Sandia National Laboratories/ New Mexico -- *Creation of a Printer Supply Exchange*

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Award Category: Waste/Pollution Prevention

Nominee: Team Nomination: Toner Exchange Team

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Nomination Abstract:

Sandia National Laboratories/New Mexico (SNL/NM) has created a virtual exchange board to facilitate the internal reuse of excess new printer supplies. Since inception at the beginning of the fourth quarter of FY05 as a short-term recycling awareness period, the Toner Exchange has garnered praise and popularity with employees, and transformed into a permanent waste minimizing and cost saving fixture of SNL/NM's electronic frontier. In just the first quarter of operation, 289 printer supply parts totaling over $45,000 were reapplied to new users, avoiding the need to acquire duplicate supplies that had already been purchased by SNL/NM.

Nomination Description:

Introduction

In June of FY05, SNL/NM began a one-month awareness period called "Toner Daze" designed to encourage and educate employees about purchasing remanufactured toner cartridges and the appropriate way to recycle spent cartridges. The period was extended to two months as the extent of awareness training that needed to be accomplished became clear.

During this time, disposal methods were examined and it was discovered that large quantities of unused toner and other miscellaneous new printer supplies were being wasted on a regular basis. Most often, the owner of the supplies would send their excess

to the Reapplication Yard. These supplies would then be auctioned off to the public, with SNL recovering only a very small fraction of the original cost.

Process Development

The underlying assumption of the Toner Exchange is that SNL is so large that if excess supplies exist for a given printer model, than at least one more of that printer exists somewhere at SNL. To effectively function, the Toner Exchange requires a method to receive supplies from around the site, a processing hub and a means to deliver the product to new users. This was all accomplished by piggybacking on previously existing processes by the goodwill and participation of each process owner, and is flowcharted in Attachment 1.

To receive printer supplies, two methods were established. First, the Reapplication Yard agreed to set aside any unused toner, ink or other printer supplies received, and the Toner Exchange manager is notified and picks up the supplies. Second, employees interested in contributing directly to the Toner Exchange place their supplies in the used toner recycling stream, but marked clearly as a "new" product. The recycling crew from the Solid Waste Transfer Facility then sets aside the supplies for pickup by the Toner Exchange manager.

Once picked up, the supplies are entered in a simple database, valued for tracking purposes, and posted on the Toner Exchange website. A screenshot of the website is provided in Attachment 1. Along with a current inventory, the website also instructs visitors on how to recycle spent cartridges and how to participate in the Toner Exchange. To actively locate potential new users of the supplies, a living list of over 2500 printers attached to the SNL internal network is consulted. Once the appropriate printer is found, the owner is contacted and offered the supplies. If an owner cannot be identified, a customized advertisement pictured in Attachment 1 is issued through the network and dispensed by the printer the supplies are for. If no interested parties are identified in this manner, e-mail advertisements are issued on a monthly basis to a rotating list of specific buildings with large populations. Most supplies are claimed by this time and only the oldest or most unique supplies remain. These supplies are then returned to the Reapplication Yard to be auctioned for any remaining value. The Toner Exchange has a turnover rate of between two and three months. All supply exchanged are tracked in a database. If the similar supplies become available again, past customers are easy to identify and contact.

To deliver the supplies to new users, the manager of the Shipping and Receiving Department agreed to deliver packaged supplies throughout the site utilizing the preexisting Just-In-Time (JIT) delivery process. The Toner Exchange manager simply makes address labels to mimic the JIT delivery labels and drops off the packages during non-peak hours. An address label sample is pictured in Attachment 1. This is popular with the product recipients as they receive next-day delivery of supplies at no cost.

Accomplishments

Having become active at the beginning of the fourth quarter of FY05, the Toner Exchange achieved surprising success immediately. There were 289 boxes of supplies exchanged in that first quarter that had a combined value of over $45,000. This was accomplished with little or no overhead expenses except an initial 5-10 hours of labor per week by one employee. The time expensed to labor rapidly decreased below this range as efficiencies were discovered, repeat users began appearing and a waiting list for supplies was started.

Conclusion

Through the cooperation and coordination of numerous departments, the Toner Exchange successfully closed a path of waste previously unidentified at SNL and continues to save the facility thousands of dollars per month.