2013 SPECIAL WASTE MANAGEMENT EXCELLENCE AWARD

RELEASE FORM

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Printed Name of Representative: John Dubach

Organization Name: City of Hobart - Department of Public Works

Signature: [Signature]

Date: May 15, 2013
City of Hobart Latex Paint Recycling Program
Executive Summary

Unlike oil-based paint, latex paint is not considered hazardous waste. Due to its liquid content, it remains a special waste challenge for solid waste managers. According to US Environmental Protection Agency (EPA) estimates, as much as 16% of annual paint sales go unused.

In 2008, the City of Hobart assembled state, regional, local and private partners that shared the vision that unused latex paint should be recycled and not thrown out as trash.

In 2010, Hobart introduced its Latex Paint Recycling Program to serve the City’s 13,000 households. In 2011, the program expanded to serve all 200,000 Lake County households. Last year, the program expanded to include neighboring Porter County. Now the program serves nearly 275,000 households.

The Hobart Latex Paint Recycling Program is an innovative local solution to a regional special waste management challenge. The program serves as a model for efficiency and effectiveness.
City of Hobart Latex Paint Recycling Program
Section 1: Design of the Latex Paint Recycling System

Community Commitment to a Regional Latex Paint Recycling Solution
The City of Hobart believes that the success of its Latex Paint Recycling Program is due to the broad-based collaboration of state, regional, local, and private partners that designed the program. The partners’ combined environmental, operational, promotional, economic, and practical expertise designed an efficient latex paint recycling program that maximizes convenience and minimizes costs. The Hobart Latex Paint Recycling Program is a local program that meets the regional need for latex paint management. The program produces a 100% recycled-content utility grade paint product that is an affordable alternative to higher-quality paint for many applications.

Type of Collection and Special Waste Management System

Collection System:
The City of Hobart’s Latex Paint Recycling Program is a special waste recycling program where unused latex paint is recovered, blended, poured into cans, and marketed to consumers. The program utilizes a dual drop-off collection system to maximize convenience for residents wanting to dispose unused latex paint.

These drop-off collection systems are identified as:
(1) Daily Drop-Off = residents may drop-off paint at the Hobart Latex Paint Recycling Facility on Monday through Saturday; and,
(2) Special Event Drop-Off = residents may drop-off paint at the Lake Michigan Districts’ Saturday Household Hazardous Waste (HHW) Collection Events. There are 14 HHW Collection Events at in Lake and Porter County between April and October every year.

Latex Paint Recycling Permanent Facility:
The City of Hobart’s regional Latex Paint Recycling Facility is located at the Hobart Public Works Department’s facility at 340 Shelby Street in Hobart, IN. The paint recycling operation is housed in a 2,300 square feet (SF) heated and insulated pole-barn structure with an asphalt floor without any floor drains. This structure is used only for latex paint recycling and recycled paint storage.

Special Event Latex Paint Collection:
The Hobart Latex Paint Recycling program collects unused latex paint at 14 Lake Michigan Districts’ HHW Collection Events in Lake and Porter Counties. The Hobart Department of Public Works has converted an obsolete leaf collection trailer into a latex paint collection

Winning paint poster
Paint Recycling Facility sign at Public Works area entrance
Hobart Paint Recycling Building
"Optimus Primer" Latex Paint Trailer
The paint collection trailer has been repainted and named “Optimus Primer.” Latex paint is collected at Saturday HHW Collection Events in Lake and Porter Counties. After a collection event, the trailer is returned to the Latex Paint Recycling Facility for paint off-loading.

**Permanent Facility’s Operation Plan Design:**
A flow chart for the City of Hobart’s Latex Paint Recycling Program is shown below:

1. **Initial Paint Sort**
   -Latex paint is temporarily stored for secondary inspection.
   -Latex paint cans are shaken & opened to assess quality for recoverability.
   -Reusable latex paint is marked as “checked” and temporarily placed on shelves for later blending.
   -Cans of recoverable paint are loaded into the can crusher for paint extraction.
   -Reusable paint is pumped into reblending tank. Paint is mixed in the tank until about 1,500 gallons of paint are collected.
   -Reblended paint is discharged into 1 and 5-gallon containers.
   -100% recycled-content paint is stored for sale to residents or given to non-profit organizations & public entities.

2. **Oil-based paints and stains are rejected**
   -Oil-based paint and stains are stored in HHW trailer for later transport to Lake Michigan Districts for HHW disposal.
   -Latex paint is temporarily stored for secondary inspection.
   -Oil-based paint and stains are rejected as unusable.
   -Rejected paint is latex prepared for disposal as trash.

3. **Latex paint is collected at HHW Events and delivered to facility.**
   -Steel lids, steel paint cans, and plastic cans are separated for recycling.

4. **Paint is received from residents**
   -100% recycled latex paint on shelves

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*City of Hobart Latex Paint Recycling Program - SWANA Special Waste Category - Page 4*
There are seven functional areas within the Latex Paint Recycling Facility. These functional areas correspond to the flowchart shown above. These areas are identified on the floor plan that is provided as a Supplemental Material attached to this nomination form. These functional areas are identified as:

1. **Paint Intake Area** = where residents enter the facility to drop-off cans of unused paint. Hobart employees conduct initial inspection to separate latex paint from oil-based paint. Oil-based paint and stain is temporarily stored for delivery to an HHW Collection Event;
2. **Secondary Sort Area** = where Hobart employees shake latex paint cans and open to assess paint quality. Deteriorated or contaminated paint is rejected and prepared for disposal as trash;
3. **Reusable Paint Storage Area** = Latex paint that is reusable is marked as “checked” and temporarily stored on shelves.
4. **Paint Extraction Area** = During inclement weather, Hobart employees load us able latex paint cans into can crusher for paint extraction. Paint is drained and pumped into the mixing container. Steel lids and cans, as well as plastic cans, are recycled;
5. **Paint Mixing Area** = Reusable latex paint is collected in the 2,500 gallon capacity mixing tank. Paddles within the mixing tank constantly reblend the paint to ensure a consistent product.
6. **Paint Can Filling Area** = When the mixing tank volume reaches approximately 1,500 gallons, Hobart employees will discharge the 100% recycled paint into one (1) and five (5) gallon plastic containers. This is conducted during inclement weather; and,
7. **100% Recycled Paint Storage area** = cans of 100% recycled-content paint are stored on shelves for sale to consumers or free distribution to not-for-profit and public organizations.

**Latex Paint Recycling is Component of City’s Comprehensive Solid Waste Management Program**

The Hobart Latex Paint Recycling Program is the newest addition to the City of Hobart’s comprehensive municipal solid waste management program. The City’s Department of Public Works provides residential services to approximately 11,000 residential properties ranging from single-family to four-plex structures. Residents in the community’s remaining 2,000 apartments and businesses may utilize drop-off recycling programs.

The City of Hobart is a leader in providing cost-effective comprehensive solid waste management services to residents including:

- Weekly curbside residential recycling;
- Weekly curbside appliance and scrap metal recycling;
- Weekly curbside yard waste collection;
- Drop-off recycling service for apartments and businesses;
- Curbside yard waste collection and off-site composting;
- Special waste drop-off for electronics;
- Special waste drop-off for batteries and fluorescent lights;
- Special waste drop-off for old tires; and,
- Special collection service for school-based recycling programs.

Winning recycling poster
Innovative and Unique Aspects of the Hobart Latex Paint Recycling Program

The City of Hobart’s Latex Paint Recycling Program is an innovative program due to the creative collaborative planning process that developed it. The program is unique because it is a local special waste management program that serves a regional service area and audience. The program’s innovative and unique elements are described below.

Custom-Designed Reblending System

The program’s creative collaboration process led to an innovative latex paint processing approach including the custom-built latex paint reblending system. This system uses a paint can crusher to extract reusable latex paint. Reusable paint is then pumped into a 2,500 gallon reblending tank. The reblending tank includes a paddle assembly that constantly mixes the recycled latex paint. This large capacity mixing tank was custom built to promote economies of scale and large-batch processing to produce a consistent recycled paint product. The 100% recycled-content paint is consistently beige. The crushed plastic and steel paint cans and steel lids are recycled with the community’s recyclables.

Latex Paint Recycling Center Offers Convenience

The Hobart Latex Paint Recycling Facility is located at the City’s Department of Public Works facility. Public Works facilities have work areas with heavy duty equipment that can be frightening to many people. The Hobart Latex Paint Recycling Facility is located near the entrance to the Public Works Department complex to maximize convenience for individuals dropping-off paint.

Large Batch Processing Maximizes Operational Efficiency

The Hobart Latex Paint Recycling Program utilizes a 2,500 gallon capacity mixing tank that is designed for batch processing after at least 1,500 gallons of reusable paint are collected. Due to the large batch processing, the Public Works Department never needs to pull workers “off the street” or “out of the Yard” to handle paint recycling activities. Instead, Public Works employees only work on recycled paint processing when inclement weather interrupts outdoor work activities. As a result, the Latex Paint Recycling Program has turned Public Works employee downtime into productive time without increasing the Department’s overall labor costs. This weather-driven approach to latex paint recycling activities has given rise to the motto, “When it rains, we pour.”
Overall Impact on Human Health, Environmental Quality, and Resource Conservation
The Latex Paint Recycling Program has had a tremendous beneficial impact on the northwest Indiana service area. These impacts are described in the sections below.

Human Health Impact
The Hobart Latex Paint Recycling program provides 100% recycled paint free-of-charge to Northwest Indiana Habitat for Humanity, local community organizations, many churches, and public housing authorities in Gary and other communities in northwest Indiana. A majority of the housing supply in these older, urban communities was built before 1960. Given the age of these dwellings, most are believed to have lead paint since such paint products were not banned until 1978. The Hobart Latex Paint Recycling Programs facilitates affordable repainting to cover surfaces that are known or believed to have lead paint thereby improving the health of the individuals living in older residences.

Environmental Quality Impact
A major motivation for the Hobart Latex Paint Recycling Program was the project partners’ shared belief that telling residents to add kitty litter to paint and let it dry out was not a practical solution. The project partners realized – and, were told by many residents – that “dewatering” paint was a time-consuming process and not a viable option for those with an immediate need to dispose of unused latex paint. The project partners knew that, absent a convenient alternative for disposal, many northwest Indiana residents would improperly dispose of latex paint (e.g., pour it down the drain or into storm sewers, throw cans along the roadside and in ditches, or hide paint cans in trash cans destined for landfill disposal).

The Hobart Latex Paint Recycling Program has, to the fullest extent possible, eliminated environmental degradation due to illegal latex paint disposal. The program’s convenient daily drop-off and special event drop-off collection systems make it easy for northwest Indiana residents to “do the right thing” with unused latex paint. Though it is not possible to quantify the actual environmental degradation that has been avoided, the project partners believe that a significant portion of the latex paint currently collected very likely would have been illegally dumped without the Hobart Latex Paint Recycling Program.

Resource Conservation Impacts
First and foremost, the Hobart Latex Paint Recycling Program allows a valuable product – latex paint – to be used as intended by residents, not-for-profit organizations, and government entities. Since it started, the program has recycled nearly 33,000 lbs. of paint that would have been sent to landfills or improperly disposed. Instead, this unused paint is processed into a usable utility grade paint product.
Economic Resources Conservation Impact

The Hobart Latex Paint Recycling Program produces a 100% recycled-content, utility grade, beige paint. This utility grade paint will never be a preferred alternative for consumers seeking higher-quality paint that can be tinted to achieve a rainbow of colors. However, the 100% recycled paint allows residents to accomplish painting projects for only 10% of the paint cost compared to retail paint. Not-for-profit and public organizations can use recycled-content paint free-of-charge. The cost savings offered by 100% recycled-content paint allows residents, not-for-profit organizations, and publicly-funded government entities to devote scarce economic resources to other higher-priority activities.

Source Reduction Community Outreach Efforts

The Hobart Latex Paint Recycling Program does not charge residents to drop-off unused paint. This does not mean the program is free. Like all special waste management programs, the Hobart Latex Paint Recycling Program endeavors to promote source reduction to minimize program costs. The City of Hobart and its project partners promote the “BUDDY” system for paint purchases to minimize leftover paint and reduce reliance on the latex paint recycling program. The “BUDDY” system recommends the following smart painting practices:

**Buy only what you need.** Measure walls and ask paint center staff to help estimate paint that is needed;
**Use up all the paint you buy** by adding an extra coat to areas needing more protection;
**Dispose of leftover paint properly** at the Hobart Latex Paint Recycling Center or Lake Michigan Districts HHW Collection Event. Never pour paint down the drain or throw liquid paint away;
**Do not allow paint to freeze.** Paint can be stored for years if it is kept in a climate-controlled area with a tight-fitting lid. Store paint cans upside down for an air-proof seal; and,
**You will protect the environment and save money if you practice the BUDDY system for smart painting.**

A “BUDDY” system hand-out is given to anyone dropping off unused latex paint. A “BUDDY” system sticker is affixed on every can of recycled paint.

Recycled Paint Marketing Community Outreach

A recycling program is only sustainable if there are consumers willing to purchase recycled-content products. The Hobart Latex Paint Recycling Program has had no problem collecting unused latex paint, but its sustainability depends on marketing the 100% recycled-content paint to citizen and organizational consumers.

Community Outreach to Increase Demand

To build demand for 100% recycled-content paint, the project partners have conducted the following marketing efforts:

- Distribute recycled latex paint at Lake Michigan District HHW Collection Events;
- Sell recycled latex paint at the City of Hammond’s “ReUse” Center;

"BUDDY" System sticker
• Distribute recycled latex paint at regional environmental events and Earth Day celebrations;
• Media releases to raise awareness that citizens may purchase 100% recycled-content paint for $3.00 per gallon; and,
• Promotional literature to area school districts, churches, community organizations, and other institutions to raise awareness about free 100% recycled-content paint.

Public-Private Partnership to Increase Demand
The 100% recycled-content latex paint produced by the Hobart Latex Paint Recycling Program is always beige. While beige paint is fine for many uses, it poses a challenge for customers looking to make a more colorful statement in painting projects.

To improve the marketability of the program’s recycled paint, the City of Hobart contacted Hobart Lumber (a local hardware store) about the possibility of tinting the beige recycled paint. Hobart Lumber analyzed the pigment in the 100% recycled-content paint product and identified dozens of existing shades that can be created by tinting the recycled paint. Hobart Lumber charges $4.00 per gallon for paint tinting. Even with the additional tinting fee, $7.00 per gallon makes tinted recycled paint an affordable alternative to first-run paint for many consumers.

Media Outreach Activities
The City of Hobart has cultivated strong relationships with local media outlets to raise community awareness about latex paint recycling. The City has partnered with the Lake County Solid Waste Management District to develop a newspaper insert to promote the Latex Paint Recycling program. This regional special waste district promotes the project through radio and cable television PSAs.

Environmental Compliance
The Hobart Latex Paint Recycling Facility complies with the applicable federal, state, and local regulations for latex paint management and recycling. The 2,300 SF building is an enclosed, climate-controlled, and properly-ventilated structure. The building has a poured asphalt floor and no floor drains. The structure serves as the primary containment system.

All activities that involve processing unused latex paint are conducted in a secondary containment area in which the equipment is located. The containment area (shown at right) is a large, rigid, plastic basin approximately 3-feet high on all sides. In the event of an equipment or process failure, spilled paint will be contained within this leak-proof secondary containment enclosure.

The City of Hobart’s Latex Paint Recycling program has not been cited for any practice, event, or facility violation during its history.
Environmental Awards for the City of Hobart Environmental Programs
The City of Hobart has earned a reputation as an efficient provider of comprehensive municipal solid waste management services. This community’s environmental programming has been recognized by receiving the following awards:

- Indiana Governor’s Award for Excellence in Recycling, 2011; and,
- Indiana Department of Environmental Management “CLEAN Community” Recognition.

*Hobart Mayor Brian Snedecor, Hobart Public Works Department employees, and Lake County Solid Waste Management District personnel receive Governor’s Award for Environmental Excellence from IDEM Assistant Commissioner Thomas Easterly in 2011.*
Collaborative Planning Process for the Hobart Latex Paint Recycling Program

In many communities, the “proper disposal method” for unused latex paint involves adding kitty litter to the unused paint, letting the paint dry out, and throwing out the dried paint as trash. The City of Hobart’s Latex Paint Recycling program began with a simple idea: the so-called “proper disposal method” for unused latex paint was wasting a resource that could be recovered. The City of Hobart felt unused latex paint should be recycled and was committed to finding an affordable way to accomplish this.

In 2008, the City of Hobart began a collaborative effort to identify “best management practices” for a community latex paint recycling program. This collaboration included the City of Hobart, the Lake County Solid Waste Management District, and the Lake Michigan Districts. These partners researched existing latex paint recycling programs to identify appropriate model programs. The partners turned to the Indiana Department of Environmental Management (IDEM) for technical assistance to ensure compliance with applicable regulations. During the summer of 2008, the project partners endorsed a preliminary plan for a community Latex Paint Recycling Program to serve the City of Hobart.

Phased Development for Latex Paint Recycling

The City of Hobart and the Lake County Solid Waste Management District agreed that all Lake County residents needed a convenient and effective latex paint recycling program. However, the City of Hobart had concerns that it might be difficult for a local program serve the entire County.

The partners agreed that the Hobart Latex Paint Recycling program “needed to walk before it could run.” The program began with an incremental approach to latex paint recycling. The program would begin by serving only Hobart residents. If the program had surplus capacity, it would expand to serve Lake County residents.

Latex Paint Recycling Implementation and Cost-Sharing

Once the City of Hobart developed its plan for a municipal latex paint recycling program, the City took steps to implement the plan. The Public Works Department assumed operational responsibility for the latex paint recycling project. The City applied for an Indiana Recycling Grant to partially finance the start-up costs for the latex paint recycling center. In 2009, the State of Indiana awarded a Recycling Grant in the amount of $19,709 to purchase latex paint recycling equipment. The Lake County Solid Waste Management District provided funding to construct a 2,300 SF building to house the latex paint recycling operation. The City of Hobart purchased recycled plastic paint cans and steel handles to store the recycled-content paint.
Effectiveness of the City of Hobart Latex Paint Recycling Planning Process
The City of Hobart utilized a collaborative planning process to draw on the expertise of special waste management, regulatory, funding, community outreach, and operational professionals. This planning process created a local latex paint recycling program that had the capacity to handle the region’s need for latex paint recycling. Throughout the implementation and operational phases, the City of Hobart has utilized the expertise of its planning collaborators to address periodic challenges and expand the program’s service area. The project partners meet quarterly to discuss emerging issues and plan marketing efforts.

In 2011, the Hobart Latex Paint Recycling Program expanded to include all residents in Lake County. This increased the number of households served to 200,000. In 2012, the program expanded to include residents in neighboring Porter County. The Waste Reduction and Recycling District of Porter County joined as a project partner, as well. Hobart Latex Paint Recycling Program now serves nearly 275,000 households in a 1,148 square mile service area in northwest Indiana.

Community Partners as High-Volume Consumers
The City of Hobart has aggressively marketed the 100% recycled-content paint to not-for-profits, schools, community organizations, public housing authorities, and government entities to ensure that the recycled paint product is utilized. The project’s community partners include the following:
- City of Hobart Police and Court Complex facility;
- Lake County Sheriff’s Department;
- Lake County Parks Department;
- Gary Public Housing Authority;
- Gary Community Development Commission;
- City of Hammond Re-Use Center; and,
- City of Hammond Environmental Expo Special Event.

Program Collaborators Share in Program Funding
The Hobart Latex Paint Recycling Program is a collaboration of partners that share a commitment to recycling unused latex paint. The partners are also committed to sharing program responsibilities including program costs.

Start-Up Cost Financial Assistance
The Lake County Solid Waste Management District and the Indiana Department of Environmental Management (IDEM) provided start-up funding to build a dedicated structure and purchase paint recycling equipment.

Labor and Operational Expenses
The City of Hobart’s Department of Public Works provides the labor force needed for the Hobart Latex Paint Recycling Program. The program’s large quantity batch processing is suited to the Department’s desire for flexibility in assigning workers to paint recycling activities. The Department assigns workers to latex paint recycling activities only during periods of inclement weather when they cannot perform outdoor duties. This flexible approach to labor means the
Hobart Latex Paint Recycling Program has actually improved the productivity of the Department’s labor force by turning “downtime” into productive time without increasing overall labor costs.

Plan for Managing Collected Latex Paint
The Hobart Latex Paint Recycling Program has a simple plan for managing this special waste: *Recycle all the reusable latex paint that is collected and distribute all the 100% recycled-content latex paint that is produced.* The program has also developed plans for managing oil-based and degraded/contaminated latex paint that cannot be recycled. These paint handling methods are described below.

**Oil-Based (Alkyd) Paints and Stain**
The Hobart Latex Paint Recycling Program cannot process oil-based paint or stain products. But, the Hobart Department of Public Works will not turn away residents dropping-off oil-based products. All oil-based paint cans are identified and rejected during the initial sorting stage. These unusable products are temporarily stored in a trailer at the Hobart Department of Works. The Department of Public Works transports oil-based paint products to the Lake Michigan Districts. The Lake Michigan Districts is a regional special waste management district that processes oil-based paint products as household hazardous wastes (HHW). This HHW disposal services is provided at no charge to residents or the City of Hobart.

**Degraded or Contaminated Latex Paint**
Approximately ten percent (10%) of the latex paint received by the Hobart Latex Paint Recycling Program is degraded or contaminated due to freezing, rusting cans, dried paint, foreign objects and trash left in the paint cans. The paint in these cans is rejected and prepared for disposal as trash.

**Reusable Latex Paint**
The plan for managing reusable latex paint involves temporarily storing quality latex paint. Once a month – when inclement weather occurs – Public Works employees conduct paint extraction operations. Several paint cans are loaded into the can crusher. The paint crushing operation extracts latex paint that is later pumped into the 2,500 mixing tank. The paint will be continuously stirred while it is the mixing tank.

After at least 1,500 gallons of paint are in the mixing tank—and during periods of inclement weather – Public Works employees will conduct paint pouring activities. The pouring process requires a labor force of four (4) individuals to work eight (8) hours to containerize approximately 1,500 gallons of recycled paint into one-gallon and five-gallon containers. These containers are placed on storage shelves in the facility for sale or give-away.

Community Concerns Led to the Latex Paint Recycling Program
The City of Hobart is considered a leader among northwest Indiana communities with respect to environmental programming. The City of Hobart has a large contingent of pragmatic and environmentally-active citizens. In fact, many citizens complained when they were told to put kitty litter in paint and let it dry out. The Hobart community is very pleased with the City’s Latex Paint Recycling Program.
City of Hobart Latex Paint Recycling Program
Section 4: Performance, Economics, and Cost Effectiveness

Latex Paint Program Recycling Efficiency
The Hobart Latex Paint Recycling Program was designed as a low-cost operation to manage a very small component of the municipal solid waste stream. Designing an efficient operation with a cost-sharing arrangement was a necessity since none of the original collaboration partners possessed sufficient resources to operate a latex paint recycling program alone.

The project partners’ financial constraints led to a cooperative latex paint recycling program that includes the following efficiencies:

- Dual collection system = residents may drop-off paint at the Hobart facility or at Lake Michigan District HHW Collection Events collected throughout northwest Indiana;
- Oil-Based Paint Management = the Lake Michigan Districts agreed to manage the oil-based paint products dropped-off at the Hobart facility that cannot be processed;
- Community outreach = the Lake County Solid Waste Management District handles community outreach efforts that include newspaper advertising, local radio promotional spots and PSAs, banners to promote latex paint collection and recycling, and communication with cities and towns;
- Promotional activities = the Lake County Solid Waste Management District conducts promotional activities to raise citizen, not-for-profit, and government organization awareness about the 100% recycled-content utility-grade produced through the program;
- Large Batch Latex Paint Processing = the City of Hobart’s Department of Public Works provides the workforce to sort paint, extract paint, and fill paint containers only when inclement weather disrupts the laborers’ daily outdoor assignments; and,
- Marketing = all partners actively recruit large-volume customers including not-for-profit and government entities. Partners also secure “outlets” for marketing 100% recycled-content latex paint within the service area.

Latex Paint Recycling Operational Efficiency: “When it Rains, We Pour!”
The Hobart Department of Public Works employs approximately 50 full-time employees. Many of these employees experience disruptions in their work activities due to inclement weather. The “batch processing” feature allows Public Works employees to work in the Latex Paint Recycling Facility during inclement weather when they cannot do their usual work duties. The City’s Latex Paint Recycling program has actually improved the labor efficiency of the Department of Public Works by converting downtime into productive time during periods of inclement weather.

Latex Paint Recycling Program Operational Performance
The Hobart Latex Paint Recycling Facility has exceeded its goals for paint collection and recycled paint production every year since the program started. The chart on the following page summarizes program performance and efficiency.
**Hobart Latex Paint Recycling Program Performance Chart**

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<th>Program Operating Costs</th>
<th>Gallons of Recycled Paint Produced</th>
<th>Cost Per Gallon</th>
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**Performance Chart Notes:**

1. The Hobart Latex Paint Recycling Program began in September 2010. The program collected 1,571 cans of old latex paint in 2010. Most of these cans contained less than a gallon of paint. As a result, the program did not reach the required quantity of recycled paint (>1,500 gallons) to process a batch for recycled latex paint production. No recycled paint was produced or sold during 2010.

2. Program costs include the Public Works Department’s workforce at an average rate of $19.00 per hour, as well as the cost of the 100% recycled-content plastic paint cans, lids, label, and steel handles.

3. Program revenue is not directly related to the gallons of recycled paint produced. The City of Hobart charges residential customers $3.00 per gallon for recycled paint. However, recycled-content latex paint is distributed free-of-charge to not-for-profit organizations, schools, community organizations, government entities, and institutions. Program revenue only includes paint sales to residents.

**Hobart Latex Paint Recycling Program Customer Service**

The Hobart Department of Public Works understands that a sustainable latex paint recycling program must meet its customers’ needs. Program features that demonstrate the program’s commitment to customer service are described in the sections below.

*Drop-Off Collection Convenience*

The program offers Monday through Saturday unused latex paint drop-off collection at the Hobart Latex Paint Recycling Facility. The paint recycling center is located at the entrance to the Public Works Department property to make it easy for individuals to drop-off paint.

*Special Event Collection Convenience*

The Hobart Latex Paint Recycling Program serves a 1,148 square mile geographic service area. The City of Hobart partnered with the Lake Michigan Districts to accept unused latex paint at 14 HHW Collection Events in Lake and Porter Counties. The City has partnered with several municipal solid waste programs for special latex paint collection events to increase convenience for customers in more distant communities.

*Recycled Paint Sales Customer Convenience*

The Hobart Latex Paint Recycling Facility sells paint to individuals daily Monday through Saturday for a price of $3.00 per gallon. Not-for-profit organizations, schools, community organizations, and public entities may pick up paint free-of-charge. To facilitate paint sales and
distribution in more distant communities, the Hobart Latex Paint Recycling Program has partnered with organizations that will distribute paint to customers. These remote sales and distribution sites makes sure the demand for recycled-paint keeps pace with its production. The program is actively recruiting other paint sales locations to make it more convenient for Lake and Porter County customers to buy 100% recycled-content paint.

**Pricing Reflects Commitment to Customer Service**
The Hobart Latex Paint Recycling Program sells 100% recycled-content paint to customers for $3.00. This price is 10% of the price for a higher-quality paint sold at home improvement centers. Of course, the 100% recycled-content is a utility-grade paint that is produced in a single color, beige. The 100% recycled-content paint will never compete with retail paint in quality, but the recycled paint is an affordable alternative for those painting on a tight budget.

**Hobart Hardware Tinting Appeals to Customers**
To make the beige recycled paint product more attractive to residential customers, the City of Hobart worked with Hobart Lumber to identify dozens of decorative paint shades that can be made using the recycled paint as a tintable base. Hobart Lumber provides the tinting service for $4.00 per gallon. This feature has increased residential customer satisfaction with the program’s recycled paint product.

**Latex Paint Recycling Budget and Program Budget Analysis**
The Hobart Latex Paint Recycling Program has a modest annual budget. The program’s budget is included in the Department of Public Works’ budget. The program began in September 2010 and has operated for two full fiscal (i.e., calendar) years in 2011 and 2012. The program’s costs vary with the volume of latex paint that is dropped-off and the number of gallons of recycled paint produced. The program has operated within its budget during 2011 and 2012.

**Appropriateness of Program Costs**
The State of Indiana does not require municipal solid waste management or special waste management programs to report their program costs or collection volume. As a result, it is not possible to compare the City of Hobart’s Latex Paint Recycling programs with similar Indiana programs.

The City of Hobart has not conducted benchmarking studies with comparable latex paint recycling programs. After the program completes three calendar years of operation – and possesses three years of performance, costs, and revenue data – the Lake County Solid Waste Management District has agreed to complete a benchmarking study for the program.

**Program Revenue Performance Problematic**
The Hobart Latex Paint Recycling Program’s funding objective is to have recycled-content paint sales revenues recover all program costs. The program reached this objective in 2011, but fell short in 2012. A factor that undermines the program’s ability to recover program costs is the “paint give-away” policy. In 2011, the program sold 82% (1,049 gallons) of the recycled paint generating a profit of $36. However, in 2012, the program sold 75% (1,529 gallons) of the paint produced and lost $156.
Reason for Revenue Shortfall
The program sells recycled-content paint for $3.00 per gallon. The $3.00 per gallon price is sufficient to recover the unit cost for a gallon produced. (The average cost to produce a gallon of paint is $2.37.) However, the program’s per gallon price does not generate sufficient revenues in excess of costs (i.e., profits) to recover the production cost of paint that is given away. Based on current costs and paint pricing, the City needs to sell at least 82% of the recycled paint to residential customers in order to adequately recover program costs.

Implications for the Program’s Future
The Hobart Latex Paint Recycling Program was not created as a profit center for the municipality. However, the program was always intended to recover the City’s costs for producing the 100% recycled paint. Based on the 2012 revenue performance, the program will need to consider making changes to rectify the program’s revenue performance.

The City of Hobart and its project partners recognize that the current paint pricing involves residential customers subsidizing the non-paying customers. The City of Hobart and its partners are currently considering the following measures to remedy the revenue shortfall issues:

(1) Eliminate or revise the “paint give away policy” that undercuts program revenues;
(2) Explore more aggressive marketing of the paint to paying customers; and,
(3) Conduct a market-price analysis to evaluate how changes in paint price might impact revenue generation and demand for the product.
Hobart Latex Paint Recycling Equipment Configuration
The Hobart regional Latex Paint Recycling program includes a custom-designed equipment configuration to maximize the efficiency of the operation as well as ensure a consistent recycled paint product. The equipment used during the latex paint recycling process is identified and described in the sections below.

Paint Intake and Initial Sort
No equipment is used to accept paint from individuals dropping off unused paint.

Secondary Sort for Quality
The secondary sort assesses the quality of the unused latex paint to determine if the paint is degraded or contaminated and, therefore, unsuitable for remixing. The equipment used for this is an Elliot Equipment Corp Pacer 60 Dual Can Shaker. After the paint is shaken for three minutes, the can is opened. If the paint is free of contamination (e.g., paper towels, paint rollers, rust particles, etc.) and not degraded (e.g., chunks of dried paint, latex film, etc.) the paint can will be resealed and placed on shelves for later remixing. The paint shaker is shown at right.

Temporary Storage for Mixable Paint
Unused latex paint that has passed the secondary quality assessment is temporarily stored on industrial shelving units. Paint cans are stored for approximately 30 days. The temporary storage shelves are shown at left.

Paint Extraction
Approximately once a month, the unused latex paint is processed for remixing. The cans are loaded into Teemark model 6PJ-VC Can Crusher. This equipment holds several cans of paint, crushes the cans, and drains the paint into a small collection container. When the paint collection container is full, paint is pumped to the mixing area. The paint can crusher equipment is pictured at right.

Paint Reblending in Mixing Tank
Reactive latex paint is collected in a 2,500 gallon capacity mixing tank. Paddles within the mixing tank constantly reblend the paint to ensure a consistent product.
The program’s paint mixing tank was custom-made based on input from other paint recycling program managers. The mixing tank is shown at right.

The program uses a large batch processing method to produce consistent quality and color paint across production runs. When the paint volume in the mixing tank reaches approximately 1,500 gallons – and when inclement weather disrupts outside work duties – the Hobart Public Works personnel will conduct recycled paint pouring.

100% Recycled-Content Latex Paint Pouring
When approximately 1,500 gallons of reblended paint has accumulated in the mixing tank, the 100% recycled-content finished product is gravity fed and poured into one-gallon or five-gallon plastic paint containers. The gravity-fed tube leaving the mixing tank and the valve used for filling paint containers is shown at right. Paint cans are placed in containment bucket to avoid spills during paint pouring process.

100% Recycled Paint Storage
After paint containers are filled, they are moved to the processed paint storage area located within the Hobart Latex Paint Recycling Facility. The photo at right shows the paint storage area. Customers may purchase paint from the facility. Residential customers pay $3.00 per gallon for the 100% recycled-content paint. Not-for-profit organizations and government entities receive paint free-of-charge.

Equipment Efficiency and Effectiveness
The Hobart Department of Public Works is satisfied with the equipment configuration for the Latex Paint Recycling Program. Since September 2010, there have been no equipment breakdown or performance issues. The equipment has needed only routine cleaning and maintenance since being placed in service.
Workforce Training
All 50 of the City of Hobart’s Department of Public Works employees have been cross-trained to perform the tasks involved in the latex paint recycling process. As a result, any Public Works employee may be assigned to duties in the Hobart Latex Paint Recycling Facility.

Hobart Latex Paint Recycling Program Safety Procedures
The Department of Public Works developed a Safety Procedures Manual for the Latex Paint Recycling Program as part of its departmental safety program. This manual is available in the Latex Paint Recycling Facility and at the Department’s main office in another building at the site.

Paint extraction and recycled paint pouring activities are supervised by a Public Works Department foreman. A four-person crew – including a foreman and three laborers – conducts the paint extraction and paint pouring activities. Safety equipment required in the Latex Paint Recycling Facility includes: goggles, steel-toed shoes, gloves, and hard hat. Ear-protection is required when the can crusher is used for paint extraction. Paint extraction is conducted on a monthly basis. Recycled paint pouring is conducted quarterly or as needed when the “large batch” volume of 1,500 gallons of paint is achieved.

Hobart Latex Paint Recycling Program Injury Rates
There have been no reported accidents or injuries associated with the Hobart Latex Paint Recycling Program since the program began in September 2010.
City of Hobart Latex Paint Recycling Program
Section 7: Public Acceptance, Appearance, and Aesthetics

Public Acceptance of the Hobart Latex Paint Recycling program
The Department of Public Works maintains the Hobart Latex Paint Recycling Facility so it is clean and comfortable for individuals dropping-off or purchasing paint. The program does not maintain a fleet of vehicles. The only piece of equipment that leaves Latex Paint Recycling facility is a colorful trailer—“Optimus Primer” – used to collect paint at special events.

Residential Satisfaction with the Program and Product
Based on feedback from customers, residents are satisfied with the convenient drop-off system. Consumers are pleased with the quality of the utility-grade 100% recycled-content latex paint and like the option to have it tinted at Hobart Lumber.

Not-for-Profit and Government Satisfaction with the Product
Not-for-profit organizations and government customers are very pleased with the program since it has reduced materials costs for routine painting projects. These customers are satisfied with the quality of the paint and have no problem with the beige color.

Appearance of the Paint Recycling Program Facility
The latex paint recycling operation is conducted at a newly-built 2,300 square-feet pole barn structure within the City of Hobart’s Department of Public Works complex. The Department of Public Works complex is located in an industrial park on the east side of Hobart.

Public Relations and Public Education Information
The City of Hobart conducts on-going community outreach to promote household participation in the Latex Paint Recycling Program. The City has conducted a number of poster contests to raise public awareness of the program. The Lake County Solid Waste Management District handles county-wide community outreach, media advertising including a newspaper insert that coincides with Earth Day to promote unused paint drop-off collection and recycled paint purchasing.

City of Hobart as Good Neighbor
The Hobart Latex Paint Recycling Program is a good neighbor to the commercial businesses in the adjacent industrial park. The structures at the City’s facility – including the Latex Paint Recycling Program facility – are consistent with other structures located in the industrial park. The Hobart Police Department makes routine patrols through the industrial park to deter trespassing at the Public Works Department’s locked and gated facility. The facility’s neighbors have expressed gratitude to the City for the sense of security this police presence provides for the entire area.
Supplemental Material – 1 of 1

Hobart Latex Paint Recycling Facility Floor Plan and Functional Areas

Additional storage area for new cans and lids

#7 = Storage shelves for remixed paint – 100% Recycled Paint is stored for sale to citizens or free distribution to not-for-profits, schools, and government entities.

#4 = Can Crusher for paint extraction; pump to mixing tank

#5 = Mixing Container where reusable paint is reblended until a sufficient quantity is collected.

#6 = Recycled Paint is gravity-fed into paint cans

#2 = Secondary check; paint cans shaken to assess quality and contamination

#3 = Storage shelves for reusable paint that will be mixed.

#1 = Paint Intake Area

Initial check for latex

Paint shaker

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