sign in stating their name and address, if they have used the facility before and how they heard about the facility.

- ✓ All items are assessed. Paint cans are checked by shaking and/or stirring the paint. If deemed reusable, a sample of the color is placed on the outside of the paint can.
- ✓ If it can be used again, it is placed on shelves in the Reuse Room for customers to pick up. If material is not deemed reusable (i.e. can is rusty or only ¼ full, etc.), materials are placed on pallets to be bulked or prepared for shipping.
- ✓ Residents that pick up reusable items sign a waiver indicating that they are at least 18 years old and that city is not responsible for items removed from the facility. The form also helps staff to track the amount of material exiting the facility.
- ✓ Latex paint that is not reusable is bulked into 55-gallon drums and dried out on wood chips at the landfill (where liquids are banned). Oil based paint that is not reusable is bulked into 55-gallon drums and sent to a hazardous waste disposal facility to be used in fuel blending.

**Funding**: There is no charge for Fargo residents to use our facility. Small businesses pay a fee for products dropped off; if any items are deemed reusable, they are placed in the Reuse Room and the business is not charged for those items. The HHW budget is funded through revenue generated at the city's landfill.

**Results**: Since 1999, the City of Fargo has taken in 207,933 pounds (104 tons) of latex paint delivered by 11,321 people. Of that, 85,138 pounds (42.6 tons), or 41%, has been reused by others. The rest has been dried and landfilled. We have also received 121,926 pounds (61 tons) of oil based paint and 44,482 pounds, or 36%, has been reused. The rest has been sent to a hazardous waste disposal facility to be used in fuel blending. The City of Fargo's HHW program has been well received, and the number of customers picking up paint and other items from our facility has continued to increase over the years.

# **APPENDIX A-4**

# PRAIRIE REGIONAL COLLECTION CENTER UNION COUNTY LANDFILL CRESTON, IOWA

**Jurisdiction**: Prairie Solid Waste Agency (SWA), serving solid waste needs of Adams, Taylor and Union Counties in Iowa

Contact: Leslie Bullock Goldsmith 641-347-5022 email: recycle@iowatelecom.net

**Purpose**: Operate regional landfill and other solid waste and recycling programs in the three county area. We also handle publicity and education aspects of these programs. The specific goal with the SWAP Shop was to reduce HHW management costs and to allow area residents to take advantage of free usable products. The SWAP Shop also increases visibility of the HHW facility.

We did not operate the hazardous materials facility prior to opening the SWAP Shop so we did not have any basis for a comparison of cost reduction.

**Description**: Adams, Taylor and Union Counties are located in rural Southwest Iowa. The largest community in the three county area is Creston at 8,600. Total area population is 24,000. In 1996 and 1999 each county offered a Toxic Cleanup Day – one day event. These events pointed out the need for a permanent household hazardous waste (HHW) program.

Prairie SWA applied for an Iowa Department of Natural Resources grant to establish a permanent HHW facility in 2000. The facility opened in 2002 and operates April through October of each year. HHW materials are accepted mostly by appointment however often people try to bring paint products to the landfill and these products are often accepted at the HHW facility.

**Implementation**: Advertisements are placed in the local newspaper and on the radio station about proper disposal of HHW including paint. We advertise that latex is not considered hazardous in Iowa and that residents may dry latex for landfilling. We also offer a latex drying service because many people either do not want to dry their own paint or are elderly and are unable to handle the large quantities of paint they may need to dry. Those people may contact us at our toll free number: 866-282-8787 for an appointment.

## **Process:**

- ✓ Vehicles drive to our facility and pull into the drive through delivery area.
- ✓ Paint is loaded onto carts. Cans are counted.
- ✓ Staff shakes cans, and asks about storage and age of products to determine usability.
- ✓ Good paint is sorted out. Good latex is placed in the SWAP Shop for free use by others.
- ✓ Bad paint is sorted out there is a \$1 per gallon fee for drying bad latex.
- ✓ Paint is weighed and weight of good paint going into the SWAP Shop is recorded.
- ✓ The unusable latex is dried with absorbent and/or wood chips and landfilled on site.

**Funding**: Paint drying is done for a fee. There is no fee for paint that can be swapped out. Prairie RCC still operates under an Iowa DNR grant which helps with personnel costs. The grant does not pay for anything latex related, since latex is not considered hazardous.

We also collect other HHW including oil-based paint products (OBP). OBP is considered hazardous in Iowa. Our agency is eligible for reimbursement for fees spent to properly dispose of OBP as well as other HHW products. Good OBP is placed in the SWAP Shop and bad OBP is manually poured and scraped into DOT drums for disposal by our HHW contractor.

**Results**: Since 2002, Prairie RCC has taken in 12,057 pounds of latex paint delivered by 794 households. Of that, 6,168 pounds, or 51%, has been reused by others. The rest has been dried and landfilled. We have also received 9,686 pounds of oil based paint and 3,012, or 31%, have been reused.

The Prairie RCC program has been very well received and has allowed our agency to "show off" this service when we do landfill tours. Each year, several teachers bring their students for tours here. One teacher allows students to make an appointment for HHW delivery as an assignment.

In 2003, Prairie RCC applied for another RCC grant to purchase a truck and trailer and HazStor buildings for 2 satellite facilities in Clarke and Audubon Counties. The mobile unit allows us to pick up HHW from these satellites to combine with ours. We also do a mobile HHW collection in Bedford each year as that is one of the farther drives from the Prairie RCC facility.

# **APPENDIX A-5**

# SNOHOMISH COUNTY, WASHINGTON

Jurisdiction: Snohomish County, WA, serving solid waste needs of Snohomish County.

**Contact**: Dave Shea (425) 388-6052 or dave.shea@co.snohomish.wa.us; Jim Gustafson, (425) 388-6053 or jim.gustafson@co.snohomish.wa.us

**Purpose**: To provide the local community with an outlet for usable, leftover paint.

**Description**: The population of Snohomish County, WA is primarily rural. Paint is collected at the main county collection facility four days a week and occasionally (depending on funding) at a couple of mobile collection events in the more rural areas of the county. Paint is accepted from residents, blended, and then placed in four gallon containers for use. Colors available include interior/exterior white, brown, green, gray and tan. Exterior use is recommended for all the colors except interior white. Once containerized, the paint is taken to the salvage store located next to the facility. The public can take up to 32 gallons of paint free from the reuse store. This program has been operating for over 10 years. Prior to opening the Moderate Risk Waste (MRW) Facility the latex salvage program operated as part of a series of mobile Household Hazardous Waste (HHW) collection events sponsored by the County.



Paint as received ...



Being sorted ...



Filling into new containers...



Final Product!

**Implementation**: Snohomish County will salvage and distribute for use over 40,000 gallons of latex paint in 2005. The County collected over 52,000 gallons of paint in 2003, of which 36,000 was salvaged and

given out the public. Sixteen thousands gallons were bulked in 55 gallons drums and sent to a Transfer Storage and Disposal Facility (TSDF) for solidification and disposal in a landfill at a cost of approximately \$2/gallon. The County provides free latex to non-profits, but most paint is used by individuals.

**Funding**: The program is funded by the County through solid waste tipping fees and grants from the WA Department of Ecology. The County continues to do 4 or 5 mobile HHW collection events annually but transports the paint collected to the MRW Facility for processing and distribution back to the pubic.

**Results**: The County views this program a success because it:

- ✓ Provides a valuable service to the community
- ✓ Provides an outlet for useable, leftover paint
- ✓ Very little of the paint taken from the reuse store comes back to the facility a second time
- ✓ Removes a substantial amount of paint from the local community and landfill each year
- ✓ No significant implementation problems
- ✓ Increased usage by 900 customers from 2004 to 2005.
- ✓ Is a valuable draw for the hazardous waste disposal services offered by the MRW Facility including collection of fluorescent lamps, propane tanks, and automotive waste.

## **APPENDIX A-6**

## HABITAT FOR HUMANITY RESTORE SACRAMENTO, CA

Jurisdiction: Sacramento Region

Contact: Greg Cerlenko, Chief Operations Officer 916-440-1215 ext. 1104 email: gcerlenko@shfh.org

Website: www.shfh.org/restore/news

**Purpose**: Habitat for Humanity affiliates throughout Canada and the United States have opened "ReStores". ReStores have become large revenue centers for Habitat affiliates to build affordable new homes for qualified low-income families as well as a way to help low-income homeowners the opportunity to save their homes from disrepair. This is just one example of a ReStore that accepts paint. For a complete listing of ReStores in the United States and Canada, go to <a href="https://www.habitat.org/env/restores">www.habitat.org/env/restores</a>

**Description**: The Sacramento Habitat for Humanity's discount reuse/ recycling facility, the ReStore, sells donated, quality building materials at greatly discounted rates to all members of the general public. The materials collected and funds raised increase Habitat's home-building capacity. Paint is one of many materials collected and redistributed to the public and Habitat families through the ReStore.

The Habitat "ReStore" is just north of downtown Sacramento, California and serves the entire Sacramento Region. Sacramento County's population is well over 1,800,000 and considered Urban. The facility is 45,000 sq. ft and is open Tuesday through Saturday.

The ReStore opened with money from HFH and a \$50,000 reuse grant from the California Integrated Waste Management Board. The facility opened in 2003 and operates year-round and now generates \$50,000 per month in revenue for HFH making it the single largest unrestricted revenue generator for this affiliate. In 2004, the facility diverted a total of 7 million pounds of materials, it is not sure what percentage of that was leftover paint.

The Sacramento ReStore accepts latex paint only (no oil-based) and only if it is of high enough quality to resell. One gallon cans of leftover paint are sold for \$1 and 5-gallon pails are sold for \$5. Customers have been seen "custom mixing" paint right in the store but this is not encouraged.

When the ReStore first opened, they had an abundance of paint but then a local paper called the Sacramento News & Review ran an article quoting a ReStore customer that he painted his entire house for \$10 with paint from the ReStore and within a week there was no paint left in the store. The ReStore does almost no advertising. Word-of-mouth referrals from existing customers is enough to keep the customer base growing.

## APPENDIX A-7

## LARIMER COUNTY HOUSEHOLD HAZARDOUS WASTE FACILITY LARIMER COUNTY DEPARTMENT OF SOLID WASTE FORT COLLINS, COLORADO

**Jurisdiction**: The Household Hazardous Waste Facility serves Larimer County residents and qualified businesses that operate within the county.

Contact: Linda Case (970) 498-5771 email: lcase@larimer.org

**Purpose**: The Larimer County Department of Solid Waste houses the Household Hazardous Waste Program which began in 1989. The components of the program consist of a permanent household hazardous waste collection facility for residents and a conditionally exempt small quantity generator program called Business Hazardous-waste Assistance Program and Education (BHAPE). The program is responsible for diverting hazardous and other inappropriate liquid wastes from the local landfill.

**Description**: Larimer County is located in Northern Colorado and has an estimated population of approximately 283,000. The largest city located within the county is Fort Collins and has an estimated population of about 127,000. The HHW facility is sited at the Larimer County Landfill. The landfill is operated by Larimer County, and jointly owned by the City of Fort Collins (25%), the City of Loveland (12.5%) and the County (62.5%). Fort Collins opened the landfill in 1963. Larimer County assumed operating responsibility in 1975.

Implementation: The HHW program has a permanent facility that is open to residents every Tuesday, Thursday, Friday and Saturday. Businesses that qualify for the BHAPE program may make an appointment to drop off their waste on Wednesdays. Word of mouth has been one of the best forms of advertisement. However, other forms of advertising such as a coupon in the Valpac mailings, local newspapers articles and the local cable channel have been used. Participants in the immediate area bring their waste to the facility. The waste received at the permanent facility is sorted into reusable items that can be offered back to the public for free or items that will be recycled or disposed of properly. Larimer County HHW program also holds two one-day events in out-lying areas of the County. All of the waste brought to one-day events is disposed of or recycled through the vendor that is hired for the day.

**Process**: The participants using the permanent facility drop waste off on days open to residents. They are required to fill out a certification statement that confirms the waste is from their own personal use and is not a commercial waste. After the waste is received it is sorted and either place in the "Drop n' Swap" area to be given away or it is sent off site for disposal or recycle. Residents choosing to utilize the Drop n' Swap program may do so free of charge. All products given away to the public are estimated by weight as participants take them for use. Businesses using the BHAPE program bring waste at their appointed time. Waste is weighed and charged according to the waste stream and all business waste is shipped off site for disposal or recycling. None of the waste collected from businesses is offered back to the public in the Drop n' Swap.

**Funding**: Funding for the HHW facility is through a portion of fees collected for trash disposal. Since we are an enterprise fund and recycling is increasingly encouraged there may come a time that other funding sources will be necessary.

**Results**: So far in 2005 9% of the total waste accepted has been given away in the Drop n' Swap program compared to 5% in 1996. It has resulted in an approximate savings of 27% to the program, not to mention a great form of advertising. There has been a significant increase in residents participating in the give back program. It is truly a win, win situation. The majority of the waste collected from residents is non-hazardous/latex paint. Latex paint is the most sought out item that is given back to the public. Many organizations have utilized paint for different community projects and teachers as well have taken advantage of paint for class room assignments.



Larimer "Drop and Swap" shed.

## **APPENDIX A-8**

# SURPLUS PAINT AND USED MOTOR OIL RECYCLING CENTER PUBLIC WORKS DEPARTMENT BOSTON, MASSACHUSETTS

**Jurisdiction**: City of Boston, population 600,000. Size: 50 square miles.

**Contact**: Susan Cascino, City of Boston Recycling Director 617-635-4959; <a href="mailto:susan.cascino@cityofboston.gov">susan.cascino@cityofboston.gov</a>

**Purpose**: The City of Boston's Surplus Paint and Used Motor Oil Recycling Program was established in 1997 to increase Boston residents' access to safe disposal of hazardous products from their homes. The Public Works Recycling Program opened four paint and motor oil recycling centers at Public Works yards in four neighborhoods of the City. The Public Works Recycling Program investigated options for expanding the collection of residents' household hazardous waste in order to give residents easier and more frequent access to safe disposal. We determined that the majority of the material residents bring to the City's annual 1-day Household Hazardous Waste drop-off was paint and motor oil. Both of these items are recyclable and easily identifiable hazardous products.

The Massachusetts Department of Environmental Protection offered used paint and motor oil storage equipment as part of the state recycling grant program. The Boston Public Works Recycling Program applied for and received a grant for enough equipment to open four surplus paint and used motor oil recycling centers.

**Description**: The Recycling Centers are open once per month on Saturdays from May through October. Residents bring their paint, stains, varnishes, polyurethane, solvents and motor oil for recycling. Items, in good condition, are stored in our swap shops and available to residents for free.

The City of Boston's Surplus Paint and Used Motor Oil Recycling Program has been named the best paint reuse program in Massachusetts by the Executive Office of Environmental Affairs, Department of Environmental Protection.

Implementation: The recycling centers in the Public Works yards are open on Saturdays 9:00 AM to 1:00 PM; residents bring their paint and motor oil to the centers. 3 Public Works staff are required at each site. One staff greets the residents in their cars and asks them for proof of Boston residency as well as what items they have brought. One staff does traffic control. The other staff unloads the cars, reads labels and sorts materials by latex paint, oil paint, solvents, and stains. Items in good condition are put on the selves in our swap shops. The swap shops provide free paint, stains and solvents to the public.

Each year an increasing number of residents who come to the centers are there to get free paint. Close to half the visitors now are there looking for the free paint.

**Funding:** From 1997 to 2003, Boston received state grant funds to operate the sites, excluding personnel. Salaries were paid by the City. State funds have been eliminated. Now the program is funded as part of the Public works Recycling Program. The program now operates 6 months instead of eight months due to budget cuts.

**Results:** In 2005, over 2500 residents dropped off about 10,000 gallons of paint products. They took home about 2500 gallons. The City recycled about 7500 at a cost of \$20,000 excluding personnel.

The best outcome, mostly because it is the most unexpected outcome, is neighborhood pride. Residents are beautifying and protecting their environment. Providing more access for safe disposal and recycling of paint and motor oil has resulted in 50 percent of the paint, stains and solvents coming into the recycling centers being reused by residents.

The program provides the least expensive option for residents to beautify and properly maintain the interior and exterior of their homes. Paint costs between \$10 and \$25 per gallon and the recycling centers offers it for free. Over the last eight years, since the inception of the program, thousands of residents have spruced up their homes with a new coat of paint or cleaned their cellar of unwanted paint, motor oil and other hazardous materials.

## **APPENDIX B-1**

## Metro Portland Oregon, S.O.P # 7-REUSE PROGRAM

In order to promote the health and safety of Metro personnel, reuse customers, and the environment, the following guidelines will be adhered to in the Metro HHW reuse program:

## A. CONDITION OF MATERIALS

All materials accepted for the reuse program are to be:

- 1. In their original containers, with all original labels intact and legible. The container must be in sound condition, with closures properly functioning.
- 2. Sealed, never-opened containers are preferable, but containers that have been opened with half or more of the original contents remaining are acceptable.
- 3. The contents of each container accepted into the reuse program must be verified through testing. Verification testing will depend on the type of product. Products in containers with the original manufacturer's seal still intact require no testing. In addition, containers such as aerosols which cannot be reused to hold other materials need not be tested.

Testing will include, at a minimum, visual examination of the contents and in most cases some basic tests such as pH and water solubility. The results of testing must correlate with the results expected for the type of product that is specified by the container labeling. When in doubt about appropriate testing for a particular product, consult with a staff chemist.

## **B. TYPES OF MATERIALS**

The following types of materials may be routed to the reuse program when the condition criteria outlined above are met:

- Building materials, such as paint, sheetrock compounds, spackle, adhesives, etc.
- Household cleaners
- Fertilizers (see separate fertilizer narrative on next page).
- Lab chemicals
- Linseed oil/turpentine/paint vehicle mix
- Automotive products
- Garden products and organic pesticides as described in the following list:

Other types of products will be considered and evaluated for inclusion in the reuse program on a case-by-case basis.

The following will not be accepted for giveaway in the reuse program:

- Pesticides not on the above list.
- Any products for use on the human body, such as shampoos, unless the container is sealed with the original manufacturer's seal, or the product will be used for animals.
- Any products that is to be eaten or taken internally.
- Any other product that is deemed to be too hazardous for reuse.

## ORGANIC PESTICIDES ACCEPTABLE FOR REUSE

Pesticide Common Uses

Diatomaceous earth Insecticidal dust, slug barrier Silica gel Insecticidal drying agent

Boric acid Insecticidal dust, primarily ants and roaches

Insecticidal soaps Soft-bodied insects

Fish oil spray

Bacillus thurengiensis Caterpillars, mosquitoes

Linalool

MethopreneInsect growth regulatorNeemBotanical-based insecticide

Oil spray /dormant oil/ horticultural oils Smothering agent

Sulfur Fungicide
Lime-sulfur Fungicide
Copper sprays Fungicide
Tanglefoot/sharpshooter Insect barrier

Chrome yellow pain Aphid trap attractant

Anything with safer or ringer brand name Various

Pheromones Attractant for traps

The experience and skill of the recipient of reuse products should also be taken into account. For example significant quantities of flammable building products should only be given to users capable of properly handling and storing the product, and strong acids (any material with a pH less than 3) should not be distributed for use in households.

## C. PICKUP PROCEDURES

All persons and organizations that wish to obtain products through the reuse program must submit in advance a request for the material desired. Metro staff will determine if the material requested is available and meets the criteria described above.

In general Metro's preference is to give products to a limited number of recipients, to minimize staff time required, and to give to organizations rather than individuals. Exceptions to this may be made on a case-by-case basis.

Metro employees may take items for reuse, though they need to remove materials from the H2W facilities by closing time on Saturday of the week in which the material was obtained. In addition, METRO EMPLOYEES MUST FOLLOW ALL RULES AND GUIDELINES IN THIS S.O.P.

All recipients of reuse materials must sign the standard disclaimer form. These forms are kept on file. Repeat reuse recipients should sign a new form if their existing form is over one year old.

A tally of all reuse items given away should be maintained for inventory purposes.

## **Fertilizers**

Many of the fertilizers that arrive at the Household Hazardous Waste Facilities can be reused, even considering the poor condition of many of their containers. To insure a quality product, a careful sorting process has to be followed, which requires a basic knowledge of fertilizers.

The basic formula for a fertilizer is printed on the individual container, as required by law. The formula gives a listing of the guaranteed percentages of the following nutrients: Nitrogen, phosphorous, and potassium. The nutrients are always listed in that order. A fertilizer with a formula of 30-10-10 contains 30% nitrogen, 10% phosphorous, and 10% potassium (if a fourth number were present, it would represent sulfur). This number is sometimes referred to as the nutrient ratio; the example used here represents a nutrient ratio of 3-1-1.

#### **Fertilizer Ratios**

20-20-20; 18-18-18; and 10-10-10 are all the same, having a ratio of 1-1-1. The only difference is that higher numbers represent higher concentrations: When applying them, the amounts used would differ.

It should be easy now to visualize that 10-20-20 is a 1-2-2 ration, or 10% nitrogen, 20% phosphorous, and 20% potassium. An interesting fact is that manure is considered to be a 2-1-1 ratio while fishmeal is 5-1-1. So even organic fertilizers will have a formula listed.

#### Re-use

The original reason for pulling fertilizer out of the waste stream was to avoid the necessity of disposal as a poison. To this end, we contacted various Master Gardener's organizations and agricultural extension programs in an effort to determine if a market for the material was available. Surprisingly enough, it was. While we do not make a profit from disposal because the product is either given away or used on our own facility, we are not paying the \$250.00 per drum that is the normal disposal rate. We have found that our product works effectively at our facility, and some of the individuals here have tested it in their own yards.

## **Sorting**

We receive fertilizers in both liquid and solid forms. Each can be either organic or inorganic; we only differentiate between organic and inorganic when the fertilizer is a liquid. So our sorting process is broken down into four (4) categories. They are:

- 1. Solid dry fertilizers, which include organic and inorganic fertilizers and plant foods.
- 2. Solid water soluble fertilizers, which include MiracleGro, Peterson's, and various other brands usually distinguishable by their neon colored packaging.
- 3. Liquid organic fertilizers, include any and all fish/whale liquid fertilizers. This includes various vitamins, hormones, and plant foods.
- 4. Fish fertilizer.

NOTE: At no time are any "Weed 'n' Feed" or moss control products included. These products generally contain 2,4-D or other herbicides, and are harmful to most ornamental plants and trees.

As with all materials received at the H2W facilities, a certain percentage of containers are expected to be in poor condition. The material in these containers has to be disposed of on a case-by-case basis under plant food in N2 poisons.

## Disposal

It must be stressed that the product is still only as good as the gardener using it. Unlike the original packaging on store-bought fertilizers with directions on them, our have only the knowledge we impart to the user. We must inform the users of our sorting process and caution them that while we can estimate the formula only, experimentation on the only way to safely use the product. This is especially true of the liquid fertilizers that require various amounts of water to apply.

As with everything else that we give out to the public, we have to keep accurate records of who, what, and when. Make certain the disclaimer has been filled out, and that the information is legible. Notify the tracking lead person that material has been taken.

## **Procedures for Handling Fertilizer**

Any fertilizer that is unlabeled or that we can't determine if might be a weed and feed will be lab packed as N2 "plant food".

#### DRY FERTILIZER

This consists of granular lawn and garden fertilizer and organic fertilizer such as bone meal or cottonseed meal. These fertilizers are to be bulked into the 55 gal. drum marked "DRY FERTILIZER."

## WATER SOLUBLE FERTILIZER

This category consists fertilizers that are very concentrated and need large amounts of water to work properly. The fertilizer is usually bright blue, green, or yellow. Common names are Miracle-Gro and Peters plant food. These fertilizers are to be bulked in the 5 gal bucket marked "WATER SOLUBLE FERTILIZER."

## FISH FERTILIZER

This category consists of the bottles and jugs of fish fert. This is the stuff that is thick, dark brown and usually smells bad. These fertilizers are to be bulked into the 55 gal poly drum. If the container can not be opened or the contents can't be poured out then lab pack as a N2 "plant food." Be careful not to bulk any liquid fert. that are fish based, These are lighter in color and much thinner than regular fish fert. A common brand name is VI- GRO. These fish based ferts. should be bulked into the liquid fertilizer. bucket.

## LIQUID FERTILIZER

This category is for all other liquid plant foods that aren't fish fertilizer. Make sure that they are only plant food and don't contain any pesticides or herbicides. These fertilizers are to be bulked into the 5 gal bucket marked "LIQUID FERTILIZER." Some liquid lawn fertilizers that are high in iron content have EDTA in them and these should be lab packed as a N2.

## **APPENDIX B-2**

## Sonoma County Waste Management Agency, California, REUSABLE EXCHANGE PROGRAM QUALITY ASSURANCE PLAN

Products selected for redistribution through the Sonoma County Waste Management Agency's exchange program are to meet the following criteria:

- Container is at least ½ full
- Label is intact and readable
- Product is in original container
- Container is not compromised and is relatively clean
- Product is currently available over-the-counter
- Product has not expired according to manufacturers printed expiration date
   Product provides no sign of contamination

Product is not on the Agency's "Not To Be Redistributed" list

- 1. To assure the above criteria are met, the following procedures will be followed.
- 2. Reuse workers will determine following with a visual analysis of the container:
- 3. That the container is at least ½ full
- 4. That the label is intact and readable
- 5. That the product is in an original container (e.g. no unmarked or hand marked jars, tin cans, etc.)
- 6. That the container is not compromised and closures work (e.g. rusting through, cracked, broken cap, torn, bulging, etc.)
- 7. That the product is currently available over-the-counter (e.g. see attached list of banned or restricted pesticides)
- 8. That the product is not a pesticide recommended for use on food crops
- 9. That the product is not on the Agency's "Not To Be Redistributed" list
- 10. Clean off the container as necessary
- 11. Confirm expiration date has not past, if applicable

Additionally, reuse sorters will open and inspect contents for the following type of containers:

- Oil
- Antifreeze
- Bleach
- 5 gallon buckets
- containers with spray pump tops
- large containers with wide mouths

Products that have not moved in six months are to be removed from the reuse lockers and packed for disposal.

## **REUSE PROGRAM**

## PRODUCTS NOT TO BE REDISTRIBUTED

- 1. Any pesticide NOT on the approved list.(see separate list)
- 2. NO pesticides that have labels recommending used on food crops
- 3. NO root killers that contain copper
- 4. NO personal care products (e.g. hair spray, makeup, medications, shampoos, etc.)
- 5. NO pesticides that have labels recommending used on food crops
- 6. NO unknowns
- 7. NO lead-based paints
- 8. NO chemicals for experimental purposes
- 9. NO automotive batteries
- 10. NO ammunition, gunpowder, fireworks or pyrotechnic devices.

## ACCEPTABLE PESTICIDES FOR REUSE PROGRAM

Pesticide	Common Uses
Diatomaceous earth	Insecticidal dust, slug barrier
Silica gel	Insecticidal drying agent
Boric acid	Insecticidal dust, primarily ants and
Insecticidal soaps	Soft-bodied insects
Fish oil spray	
Bacillus thurengiensis	Caterpillars, mosquitoes
Linalool	
Methoprene	Insect growth regulator
Neem	Botanical-based insecticide
Oil spray /dormant oil/ horticultural oils Smothering agent	Sulfur
Fungicide	Lime-sulfur
Fungicide	Copper sprays
Fungicide	Tanglefoot/sharpshooter
Insect barrier	Chrome yellow paint
Aphid trap attractant	Anything with safer or ringer brand
Various	Pheromones
Attractant for traps	Roundup
Weed Killer	Diatomaceous earth
Silica gel	Insecticidal drying agent
Insecticidal soaps	Botanical-based insecticide
Oil spray /dormant oil/ horticultural oils Smothering agent	Copper sprays
Tanglefoot/sharpshooter	Aphid trap attractant
Anything with safer or ringer brand	Weed Killer

## **APPENDIX B-3**

# Carver County, Minnesota ENVIRONMENTAL CENTER PRODUCT REUSE PROTOCOL

2/18/05 draft

## **Background**

It is estimated that up to 50% of household hazardous wastes (HHW) received in HHW collection programs are still of good quality and can be considered reusable. Carver County has historically reused as many products received in the HHW program as possible, given the collection system in place. In 1999, Carver County was awarded a CAP grant for its HHW facility by the MN Office of Environmental Assistance. In accordance with the grant agreement, Carver County is to operate a product reuse and education program with the intent of accomplishing a 50% recovery rate of materials collected in the HHW program.

With the use of guidelines and training, HHW staff (Contractor or County) can screen wastes received for usability. The objective of the Carver County Environmental Center (EC) Reuse Protocol is to optimize the amount of good, useable products placed in the County's product reuse program. By doing so, resources for new products are conserved, tax dollars used for disposal are reduced and residents are able to save money by taking products from the reuse program for free. This protocol will establish guidelines and procedures for Contractor and Environmental Services (ES) staff to follow when receiving HHW that can be reused.

The Contractor is responsible for the operation of the Product Reuse Program, insuring that all possible quality products are removed from the disposal waste stream, properly screened, weighed and shelved for reuse. The Contractor is also responsible for the order and cleanliness of the Reuse Room. ES staff are responsible for oversight of the Product Reuse Room to insure that it is operated and maintained to the standards outlined in this protocol. ES staff will also support Contractor staff in the operation of the Reuse Room by helping to check products (24 hour OSHA trained ES staff only) for use when Contractor staff is unable to, by weighing, recording weights and stocking shelves in the Product Reuse Room and by checking latex paint products for reuse when necessary.

## General guidelines

While it is a priority for Carver County to maximize the quantity of products reused, the quality of the products placed into the Reuse Program is an important issue. The Product Reuse Room should contain products of an overall high quality. This is important to help establish and maintain a consistent customer base who will regularly utilize the Product Reuse Program and also to attract new customers drawn by a reputation for quality. In order to best accomplish this, all HHW received in the Carver County HHW program at the EC will be checked for usability following these general guidelines:

## Is the container in good condition?

- No or very minimal rust should be visible on or in the container
- The container should not be dented or damaged to the extent that it can no longer safely
  contain its intended product, cannot remain in an intended upright position or that the
  quality of the contents could be adversely affected

- The container should not be cracked or cut or otherwise modified so that it will no longer entirely and safely contain its product
- The lid or closing mechanism of the container should be functional so that it can safely seal the container to keep the product contained and the quality of the product maintained
- Mechanisms for releasing or dispensing products should be functional
- The product label should be intact and legible

## Is the product in good condition?

Products that are in good, useable condition retain the condition or quality they were in when originally packaged. A description of product characteristics on the container label may help identify original product qualities. This typically means the following:

- An absence of a foul, spoiled or atypical odor
- An absence of mold
- No hardening or crusting of a liquid product around the edges or tops of surface areas
- Powdered products that remain free flowing as opposed to caked or hardened
- An absence of separation of a product that is normally blended in it's original state
- Solidification or hardening of a product that is normally liquid or softened in it's original state

## Has the product never or partially been used?

Some products received at HHW facilities have never been opened for use. Original seals or undisturbed containers may indicate this. Some products that have never been used can be placed directly on the reuse shelves. Others will need to be opened to insure that conditions such as freezing and thawing have not affected the quality of the product. An example of a product that does not need to be opened is a new container of motor oil. An example of a product that should be opened is a new can of paint.

## Quantity of product remaining in container

Some products are useful to those who would reuse them even if small amounts remain in the container. An example of this might be a small amount of product remaining in an aerosol can of WD40. Some products, such as latex paint, should be at least one half full to be considered for reuse. Contractor and ES staff should discuss and arrive at a general common understanding of quantities of particular products.

## What is the age of the product?

Many products older than 10 years are not appropriate for use due to their age and a smaller number of older products are appropriate for use. The use of a product based upon age will be considered on a case by case basis based upon discussion between contractor and ES staff.

## **Waste Categories**

For the purposes of this protocol, HHW received can be grouped into two general categories:

- Paints (latex and oil, and stains and varnishes)
- Other Products (spray paint, adhesives, automotive fluids, household cleaners, solvents, etc.)

The two categories of paints and all other wastes will typically be managed differently by HHW staff.

## Receipt and Checking for Reusability

In the receiving area outside the west facing door of the EC, most HHW is placed on Rubbermaid carts by contractor staff and moved into the waste packing areas within the building. The two waste categories received on the carts and moved into the EC will be managed as follows:

**Paints** – If there is time at the point of receipt, qualifying paints (see container and other descriptions above) may be checked when carted into the EC receiving area. During busy collection times, qualifying paints will be stacked in gaylord containers in a separate reuse paint screening area and checked at a later time when HHW staff are not so busy.

To check for usability, paint will be moved to the receiving table and lids will be taken off to examine interior contents. If the interior paint container is generally free of loose rust, if the contents are not moldy and if an acceptable paint "odor" is detected, staff will stir the paint contents to check for mixing of any separated liquids and smoothness of product. Any lumps or small clumps that will not blend will cause the paint to be unusable. Even separated latex paint can be useable if blending can occur with stirring. When a paint product is determined to be useable, HHW staff will daub a small portion of paint on the lid of the can to indicate that it was checked for usability, that it is useable and to clearly indicate the color. Lids will be securely reaffixed using a mallet or hammer.

All Other Products – All other products such as aerosols, cleaners, solvents, adhesives, household cleaners, automotive products, etc., shall be sprayed, stirred, visually inspected or otherwise checked as thoroughly as possible for usability. The checking of these products will occur immediately upon receipt by contractor staff or qualified ES staff. If deemed useable, products will be placed in totes on receiving table. Once the totes are full or as HHW staff have time, products can be moved into the product reuse room.

#### Use of PPE

HHW staff checking products for reuse will wear appropriate PPE including chemically resistant gloves, clothing and protective eyewear while examining products.

## Carver County Environmental Services Staff Eligible to Check Products

All ES staff may check latex paint for usability. However, only 24 hour OSHA trained ES staff may check Paint and Other Products for reusability.

#### Training

All HHW staff working at the EC will be trained as to the use of the Carver County Environmental Center Product Reuse Protocol. Training will be conducted by ES HHW staff with the assistance of Contractor staff. Updates to initial training will be conducted as needed. New EC staff whether Contractor or ES, will be trained by other EC staff or the ES HHW staff, as needed.

## <u>Inspection of Drum Contents</u>

Qualified ES staff may randomly examine the contents of any Contractor staff packed drums at any time for wastes that are appropriate product reuse items. ES staff will remove such reusable products and place them into the Reuse program using Product Reuse protocol. ES staff will document this examination by indicating in writing the date of examining drum contents that were appropriately packed and products removed from packed drums and placed in Reuse including product name and approximate product volume. ES staff will monthly forward this documentation to Contractor's Operations Manager.

## Quantifying Product Reuse Volumes

To maintain accurate data for annual and grant reporting purposes, all products placed in the reuse room shall be weighed and the weights recorded for later use in reporting. Weights will be recorded as to "Latex Paint", "Oil Paint" and "Other Products" as indicated on the attached Product Reuse Monthly Tally sheets. Weights will be obtained by loading a cart with products and tubs (if necessary), rolling the cart onto the scale in the HHW storage area, noting the total weight and subtracting the net weight of the product from the cart or tub.

## Carver County Used Product Exchange Sheets

ES staff will produce and supply Used Product Exchange Sheets for the Product Reuse Program at the EC. These are duplicate sheets to be located in the Product Reuse room and filled out by customers taking products for reuse. ES staff will remove completed sheets and insure that blank sheets are available for residents to fill out when taking product reuse items.

## Signage

ES staff will be responsible for Product Reuse signage required or recommended in the Contract Between the State of Minnesota and the County of Carver for the Operation of a HHW Management program and any other signs deemed necessary.

#### EC Warehouse Product Reuse Area

To protect public health and Carver County from potential liability exposure regarding products taken and used, the following protocol shall be followed:

Certain products, including those that could pose special concerns for public health and could be used to produce methamphetamine or otherwise be improperly used will be moved and dispensed in a more secure and supervised location. In order for the public to gain access to these products, a sign will be placed in the Product Reuse Room directing customers to speak with an EC staff person who will then direct the customer to the products in the secure area. Examples of products stored in the warehouse product reuse area include but are not limited to aerosols, corrosives, solvents and fertilizers.

The proposed area to store the products will be marked off from and adjacent to the Product Reuse Room in the warehouse area.

## Unusable products

Banned or restricted products are ineligible for reuse in the Carver County Product Reuse Program. In addition, all pesticides, herbicides, rodenticides and fungicides, aerosols containing CFCs, lead or mercury containing paint, materials with which HHW staff are not familiar or any materials prohibited or restricted from distribution by local, state or federal regulations are ineligible for reuse in the Carver County Product Reuse Program.

## Inventories of Product Reuse Room

A regular inventory of Product Reuse Room shelves to determine what products are moving and what products may not be reused and should be removed from the shelves is important. Additionally, occasionally HHW that is not reusable is mistakenly set on reuse shelves by residents or others. A regular inventory will help identify products that should be removed from the Product Reuse shelves. This inventory should include informally noting products and the condition of the area when walking through the Reuse Room and a once weekly visual inspection. Contractor and qualified ES staff will perform these inspections.

## Marketing of CC Product Reuse Program

Carver County ES staff will be responsible for the marketing of the HHW Product Reuse Program. Marketing may include information about the reuse program via classified advertising and press releases in local papers, church bulletin inserts, County website information, literature at the Environmental Center, Government Center, local libraries and other public buildings. Marketing efforts can be increased if use of the Product Reuse Room drops off. Likewise, if the shelves of the Product Reuse Room are regularly empty, marketing efforts, especially marketing that is not free, may be reduced.

## **Carver County Environmental Center HHW Product Reuse Program**

Month,	Year	

Product Type	Pounds
Latex Paint	
Oil Paint, Varnish, Stains	
Other: Aerosols, cleaners, adhesives,	
Automotive, yard care, etc.	

Cart weight = 39 pounds Tub weight = 2 pounds

## Please weigh all products

Incidental weights:
Latex paint (full gallon) weight = 10.9 pounds
Oil paint (full gallon) weight = 9.4 pounds

## **APPENDIX B-4**

## Brevard County Solid Waste Management Department, Florida HOUSEHOLD HAZARDOUS WASTECOLLECTION PROGRAM

## I. INTRODUCTION

## PURPOSE AND SCOPE

The Brevard County Solid Waste Management Department has compiled this Operations Manual in order to comply with the O.S.H.A. Hazard Communications Standard Title 29 Code of Federal Regulations 1910.1200. The purpose of the manual is to provide information and guidance for the operation of the Brevard County Household Hazardous Waste Collection Center (HHWCC). This includes information on the hazardous properties of chemicals being handled, safe handling procedures, emergency procedures in case of an incident and health and safety training. This manual applies to all work operations at the Household Hazardous Waste Collection Center during normal working conditions or emergency situations. The HHWC Program Supervisor is Rita Perini. The Program Supervisor is responsible for the overall facility operations, maintenance, scheduling and training. A copy of this manual is available at the HHWCC or can be obtained at the Brevard County Solid Waste Operations Department, 2250 Adamson Rd., Cocoa, FL.

## BREVARD COUNTY HOUSEHOLD HAZARDOUS WASTECOLLECTION PROGRAM

The Brevard County Board of County Commissioners has sponsored the Household Hazardous Waste (HHW) Collection Program since 1987 which includes operation of three HHWCC's located at the Central Disposal Facility, 2250 Adamson Rd., Cocoa, FL., the Melbourne Transfer Station, 3379 Sarno Rd., Melbourne, FL, and the Mockingbird Way Mulching Facility, 3600 South St., Titusville, Fl. The collection centers were constructed to provide temporary storage of household hazardous wastes and emergency storage of spilled or abandoned hazardous substances that pose a threat to the public or the environment in cases where a responsible party cannot be readily identified. Currently these facilities are open to the public Monday through Saturday in Cocoa, every Thursday, Friday and Saturday in Melbourne, and Monday through Saturday in Titusville. All three facilities are open to the public between the hours of 8:00 am and 4:00 pm. Residents of Brevard can utilize the services of the collection center by bringing their leftover or unwanted paint, pool chemicals, lawn and garden products and automotive products to the collection center for safe and proper disposal. The HHW Collection Program includes semiannual HHW mobile "ROUNDUPS". These are single day events held throughout the County usually in the Spring and the Fall. In order to provide convenient disposal for all residents, the events are held at different locations around the county. Citizens can drop off their old and unused paint, pool chemicals, lawn and garden products and automotive products during the advertised operational hours. HHW is accepted free of charge from homeowners with a limit of 20 gallons per home.

## DROP AND SWAP (MATERIALS EXCHANGE)

On July 1, 1994 the Solid Waste Department Household Hazardous Waste Collection Program implemented a "Drop and Swap" Program. The program was developed to divert usable household products from the overall household hazardous waste stream. A major goal of the

program is to defray the potentially high disposal costs of these types of wastes and to use what would otherwise be wasted materials. In addition, the program provides homeowners, as well as public agencies (i.e. county, city departments, housing authority, charities), the opportunity to obtain usable materials at no charge. The HHW Collection program has found, for example, that Park and Recreation Department's can utilize muriatic acid; ceramic tile installers can use adhesives and grout additives, gardeners can use certain herbicides and homeowners can always use a specific paint, stain or varnish. The Program is designed so that usable materials are collected and segregated by the collection center staff at the Cocoa facility during normal operating hours. The only exception is paint that can be exchanged at any of the three facilities.

Materials must meet the following criteria in order to be segregated for the exchange program:

- 1) Original container
- 2) Unopened or opened and at least half full containers
- 3) Label in tact (readable)

Materials which are excluded from the exchange program include:

- 1) Pesticides/Insecticides
- 2) Unknowns
- 3) Canceled or banned products (i.e. Blockade, chlordane, DDT)

All materials selected for the exchange program must be approved by the Program Supervisor or designee before being placed in the designated "Drop and Swap" area. A "Drop and Swap" recipient shall be at least 18 years of age and will be allowed to browse the materials in the designated "Drop and Swap" area only. No materials will be exchanged from any other area of the collection facility including the chemical storage buildings or the paint storage area. After the "Drop and Swap" recipient has selected desired items, the Program Supervisor or designee, shall review the materials and assist the recipient in filling out the "Drop and Swap" waiver (Attachment E). The recipient, in turn, must sign and date the waiver. If at any time the materials selected by the "Drop and Swap" recipient do not meet their expectations, the materials can always be returned to the collection facility.

## Drop and Swap

Potential Hazards

- a) exposure to spilled or leaking materials
- b) exposure to sharp edged containers
- c) injury through lifting and carrying

## Safety/PPE

- a) apron
- b) gloves
- c) safety goggles
- d) county issued safety shoes

#### Duties include:

- a) making available products that meet the requirements of the Drop and Swap
  - i) segregating usable material to Drop and Swap area
  - ii) assisting Drop and Swap recipient in filling out waiver form

## Education

## Duties include:

- a) providing information upon request to customers concerning the program or referrals
- b) fact sheets, flyers, magnets, recyclopedia and brochures are available for handout to the public and are available at each site
- c) providing professional, polite and courteous service to all customers

#### **PAINT**

## **Description**

A) latex: pourable water base paint, acrylic paint; product containers shall be gallon or 5 gallon bucket size, and at least half full and non-leaking.

Key Words: water, latex, acrylic, keep from freezing, clean up with water

<u>Packing Method</u>: segregate usable latex paints into the designated pre-recycled paint storage area. Pack by placing the individual containers in cardboard paint boxes. Boxes shall be placed on the pallets for shipment to Richard's Paint Manufacturing Co. for recycling. Latex paint less than a gallon (i.e. quart, pint) can be discarded as garbage or segregated to the Drop and Swap area.

## Hazard Label: none

B)oil-base: pourable enamel (oil-base) paint and primer, wood stains, polyurethane, varnish, and shellac; product containers shall be quart, gallon or 5 gallon bucket size, and at least half full and non-leaking.

Key Words: flammable, combustible

Packing Method: segregate usable enamel paints into the designated paint storage area. Pack by placing individual containers in cardboard paint boxes. Boxes shall be placed on pallets for shipment to Richard's Paint Manufacturing Co., for bulking. The bulked oil-base paint is shipped as an alternative fuel to a concrete aggregate manufacturing plant.

C) oil-base: less than a quart and oil-base; automotive, adhesive, industrial coatings, or traffic paint.

<u>Key Words</u>: flammable, combustible, industrial, adhesive, traffic, adhesive, marine, keep away from flames, avoid fumes.

<u>Packing Method</u>: segregate paints, adhesives and industrial coatings; loose pack by placing individual product containers in 55 gallon metal open head drums. Drums shall be properly labeled prior to use. The label shall include the hazard class and accumulation start date. (Attachment G)

Hazard Label: Paint related material/Flammable Liquid

#### **NON-HAZARDOUS**

<u>Description</u>: miscellaneous materials not containing solvents, corrosives, poisons, pesticides or other hazardous ingredients. Includes latex (water base) paint and adhesives, caulk, suntan lotion, cooking oil, asphalt, cement, car wax and cosmetics etc. There are many household cleaners that are diluted during their normal use and disposed of down the drain to the sanitary sewer. Avoid this when on septic tank. Some examples of this would include Mr. Clean and Spic-n-Span floor cleaners; Pine Sol or 409 all purpose cleaners; Ajax and bathroom cleaners; and laundry and dishwashing detergents.

<u>Disposal</u>: Solids are disposed of in the regular garbage. Liquids can be sewered with prior approval of wastewater treatment facilities. Usable materials can be segregated to the Drop and Swap area.

## RECYCLABLES

<u>Description</u>: any materials that are recycled, either off-site or by county staff on-site, including used motor oil, antifreeze, latex paint, automotive batteries, NiCad (Nickel Cadmium) batteries.

- A) <u>Used motor oil</u>: including two cycle oil, hydraulic fluid, transmission fluid (no brake fluid), shall be bulked by pouring the liquid waste motor oil into the designated secondarily contained storage tank.
- B) <u>Antifreeze</u>: bulk into the designated lined storage container, usually a 55 gallon metal open head drum. Prior to bulking the antifreeze the drum shall be properly labeled. The drum shall be properly grounded prior to bulking the antifreeze.
- C) <u>Automotive batteries</u>: pack by placing individual batteries on pallets in designated battery storage area. The batteries are to be stacked no more than two high and a layer of cardboard shall be placed on the pallet first and in between the layers. If not under a roof area, the batteries will be covered with visqueen and a tarp during storage. Sealed lead acid batteries will also be stored with the automotive batteries.
- D) <u>Latex paint</u>: segregate to the designated paint storage area and placed into the cardboard paint boxes and set on pallets. If not under roof, the paint is to be covered with a tarp during storage.
- E) <u>Fluorescent Lamps</u>: household generated fluorescent lamps will be accepted through the collection program. The lamps will be packed by placing them into the appropriately sized box marked "spent fluorescent lamp" (4', 5', or 8'). When a box is full close and tape the end of the box and mark the number of lamps in the space provided on the outside of the box. Commercially generated lamps: due to lack of sufficient storage space, all commercial generators of fluorescent lamps within Brevard County shall be referred to MTI, 4317-L Fortune Place, West Melbourne, Fl., 1-800-808-4684 or 952-1516. MTI is an advanced environmental recycling corporation.
- F) <u>Mercury Containing Devices (MCD's)</u>: including household thermometers, thermostats, boat bilge switches and even tennis shoes with lights in the heel are acceptable through the collection program. Pack these materials in the designated 5 gallon bucket. The bucket shall be properly labeled "mercury containing devices". The marked container is to be stored in the designated compartment of the chemical storage building.

G) Propane Tanks (20 gallon only): bar-b-que and RV 20 gallon propane tanks are stored at each site on designated pallets. Periodically the tanks are picked up from the MWMF and Sarno collection centers and moved to the CDF collection center for final transport to the vendor's site for recycling.

## **UNKNOWNS**

<u>Description</u>: any material for which a hazard class can not be readily identified: unlabelled containers. Collection center staff should obtain as much information as possible from the resident leaving the material including name, address and phone number. Material shall be tested for pH If necessary contact the County's hazardous waste contractor or set aside for identification by the contracted chemists at the next shed cleanout.

Key Words: none

<u>Packing Method</u>: the material shall be tested for pH and then segregated to the designated unit of the chemical storage shed and place in the bin marked appropriately. If material remains unknown, segregate product container to the designated unit of the chemical storage by placing the container in the bin marked appropriately (i.e. unknowns).

#### PROCEDURES FOR OPEN OR LEAKING CONTAINERS

If the material is brought into the collection center or Roundup in a open or leaking container, the site personnel should place the material and container into a larger appropriate (i.e. plastic or metal) receptacle (i.e. 5 gallon bucket, 2 lb. plastic bag) and properly label the container. Any spilled material should be soaked up with absorbent material stored in the equipment shed (vermiculite, oil dri). The contaminated absorbent should also be handled as a hazardous material and sealed in a container and stored in the chemical storage shed (except less then 25 gallons of oil or petroleum materials that spilled). In this case the absorbent material can be thrown out.

As stated earlier in the manual up to 20 gallons of material will be accepted from homeowners. If the volume of material brought in is so large or if the nature of the material is such that it is suspected of being commercial/business generated waste, rather than household, use the following procedures:

- 1) Request that the individual complete the Household Hazardous Waste Participant Certification Form (Attachment F) attesting that the material is residential rather than generated by a commercial business.
- 2) If the individual indicates that the waste is indeed commercially generated, site staff shall follow the procedures for disposal of commercial/business generated waste (Attachment H). Remember, some times it is better to accept a small amount of commercially generated materials rather than take the risk that the individual will illegally dump the material. Practice good, sound judgment!

## WASTE PICKUP PROCEDURES

The HHW collected through the collection program is packaged and transported by several different waste management contractors. Pickup service is scheduled with the appropriate waste hauler, this will vary depending on the waste stream. Collection center staff will be responsible for assisting in the packing of waste materials for transport and completing necessary paperwork for the shipment. The following table outlines waste types, waste management contractor and required paperwork.

WASTE TYPE	CONTRACTOR	PAPERWORK
1) Automotive Batteries	TradeMark Metals	Vendor invoice
2) Antifreeze	EQ Industrial Services	Manifest
3) Latex & Oil Paints	Richard's Paint Mfg.	None
4) Used Motor Oil	US Filters	Used Oil Manifest
5) NiCad Batteries	RBRC	None
6) Bulk Flammable Liq.	Giant Resource Recovery, Inc.	Waste Material Profile
7) Shed Materials loose packs,	EQ Ind. Services	Uniform Waste manifest
lab packs		
8) Fluorescent Lamps	MTI/AERC	Uniform Waste Manifest
9) Flares/Ammunition	Fl State Fire Marshall	Record weight
10)Propane Tanks	Par Gas	Vendor Invoice

CONTRACTOR

DADEDWODZ

WACTE TYPE

The Brevard County HHW Collection center operates as a temporary storage facility for HHW and CESQG waste and therefore, they are registered with Federal and state authorities as a generator.

The collection centers have been assigned the following generator EPA ID #'s FLD984166173 (CDF), FLR00007889 (Sarno) and FLR000028738 (Titusville Mulching Facility). The ID #'a are to be used as the generator ID # on the Uniform Waste Manifest forms when applicable. Any commercial business requesting disposal through the HHW collection program is required to maintain a separate generator ID number.

Copies of the necessary paperwork is maintained at the program Supervisor's office at all times. If at any time there are any questions concerning scheduling waste pickups or paperwork staff should contact the program Supervisor for assistance.

## APPENDIX B-5

# Pinellas County Utilities Department of Solid Waste Operations, Florida HOUSEHOLD ELECTRONIC & CHEMICAL COLLECTION CENTER (HEC<sub>3</sub>) SWAP SHOP PROGRAM OPERATING PROCEDURES

The HEC3 Swap Shop Program offers, to government entities and the public for re-use for homes, automobiles, and/or shops, the following types of materials collected at HEC3:

- Aerosols: Cleaners, paints, lubricants, disinfectants.
- <u>Automotive fluids</u>: Antifreeze, automotive cleansers, brake fluid, power steering fluid, transmission fluid.
- <u>Latex paint</u>: In original secure labeled containers, not visibly contaminated.
- Oil paint: ONLY in original, labeled, un-opened containers.
- <u>Paint related materials</u>: Linseed oil, mineral spirits, paint remover/stripper, paint thinner, polyurethane tung oil, turpentine, varnish, stain.
- Fertilizer: In original, secure, labeled containers; solid form only.

## A. SCREENING FOR RE-USABLE MATERIALS:

HEC3 Staff screens accepted materials to determine whether or not materials can be reused using the following criteria:

- Materials must be in original, labeled, secure containers.
- Labels must clearly identify the contents and give instructions for safe use.
- No mixed materials can be released.
- Aerosols must be in operable condition.
- Oil paint in containers that have been opened can not be released.
- Fungicides, herbicides, insecticides, pesticides, and/or any other poisons will **NOT** be released.
- Freon will **NOT** be released.

Electronic equipment collected at HEC3 will be picked up by the Contractor. No electronic equipment may leave the facility unless weighed and signed for acceptance by the Contractor. The electronics program is not part of the Swap Shop program. No scavenging of electronic equipment will be allowed by staff or participants of the program. The Electronics Storage Area will be secured at all times when the center is not open for collections.

## B. SEGREGATING/STORING SWAP SHOP MATERIALS:

HEC3 Staff segregates/stores Swap Shop Materials as follows:

- Segregates materials for HEC3 Swap Shop upon acceptance from residents.
- Stores segregated materials in appropriate flammable cabinet; stores paints in designated HEC3 area.

## C. RELEASING SWAP SHOP MATERIALS:

HEC3 Staff uses the following procedures when releasing Swap Shop Materials:

- Inventories and logs out by number of units, material type, and weight of all materials on the Swap Shop Release/Waiver Form, prior to release.
- Recipient signs the Release/Waiver upon receipt of materials.
- Staff categorizes each item released in the specified column of the Swap Shop Release/ Waiver Form.
- Staff totals each category and notates totals at the bottom of each sheet.

The public is prohibited from entering or removing any item stored in the chemical storage building.

#### SECURITY AND INSPECTIONS

## A. SECURITY

The site is fenced to prevent unauthorized entry into the storage area. Signs are displayed on all four sides of the fencing prohibiting entry except to authorized personnel. The entrance and exit gates to the center are closed and locked whenever HEC<sub>3</sub> is not open to the public. Any time the Center is not staffed, the site and buildings are closed and locked.

## **B. INSPECTIONS**

HEC3 is inspected routinely. Results will be entered onto HEC3 Opening and Closing Check List Report Forms. Safety equipment and supplies are checked to determine:

- Accessibility
- Need for repair or service
- Inventory levels
- Readiness

Storage buildings are checked for:

- Leaking, bulging, or deformed containers
- Security of containers
- Aisle space
- Correct segregation/storage of hazard classes of chemicals
- Correct labeling of storage buildings for hazard classes

The Center is checked for:

- General site condition.
- Cleanliness of concrete slab.
- Condition of Center storage areas:

- aerosol area
- battery area
- latex paint area
- oil paint area
- paint-related chemicals area.
- Florescent bulb storage
- Condition of drain closures.
- Condition of safety shower and emergency eye wash station.
- Integrity of fencing and curbing.
- Integrity of storage buildings and office/storage building.
- Condition of fire extinguishers and warning systems (Monthly by Maint Staff and Bi Annual by contractor).
- Condition of fire suppression system (Bi Annual).

## PROCEDURES FOR HOSTING A MOBILE COLLECTION

In order to make the household electronic and collection program available to as many Pinellas county residents as possible, Pinellas County provides mobile collection events throughout the county. These events are held in partnership with cities, the Pinellas County School Board or corporate sponsors.

The partner provides the location such as a school parking lot, store parking lot or public works facility. In addition to the location the cities are asked to provide labor for the event as well as advertising and promotion.

In preparation for completing a mobile collection event the Solid Waste Specialist (SWS) will compile dates, which fall around the previous years schedule. The scheduling will be coordinated with the chemical and electronics contactor, schools, and participating cities. These dates will then be forwarded to the Environmental Education and Outreach and the hosting city or Enviro Partner (Home Depot, Kmart, etc.).

Mobile collections are held on a Saturday from 9:00am to 2:00pm. The times of the year these events are held are from September thru May. Special consideration should be given around holidays and special events.

## A. Mobile collection scheduling and staffing

• The assigned SWPA and SWS will determine the staffing requirements needed for the event. The previous year poundage and traffic require careful planning for a successful event. Full consideration is needed for traffic patterns around businesses to alleviate any problems with their normal operations. At City sponsored events, the city will provide employees to assist the contractor in collection and traffic control. The county employee will be there as coordinator and to verify weights and manifest for payment. At County sponsored events, Pinellas County Solid Waste representatives will provide all support labor as well as coordinate.

- The SWPA with the assistance of the SWS will be responsible for coordinating assignments for help.
- The County reserves the right to reschedule, relocate, suspend or discontinue operations of a mobile collection event due to participation, adverse weather or other hazardous conditions.

## B. EPA ID NUMBER

• The assigned SWPA will apply for the Application for Emergency EPA/DEP Identification number (Form 62-730.900) two weeks prior to the event.

## C. Meetings and Advertising

- The SWPA, SWS, contractors and Environmental Education and Outreach representative (EE&O) will meet with the business or city at the mobile collection site to go over placement and flow patterns. Advertising will be completed by EE&O. The Cities will do their advertising but must be coordinated and approved by EE&O.
- The SWPA and EE&O will distribute flyers to the municipality, organizations, churches, etc. two
  weeks before the event.
- The SWPA will install signage at the site a week before actual event.- The SWPA will check to see if the variable message was delivered and is correct. This will be completed on Monday prior to the event.

## D. Planning

- The SWPA will review the mobile collection checklist prior to the day of the event.
- The SWPA will make arrangements for a roll off which has been tared by PCUSWO staff. This will be utilized for County and corporate events. This roll off will be utilized for transporting latex paint back to Solid Waste. The City pays to dispose of paint for their event. If arrangements are made to recycle paint record weight of rolloff.
- The SWPA will make arrangements for adequate containers for trash and recycling.
- The SWPA will contact the Fire Department prior to the event.
- Portable Toilets ordered if required.
- If there are permits required for event, tents, or signs the SWPA or SWS will contact city for authorization.

## E. Mobile Collection Event Setup

- County representatives will setup tents and tables. Clipboards with participant forms and pencils will be available.
- Coolers with ice and water will be made available for the day of the event.
- Safety equipment will be worn and available for use by volunteers. This will consist of steel toe shoes, reflective vests, eye protection and chemical resistant aprons at unloading area.
- County representatives will coordinate placement of signs and directional cones on the road to control traffic patterns.

• Pre-event safety meeting will take place discussing evacuation zones, break areas and safety requirements.

## F. During the event

- Direct cars to sign up area, fill out participant form and request customer to put out cigarettes as they proceed to the unloading area. Once at the unloading area ask them to shut off engine, open trunk and remain in vehicle.
- The host Municipality or County will screen participants for business generated electronic or chemical waste. The County's representative shall be notified if a participant attempts to deliver business generated waste. The County's representative shall explain the restrictions to the participant, and forward the business to the appropriate contractor.
- Contractors and representatives at unloading area will make sure the car is shut off and no smoking is taking place.
- Segregation of materials unloaded will be carefully handled. Chemical contractor will be responsible for all spills and will be the first responders to an event. All customers will be stopped and escorted away from event.
- Material accepted include:

Aerosols Antifreeze Corrosives Flammable Liquids Flammable Solids Gasoline

Household Batteries Kerosene Mercury in Devices

Mercury for Recycling NiCad Batteries Oil Paints

• The following materials are specifically prohibited from collection:

Biological Wastes Explosives Infectious Wastes

Radioactive Wastes Smoke Detectors

The County will not pay for disposal of the following materials, but the Municipality hosting the event may agree to collecting and disposing of these items at their own expense. The Municipality must have a contractor available to remove the materials on the day of the mobile collection event in order to accept these materials.

Automotive Batteries Fire Extinguishers Gas Cylinders Lead-Acid Batteries

## G. End of event

- Notify traffic control when the last car will be accepted, place cones in roadway to block entrance of vehicles.
- Remove traffic signs advertising event and shut off variable message board.
- Dismantle and pack tents, cones, paperwork, safety equipment, coolers and tables.
- The Municipality and County representatives will certify net weight, contents, number, size and disposal facility of each drum on a Chemical Waste Removal Log, one copy of which will be given to the County and one copy of which will be retained by the host Municipality.

- The Municipality's representative will sign all chemical waste removal logs, land bans, and manifests, and will be given a legible copy of each document. In addition to the above referenced documents, the representative will be given a legible copy of the container contents sheets. The representative will obtain each document prior to the Contractor's removal of the waste, and will give the documents to the County's representative to verify the invoice.
- Before leaving site a thorough inspection will be completed. Make sure all debris is removed and leave site cleaner than you found it. Thank host for their hospitality.

## TRAINING PROCEDURES FOR HEC3 STAFF

Specific training is required for HEC3 staff is as follows:

- HAZWOPER Awareness and Operational Levels, 40-Hour OSHA training course in
- compliance with (29 CFR 1910.120, e 3 I]).
- Annual 8-Hour Refresher in accordance with 29CFR1910.120(e)(8).
- Annual Quantitative Respirator Fit Test.
- Right to Know Training.
- Contractor-conducted training class.
- On-the-job training in accepting, identifying, segregating, and storing
- household chemical waste.
- Ongoing training and refresher courses as needed.

#### PROCEDURES FOR FILING RECORDS

Record keeping and reporting are important functions of the HEC3. Records are used to document the number of participants, the amount of material collected, and the disposal, recycling, or demanufacturing fate of the materials collected. Completed records are filed last date first, and are retained for a minimum of one year on site and a minimum of five years at the County's Records Retention Facility. Copies of the various records and logs used for HEC3 operations are included in Appendix 1. The following records are completed for the HEC3:

- Daily opening/closing logs, HEC3
- Transfer documents / manifests for Electronics Contractor pickups from the HEC3 or mobile collections (weights, types and numbers of units collected)
- Transfer documents / manifests for Electronics Contractor collections from businesses on or offsite (weights, types and numbers of units collected)
- Disposal records from the Electronics Contractor documenting end use / disposal of all units collected
- Unknown materials, Reactive/Unknown building
- Contingency plan copies
- Manifests, container contents sheets, waste disposal restriction sheets, and certificates of disposal
- Enviro Business Reports

- Waste profile sheets
- Monthly, quarterly, and annual reports
- Participant certification forms

The following reports are prepared using the information collected above:

- TMC reports documenting participation and volume of material collected
- DEP reports documenting participation and volume of material collected
- Department reports documenting participation, volume and program cost
- Exemption report if contractor does not have a signed manifest back to us in 45 days we will contact contractor and after 60 days an exemption report goes to EPA. This will consist of a letter to contractor and DEP with copy of manifest referencing manifest # requesting signed manifest form contractor.

## PROCEDURES FOR CONTRACTOR REFERRALS

As discussed earlier in this document, HEC3 is provided as a service to manage household generated electronic and chemical waste. Acceptance of business waste would change the category of HEC3 from an exempt program to a program requiring permitting as a Hazardous Waste Storage and Transfer facility. Therefore, no business waste shall be accepted at HEC3 except in accordance with procedures outlined in Section XIII, Enviro Business collection events, when wastes are accepted directly by the contractor. Should a business bring wastes to HEC3 on a non-business day, the following procedures will be followed:

- A. Upon determining that the waste was generated by a business, inform the citizen that this facility is for Household generated waste and that business waste is only accepted on Enviro Business days.
- B. If the business is a painter or they have primarily paints give them the paint referral list.
- C. If the business has waste other than paints, advise them of the Enviro Business Collections dates. Give them the Enviro Business brochure. It has U. S. Liquids' address and phone number on it along with approximate disposal cost. Advise them that whatever they do with the waste, they must obtain a receipt to show that they properly disposed of the waste.
- D. If they make threats or give the impression that they plan to or may illegally dispose of the material, contact enforcement group.

## Sample Documents

## **APPENDIX C-1**

# SAMPLE PAINT EXCHANGE PRE-REGISTRATION FORM

The City of	is sponsoring a paint waste exchange on
to promote paint reuse.	If your organization would like to receive paint collected at
this event, please return this from not later th	nan
Name of Organization:	
Contact Person:	
Address:	
Phone Number/Contact Information:	
How Many gallons would you like to receive	e?
What colors? white beige bright colors (red other (specify)	ls, greens, etc.)
Exterior	
All paint must be picked up from the collect	ion site located at
no later than	on
For questions or further information call con	atact:
Please return form to:	
Name:	
Address:	

We will call you or send you a reminder regarding paint pick up!

Courtesy of the Oregon Department of Environmental Quality's "Paint Recycling Handbook,"

June 1994

### **APPENDIX C-2A**

### Waiver Forms

The Leon County Household Hazardous Waste Center accepts household hazardous waste (HHW) products from Leon County residents and offers those HHW products, free of charge, to other Leon County residents (Participant).

Leon County, its officers, employees, or agents, does not warrant, guarantee, or make any representation regarding:

- The integrity, quality, safety, usability or effectiveness of HHW products or containers.
- The contents of HHW containers.

- The instructions on HHW containers.
- The proper storage of HHW products.
- The risk of danger when using HHW products. The participant agrees to transport, store, treat, process, emit, discharge, dispose, use, handle, or otherwise manage HHW products in compliance with all laws.

PARTICIPANT'S WAIVER: I, the undersigned participant, represent and warrant to Leon County that I am at least 18 years of age. I understand that Leon County assumes no responsibility for the quality, performance, or safety of any HHW product, and that there are no warranties of any kind expressed or implied, including, but not limited to fitness of a product for a particular purpose. I represent familiarity with the hazards and proper use of any product obtained, and hereby agree to indemnify and save Leon County, its officers, employees or agents harmless from any and all claims as a result of injury or damages to the undersigned, to the ultimate user or other third party, or injury or damages to property caused by the product regardless of the cause of the injury or damages.

Participant signature	Date	Leon Count	y witness signature
Name (printed)		Title	
Leon County ID			
TYPE OF MATERIALS (paint, cleaners, polish, fertilizer, etc.)	# OF CONT	CAINERS	TOTAL QUANTITY (oz, gals, lbs)

### **APPENDIX C-2B**

### WASTE EXCHANGE

THIS MATERIAL IS FREE OF CHARGE TO POLK COUNTY RESIDENTS CITY AND COUNTY DEPARTMENTS AND TO CHARITABLE ORGANIZATIONS. POLK COUNTY ASSUMES NO RESPONSIBILITY FOR THE PRODUCT QUALITY, PERFORMANCE OR SAFETY. THERE ARE NO WARRANTIES OF ANY KIND EXPRESSED OR IMPLIED. THE USER REPRESENTS FAMILIARITY WITH THE HAZARDS AND PROPER USE OF ANY PRODUCTS OBTAINED AND AGREES TO SAVE THE COUNTY, IT'S OFFICERS, EMPLOYEES AND AGENTS HARMLESS FROM ANY AND ALL CLAIMS AS A RESULT OF INJURY OR DAMAGES TO THE USER, TO AN ULTIMATE USER OR OTHER THIRD PARTY OR DAMAGES OR INJURY TO PROPERTY CAUSED BY THE PRODUCT REGARDLESS OF THE CAUSE OF THE INJURY OR DAMAGES.

DATE	PRINTED NAME	SIGNATURE

### **APPENDIX C-2C**

### HOUSEHOLD CHEMICAL COLLECTION CENTER SWAP SHOP PROGRAM RELEASE/WAIVER

NAME: TITLE: DATE: TIME:	QUANTITY	
DATE: TIME:	QUANTITY	
TIME:	QUANTITY	
	QUANTITY	
# OF UNITS	QUANTITY	
	(OZ., GAL.)	*
ONAL ITEMS.		
ssed or implied. The und and hereby agrees to inde	lersigned recipient represent mnify and save the County	ts familiarity with th harmless from any a
I	DATE:	
1	ssed or implied. The und and hereby agrees to inde attimate user or other pers	as County assumes no responsibility for the product seed or implied. The undersigned recipient represent and hereby agrees to indemnify and save the County I timate user or other person or property caused by the DATE:

# HOUSEHOLD CHEMICAL COLLECTION CENTER SWAP SHOP PROGRAM RELEASE/WAIVER

	RELEASE/WAIVEI	QUANTITY	
MATERIAL(S)	# OF UNITS	(OZ., GAL.)	*
15.			
16.			
17.			
18.			
19.			
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40.			

### **APPENDIX C-2D**

### LIABILITY WAIVER

In taking these hazardous materials into my possession, I understand that the Sonoma County Waste Management Agency:

- does not guarantee that the material inside the container matches the labeling of the container(s) or the shape of such container(s) and makes no warranties or representations concerning the physical and chemical characteristics of the hazardous materials.
- makes no warranties or representations concerning the proper handling, use, storage, or other management of the hazardous material, or concerning the risks to human health and safety or to the environment from misuse.

Upon taking these hazardous materials into my possession, I agree to comply with all federal, state, and local laws and regulations pertaining to the transporting, storage, use, disposal and other management of these materials. I agree to use these materials only as indicated on the product label, provided however that in the event I have accepted any pesticides, I agree not to utilize them on food crops.

I further agree to indemnify and hold harmless the Sonoma County Waste Management Agency, its members, officers, agents, and employees from any and all liability, and any and all claims, demands, costs, damages, and expenses of any type whatsoever, which are in any manner connected to my acceptance, transportation, storage, use, disposal, or other management of this material.

Commercial User     Name (Print):	Yes □ No □	If y	es, Agricultural Chen Signature:	nical ID #:	
Address:			Olgridiaic	Date:	
City:		State:	Zip:		
2 Commercial User				nical ID #:	
			Signature:		
Address:		Ct-t	7:	Date:	
City:		State:	Zip:	Phone:	
3 Commercial User Name (Print):		If y	es, Agricultural Chen, Signature:	nical ID #:	
Address:				Date:	
City:		State:	Zip:	Phone:	
4 Commercial User	Yes □ No □	lf y	es, Agricultural Chen	nical ID #:	
Name (Print):			Signature:		
Address:				Date:	
City:		State:	Zip:	Phone:	
5 Commercial User Name (Print):		If y	es, Agricultural Chen Signature:	nical ID #:	
				Date:	
City:		State:	Zip:	Phone:	
6 Commercial User Name (Print):	Yes □ No □		yes, Agricultural Chen Signature:	nical ID #:	
Address:				Date:	
City:		State:	Zip:	Phone:	
7 Commercial User	Yes □ No □	lf y	es, Agricultural Chen	nical ID #:	
Name (Print):			Signature:		
Address:				Date:	
City:		State:	Zip:	Phone:	
	Yes □ No □		es, Agricultural Chen Signature:	nical ID #:	
Address:			Olgridiaic	Date:	
City:		State:	Zip:	Phone:	
9 Commercial User	Yes □ No □	lf v	es, Agricultural Chen	nical ID #:	
Name (Print):			Signature:		
Address:				Date:	
City:		State:	Zip:	Phone:	
10 Commercial User		lf y	es, Agricultural Chen	nical ID #:	
Name (Print):			Signature:		
Address:		C+-+	7:	Date:	
City:		State:	Zip:	Phone:	

### **APPENDIX C-3**

### California Assembly Bill No. 2202 – Providing Certain Exemptions from Liability for Government HHW Programs

#### **CHAPTER 647**

An act to amend Section 25218.1 of, and to add Section 25218.12 to, the Health and Safety Code, and to amend Section 47550 of, the Public Resources Code, relating to household hazardous waste.

[Approved by Governor September 19, 1996. Filed with Secretary of State September 19, 1996.]

### LEGISLATIVE COUNSEL'S DIGEST

AB 2202, Baca. Household hazardous products or materials: reusability

(1) Existing hazardous waste control laws require a public agency, or its contractor, that intends to operate a household hazardous waste collection facility, to submit specified information to the Department of Toxic Substances Control. The department is authorized to allow any household hazardous waste collection facility to accept hazardous waste from conditionally exempt small quantity generators. The department is required to develop a separate and distinct regulatory structure for the permitting of permanent household hazardous waste facilities that conduct specified activities.

Existing law, the California Integrated Waste Management Act of 1989, provides for the management of household hazardous waste and requires the California Integrated Waste Management Board to prepare guidelines and a state policy to guide the effort of local agencies in providing household hazardous waste collection, recycling, and disposal programs.

This bill would define terms and would authorize a public agency to conduct a materials exchange as part of a household hazardous waste collection program, if the public agency determines which reusable household hazardous products or materials, as defined, are suitable for distribution in accordance with a quality assurance plan, as defined, prepared by the public agency.

(2) Under the act, a city, county, or local agency operating a household hazardous waste program in accordance with the act is immune from liability for specified damages or injuries, except as specified.

This bill would revise the exemption from liability for household hazardous waste programs to additionally require the program to be operating in accordance with specified provisions of the hazardous waste control laws.

(3) The bill would make related legislative findings and declarations. *The people of the State of California do enact as follows:* 

SECTION 1.The Legislature hereby finds and declares all of the following:

- (a) Existing law requires the Department of Toxic Substances Control to promote the reduction of generated hazardous waste. This policy, as well as hazardous waste and disposal bans, requires the rapid development of new programs and incentives for minimizing the generation of hazardous wastes and the maximization of recycling and reclamation efforts.
- (b) A substantial portion of the materials collected by household hazardous waste programs consists of useful materials in their original containers with the original manufacturers' label containing the original instructions on proper use.
  - (c) The state would benefit if common household hazardous materials that are

collected by household hazardous waste programs and are suitable for use were offered free of charge.

- (d) It is the intent of this act to promote the safe and effective reuse, reclamation, and recycling of household hazardous materials through recycling and exchange programs that contribute to the reduction, avoidance, or elimination of the generation of hazardous wastes.
- SEC. 2.Section 25218.1 of the Health and Safety Code is amended to read:25218.1.For purposes of this article, the following terms have the following meaning:
- (a) "Conditionally exempt small quantity generator" or CESQG" means a business concern which meets the criteria specified in Section 261.5 of Title 40 of the Code of Federal Regulations.
- (b) "Curbside household hazardous waste collection program" means a service authorized by a public agency which collects recyclable household hazardous waste materials, including latex paint, used oil, used oil filters, and small batteries, and which is operated in accordance with Section 25163.
- (c) "Door-to-door household hazardous waste collection program" or "household hazardous waste residential pickup service" means a program operated by a public agency, or its contractor, that collects household hazardous waste from individual residences, and transports that waste in an inspected and certified hazardous waste transport vehicle to an authorized household hazardous waste collection facility.
- (d) "Household" means a single detached residence or a single unit of a multiple residence unit and all appurtenant structures.
- (e) "Household hazardous waste" means any hazardous waste generated incidental to owning or maintaining a place of residence. Household hazardous waste does not include any waste generated in the course of operating a business concern at a residence
- (f) "Household hazardous waste collection facility" means a facility operated by a public agency, or its contractor, for the purpose of collecting, handling, treating, storing, recycling, or disposing of household hazardous waste, and its operation may include accepting hazardous waste from conditionally exempt small quantity generators if that acceptance is authorized pursuant to Section 25218.3. Household hazardous waste collection facilities include permanent household hazardous waste collection facilities, as defined in subdivision (h), temporary household hazardous waste collection facilities, as defined in subdivision (p), recycle-only household hazardous waste collection facilities, as defined in subdivision (n), curbside household hazardous waste collection programs, as defined in subdivision (b), and mobile household hazardous waste collection facilities, as defined in subdivision (g).
- (g) "Mobile household hazardous waste collection facility" means a portable structure within which a household hazardous waste collection facility is operated and which meets all of the following conditions:
- (1) The facility is operated not more than four times in any one calendar year at the same location.
- (2) The facility is operated not more than three consecutive weeks within a two-month period at the same location.
- (3) Upon the termination of operations, all equipment, materials, and waste are removed from the site within 144 hours.

(h) "Permanent household hazardous waste collection facility" means a permanent or semi permanent structure at a fixed location which meets both of the following conditions:

Ch. 647

- (1) The facility is operated at the same location on a continuous, regular schedule.
- (2) The hazardous waste stored at the facility is removed within one year after collection.
  - (i)"Public agency" means a state or federal agency, county, city, or district.
- (j) "Quality assurance plan" means a written protocol prepared by a public agency that is designed to ensure that reusable household hazardous products or materials, as defined in subdivision (o), that are collected by a household hazardous waste collection program are evaluated to verify that product containers, contents, and labels areas they originated from the products' manufacturers. The public agency or a person authorized by the public agency, as defined in subdivision (k), shall design the protocol to ensure, using its best efforts with the resources generally available to the public agency, or the person authorized by the public agency, that products selected for distribution are appropriately labeled, uncontaminated, and appear to be as they originated from the product manufacturers. A quality assurance plan shall identify specific procedures for evaluating each container placed in a recycling or exchange program. The quality assurance plan shall also identify those products which shall not be accepted for distribution in a recycling or exchange program. Unacceptable products may include, but are not limited to, banned or unregistered agricultural waste, as defined in subdivision (a) of Section 25207.1, and products containing PCB, asbestos, or dioxin.
- (k) "Person authorized by the public agency" means an employee of a public agency or a person from whom services are contracted by the public agency.
- (l) "Recipient" means any person who accepts a reusable household hazardous product or material at a household hazardous waste collection facility operating pursuant to this article.
- (m) "Recyclable household hazardous waste material" means those materials for which proven and authorized recycling technology exists and is readily available, and includes only used oil, used oil filters, latex paint, antifreeze, used small batteries, and spent lead-acid batteries.
- (n) "Recycle-only household hazardous waste collection facility" means a household hazardous waste collection facility which is operated in accordance with Section 25218.8 and accepts for recycling only recyclable household hazardous waste materials.
- (o)"Reusable household hazardous product or material" means a container of household hazardous product, or a container of hazardous material generated by a conditionally exempt small quantity generator, that has been received by a household hazardous waste facility operating pursuant to this article and that is offered for distribution in a materials exchange program to a recipient, as defined in subdivision (l), in accordance with a quality assurance plan, as defined in subdivision (i).
- (p) "Temporary household hazardous waste collection facility" means a household hazardous waste collection facility which meets both of the following conditions:
- (1) The facility is operated not more than once for a period of not more than two days in any one month at the same location.

- (2) Upon termination of operations, all equipment, materials, and waste are removed from the site within 144 hours.
  - SEC. 3. Section 25218.12 is added to the Health and Safety Code, to read:
- 25218.12. (a) A public agency may conduct a materials exchange program as a part of its household hazardous waste collection program if the public agency determines which reusable household hazardous products or materials are suitable and acceptable for distribution to the public in accordance with a quality assurance plan prepared by the public agency. The public agency shall instruct the recipient to use the product in a manner consistent with the instructions on the label.
- (b) If the recipient of a household hazardous product or material is a business or employer, the recipient shall be responsible for obtaining any written information necessary for compliance with the Hazardous Substances Information and Training Act (Chapter 1(commencing with Section 6360) of Part 7 of Division 5 of the Labor Code).
  - SEC. 4. Section 47550 of the Public Resources Code is amended to read:

47550.A city, county, or local agency operating a collection, recycling, and disposal program in accordance with Article 3 (commencing with Section 47100), and in accordance with Article 10.8 (commencing with Section 25218) of Chapter 6.5 of Division 20 of the Health and Safety Code, is not liable for any damage or injury caused by an action taken by the city, county, or local agency, or an employee or authorized agency of the city, county, or local agency, in the course of the operation of the program, unless the action is performed in bad faith or in a negligent manner. For purposes of this section, it shall be presumed that the action is performed in good faith and without negligence, and this presumption shall affect the burden of proof.

### **APPENDIX C-4**

# SAMPLE WORKER INSTRUCTIONS

# SAMPLE INSTRUCTIONS FOR VOLUNTEER STAFF AT PAINT COLLECTION STATION (WHERE ONLY USEABLE PAINT IS COLLECTED)

- 1. PLEASE ACCEPT ONLY
  THEFOLLOWING PAINT (Unless listed below as unacceptable):
  - LATEX PAINT
  - WATER-BASED PAINT
  - LATEX ENAMEL
  - PAINTS FROM HOUSEHOLDS OR SMALLBUSINESSES

### PLEASE DO NOT ACCEPT:

- OIL-BASED PAINT
- LACQUERS
- SHELLAC
- ALKY PAINT
- STAINS
- VARNISHES
- PAINT IN UNLABELED CANS
- PAINT MARKED "FLAMMABLE" OR "COMBUSTIBLE"
- PAINTS THAT REQUIREPAINT THINNER FOR CLEAN-UP (Check the label)
- EPOXY PAINT
- AEROSOLS
- LATEX PAINT CONTAINING LEAD (Check the label)
- LATEX PAINT MORE THAN 20 YEARS OLD (May contain Lead or lead-based pigments)

- PAINTS LABELED AS MILDEW OR FUNGUS CONTROL (May contain Mercury)
- LEAKING CANS
- NON PAINT WASTES
- 2. OPEN CAN AND CHECK CONTENTS FOR SPOILED OR UNACCEPTABLE PAINT. PAINT MAY APPEAR:
  - GRAINY
  - LIKE COTTAGE CHEESE
  - AS IF SAWDUST HAS BEEN ADDED
  - LUMPY AND CANNOTEASILY BE MADE SMOOTHBY MIXING
  - CONTAINS DEBRIS MIXWITH THE PAINT
  - SMELLS LIKE ROTTEN EGGS OR SPOILED MILK
- 3. AS YOU GET PAINT, PLEASE PUT THE CANS IN THE PLASTIC TUBS OR 55-GALLON DRUMS WITHINDOOR, OUTDOOR, DARK AND LIGHT COLORS SORTEDINTOSEPARATE TUBS. THIS WILL SPEED THINGS UP AND PREVENT MISTAKES WHEN WE MIX THE PAINT. WE WILL MARK THE TUBS FOR YOU.
- 4. IF AFTER YOU TAKEPAINT, YOU NOTICE THE CANS ARE LEAKING, PLEASE PUT THEM IN THE PLASTICBAGS PROVIDED.OVER—MORE INSTRUCTIONS ON BACK SIDE

### Sample Worker Instructions

5. IF YOU MAKE A MISTAKE AND TAKE AN UNACCEPTABLE ITEM, OR YOU HAVE QUESTIONS ABOUT THE ITEM, PLEASE PLACE THE CAN IN THE BIN MARKED "WASTE PAINT."WE WILL LOOK AT THESE ITEMS LATER TO DETERMINE WHAT TO DO WITH THEM.PLEASE DO NOTPUT QUESTIONABLE ITEMS IN THE LATEX TUBS.

6.	IF YOU NEED ANY QUESTIONS	
	ANSWEREDDURING THE EVENT,	
	PLEASECALL	
	AT	
	BETWEEN THE HOURS OF	
	AND	

7. BY ALL MEANS, IF THER FIRE DEPARTMNET WANTS YOU TO DO ANTYING, PLEASE FOLLOW THEIR DIRECTIONS – THEY ARE KIN ENOUGH TO OFFER THEIR SPACE –

PLEASE RESPECT IT.THEY HAVE
THE KEYS TO THE LOCKED
SECURITY CONTAINER – THE
PERSON WHO OPENS UP FOR THE
DAY SHOULD ASK THEM FOR THE
KEY, TE LAST PERSON OF THE DAY
SHOULD MAKE SURE THAT THE
SECURITYCONTAINER IS LOCKED
AND THE KEYS ARE GIVEN TO THE
FIRE DEPARTMENTPERSONNEL
BEFORE YOU LEAVE. DO NOT
TAKE THE KEYS WITH YOU OR WE
WILL HAVE A BIG PROBLEM ON
THE NEXT DAY.

8. THANK YOU VERY MUCH FOR HELPING. IF YOU WANT TO HELP ON \_\_\_\_\_ WHEN WE MIX PAINT, PLEASE CALL \_\_\_\_ AT \_\_\_\_ IN THE EVENING AND WE WILL SETUP A TIME FOR YOU.

Courtesy of and Reprinted from the Oregon Department of Environmental Quality's Paint Recycling Handbook," June 1994

### SAMPLE Volunteer Job Descriptions

#### SET-UP JOBS

<u>Traffic set-up</u> – Volunteers will be in charge of setting up traffic cones, putting up signs and planning the traffic flow pattern at both the drop-off and swap areas.

<u>Swap area set-up</u> – Volunteers will help setup the tent, cover the ground with plastic, and organize the space for people to take paint.

<u>Drop area set-up</u> – Several people will need to set up and cover tables with tarps, set up a tarp or tent as a roof and cover the ground with plastic.

<u>Information set-up</u> – This person will set up the information table and arrange the brochures and information which will be handed out to participants.

<u>Safety Supervisor</u> – This person will have a checklist of safety equipment and will be responsible for ensuring that everything is in place and well-marked with signs. No special training is needed.

### **COLLECTION JOBS**

**Note**: All persons working with the paint will be given goggles and gloves (if working with latex paint consolidation) as well as any tools or special equipment they need. Volunteers should, however, wear old clothes and old shoes as they may get some paint on themselves.

<u>Chemist/Paint Expert</u> – This person does not have to be a chemist, but should be familiar with paint ingredients and solvents and be able to

recognize those products which might need special handling. Paint store employees, for example, would be appropriate for this position.

<u>Traffic control</u> – Volunteers will be located by the road directing traffic.

<u>Unloaders</u> – Volunteers will unload paint from cars and take it to the paint opening area.

<u>Latex openers</u> – Volunteers will be opening cans of latex paint, sorting the good from the bad, and sending it either back to the person who brought it, to the paint exchange area or to the disposal area. No respirators will be necessary.

<u>Runner</u> – Volunteers will take good paint to the paint exchange area.

<u>Swap Tent</u> – Volunteers will arrange the good paint by color, help people find what they need, and hand-out informational materials.

<u>Paint pick-up</u> – Volunteers will coordinate pick up of paint by organizations which have preregistered for paint pick up. Paint will need to be sorted into different boxed marked for each preregistered organization to fill their orders.

<u>Lunch/Break area</u> – Volunteers will pick up the food/beverages and set up the food/break area.

### **CLEAN-UP JOBS**

Volunteers working on the clean up shift will finish processing paint brought in during open hours, bulk good paint, and put things away. Volunteers will also be needed to help dismantle equipment.

Courtesy of and Reprinted from the Oregon Department of Environmental Quality's "Paint Recycling Handbook," June 1994

### **APPENDIX C-5**

# SAMPLE PUBLICITY



Household
Paint
Recycling
and
Hazardous
Waste Turn-In

For Linn County Residents

What: Paint, Motor Oil, Antifreeze & Batteries When/Where:

Fire Stations	Date	Time
Albany Fire Dept.	Nov. 4, 5, 6	9am - 3pm 34th
St. Station		
Lebanon Fire Dept.	Nov. 4, 5, 6	9am – 3pm
Sweet Home Fire Dept.	Nov. 4, 5, 6	9am – 3pm
Brownsville Fire Dept.	Nov. 7 & 8	9am – 3pm
Tangent Fire Dept.	Nov. 4, 5, 6, 7, 8	9am – 3pm

<u>What</u>: Insecticides, Herbicides, Pesticides, Paint Thinners, Strippers, Outdated Materials.

### When/Where:

Fire Stations	Date	Time
Sweet Home Fire Dept.	Nov. 19th	9am – 3pm
1140 15th Ave. Sweethome		
Linn-Benton	Nov. 16 <sup>th</sup>	9am – 3pm
Community College		

## Do not bring the following items to the turn-in day, as they cannot be accepted:

- 1. Barrels or containers larger than 5 gallons
- 2. Commercial or Industrial waste
- 3. Radioactive materials
- 4. Explosives
- 5. Medical, biological wastes

### Follow these steps to ensure your family's safety:

- 1. Wear gloves when handling these materials.
- 2. Keep materials in original containers. Place all leaking containers in plastic bag and box. Place all containers in a plastic-lined box and put in the trunk or your car.
- 3. For safety's sake, please don't bring your children

Sponsored by: Department of Environmental Quality
Linn County Environmental Health
Local Fire Departments
Local Sanitation Companies
For more Information Contact Sweet Home Sanitation 357-2535

Tof more information contact sweet frome sumation 337 2333

Courtesy of and Reprinted from the Oregon Department of Environmental Quality's "Paint Recycling Handbook," June 1994

### Bring us your old paint, dead batteries and used oil.

Dispose of unwanted hazardous household products safely at one of the special collection days listed below.

### April 25 - Gresham

9 a.m. to 3 p.m. Gresham City Hall 1333 NW Eastman parkway, Gresham

Materials accepted: All household hazardous waste, such as leftover paint, solvents, pesticides, automotive fluids, aerosols and hobby chemicals. Look for label warnings such as flammable, danger, warning and caution.

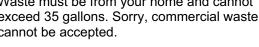
### May 2 – Sandy

8 a.m. to 4 p.m. Sandy Union High School, parking lot 17100 Bluff Rd., Sandy (Take hwy. 26 to Bluff Rd., turn at high school sign)

### Materials accepted:

ONLY batteries, oil, paint and antifreeze.

Waste must be from your home and cannot exceed 35 gallons. Sorry, commercial waste cannot be accepted.



For information about preparing material, Metro's permanent disposal facility and safer alternatives to pesticides and household product, call Metro Recycling Information, 224-555. (After April 16, call us at our new offices, 234-3000).

Courtesy of and Reprinted from the Oregon Department of Environmental Quality's "Paint Recycling Handbook," June 1994



### SPRING CLEAN UP TIME

### PAINT RECYCLING PROJECT

??? ARE PAINT CANS CLUTTERING YOUR GARAGE OR BASEMENT ??? ??? DID YOU KNOW PAINT IS A HOUSEHOLD HAZARDOUS WASTE ??? ??? DO YOU WANT TO MAKE YOUR HOUSEHOLD SAFE AND CLEAN ??? AND

DISPOSE OF YOUR PAINT PROPERLY ???

THEN BRING YOUR PAINT TO THE PAINT EXCHANGE AT THE

HOUSEHOLD HAZARDOUS WASTE CLEAN-UP DAY
MAY 18
CORVALLIS DISPOSAL CO. 110 NE WALNUT BLVD

USABLE LATEX AND OIL-BASEPAINT WILL BE RECYCLED BY VOLUNTEERS.LASTYEAR236GALLONS OF PAINTWERERECLAIMED, REMIXED, AND REUSED IN OURCOMMUNITY, PRIMIARILY BYNON-PROFIT ORGANIZATIONS.

OR

BRING PAINT ONLY TO THE PHILOMATH FIRE DEPT. MAY 10, 11, 13, 14, AND 15 8:00a.m. - 5:00 P.M.

(PLEASE,NO STAIN,VARNISH, THINNER, SHELLAC, ETC.– BRING THESE AND OTHERITEMS MAY19 FOR DISPOSALDURING THE CLEAN-UPDAY)

LIKE TO HELP OR NEED PAINT? CALL ECO-ALLIANCE @ 745-5235

HHW CLEAN-UP DAY FUNDED BYOREGONDEQ, WITHSUPPORT FROM CORVALLISDISPOSALCO., CORVALLIS DEPT. OF PUBLIC WORKS, ECO-ALLIANCE, AND OTHERS.

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### APPENDIX D



### BE PAINT WISE, BUY THE RIGHT SIZE

Do your part to help better manage our world's natural resources. Follow the step listed below\* and you, too, will be improving the environment today by using the 3R's ... Reduce, Reuse, and Recycle.

### 1. BUY THE CORRECT AMOUNT OF PAINT FOR THE PROJECT

Be a wise consumer and buy only what you need. Check with your local paint dealer for instructions on how to determine the correct volume of paint required for your project. When you purchase the right volume of paint, it eliminates the need to store or dispose/recycle paint when the project is finished, and it might even save you a bit of money. When your painting project is complete, take a look in the can. If there is only a small quantity of paint left, use it up. Paint out the last inch-or-two of paint in the bottom of the can.

#### 2. STORE PAINT TO KEEP IT FRESH

If your project is complete and you still have a fair amount of paint leftover, be sure to correctly store the paint. Proper paint storage will eliminate safety concerns and keep your paint fresh for touch-ups or future projects. For best results, cover the opening of the paint can with plastic wrap and securely seal the lid. When you are sure the lid is leak-proof, turn the can upside down and store it in a place with a moderate room temperature to avoid freezing. Be sure to choose a safe location that is out of the reach of children and pets.

#### 3. USE UP LEFTOVER PAINT

Now that you have safely stored your leftover paint, don't forget about it. Leftover paint can be used for touch-ups or for smaller projects. Record the room name on the lid for future touch ups. You can blend and mix smaller quantities of latex paint to use as a base coat on larger jobs. Perhaps, you know a neighbor or relative who could use your leftover paint; now, that's being environmentally friendly!

### 4. REUSE OR RECYCLE

If you can't make use of the paint yourself, donate your useable leftover paint to a worthwhile community association, theatre company, church group or other local organizations that may be in need of good paint. Perhaps, your community offers a paint exchange event or a special paint collection program. Many communities collect paint for reuse, recycling or as a last resort, proper disposal through local Household Hazardous Waste (HHW) collection programs. Check the "Earth 911" website, <a href="https://www.Earth911.org">www.Earth911.org</a> or 1-800-clean-up, to learn about reuse, recycling and HHW collection programs that may be available in your community.

### 5. DISPOSE OF THE PAINT PROPERLY

If there is not a leftover paint collection program available in your area, you may need to dispose of leftover latex paint yourself. Air-drying of liquid alkyd or oil based paint is not considered safe. In regions that allow it, let your latex paint air dry in a safe location away from children and pets. A small amount of paint, less than ½ inch, in the bottom of a paint can is easily dried out by leaving the lid off. Once the paint is hard, discard the paint can with the lid off, preferably in a metal recycling program. If metal recycling is not available or the paint container is plastic, dispose of the container in the garbage. Larger volumes of latex paint can be dried in a box with absorbent material such as shredded paper or kitty litter. Recycle the empty can with the lid off and dispose of the dried out latex paint as garbage. If the paint in the can is solidified all the way through, it may be disposed of as garbage with the lid off to prevent the build up of pressure in the can.

Product Stewardship Institute, Inc. • 137 Newbury Street • 7th Floor • Boston, MA 02116 Telephone: (617) 236-4855 • Fax (617) 859-9889 • www.productstewardship.us

■ Non-chlorine Bleached / 100% Post-Consumer Recycled Paper / Soy Ink

<sup>\*</sup> These steps were agreed to in July 2004 by consensus of participants in the Paint Product Stewardship Initiative, facilitated by the Product Stewardship Institute.

### APPENDIX E

# Paint Sorting Protocol

