

“E-rase your E-waste” Collection Event

**ARS & LEPC Community Event
Sidney, Montana**

FINAL REPORT

Prepared by:

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1500 North Central Ave.
Sidney, MT 59270
June 24 – 25th, 2005**



I. BACKGROUND

The USDA/ARS/NPARL Safety Occupational Health Specialist and Technical Information Specialist developed a proposal for the “E-erase your E-waste” community event to be held in Sidney MT and presented it to the Richland County Local Emergency Planning Committee (LEPC). LEPC members expressed plenty of interest and agreed to help with preparations for the event.

This was the first computer and electronic components recycling collection event held in Richland County, and one of only a very few conducted in the state. ***Our goal was to collect outdated computer and other electronic equipment for recycling from local businesses and community residents, thereby keeping them and their associated toxins out of the local landfill.*** This report contains a summary of event planning activities and outcomes.

II. SUMMARY

Event Partners

The following organizations and agencies partnered and assisted the ARS safety specialist and information specialist to plan, promote and conduct the collection event:

City of Sidney

- Solid Waste Management Division

Richland County

- County Commissioners
- LEPC – Local Emergency Planning Committee
- DES – Local Disaster Emergency Service Coordinator
- RSVP – Retired Seniors Volunteer Program
- CERT – Community Emergency Response Team

Montana Department of Environmental Quality

- Solid Waste Division
- Recycling & Marketing Division of MT DEQ

Tammera Crone – Gallatin Local Water Quality District of Bozeman

The planning committee met four times and had numerous communications via email. The ARS, RSVP and CERT members contributed considerable staff time. They served a critical role in the success of event. The CERT, RSVP and ARS staff members were invaluable in assisting with publicity and for the collection event itself. Additionally, several members of the event planning committee provided volunteer and in-kind services.

Collection Event Focus Area

The event targeted residents and local businesses in Richland County, although it was also open to surrounding Montana and North Dakota counties. While outreach and publicity efforts focused on the Richland County area, media coverage reached a broader audience, with a couple of participants in the event coming from as far away as Roosevelt County (Froid MT) and Williams county ND (Williston, ND) after hearing about the event on television and radio.

Please note, that while Richland County was targeted for the collection effort, the program itself had a much broader impact in that organizers provided materials and

information to officials in surrounding communities to aid them in setting up their own collection events. (See "Conclusion," for more details.)

Hauler/Recycler Contractor

We followed EPA's Guidelines and used the Federal Electronic Challenge's on-site electronic waste management audit information in the *Recycler Selection Criteria* to ensure selection of a reputable contractor that followed environmental guidelines. It was important that the ultimate destination for the computer equipment remain within the U.S. and only 1.5% of inert products from electronic equipment would go to landfill. These concerns were echoed by many of the individuals and businesses who would call to inquire about the event and the final destination of the materials. We selected Tatoonie Electronic Systems, Inc. of Cheyenne, WY as our hauler/recycler contractor for the event. Tatoonie assumed full responsibility for transportation of all the computer/electronic equipment collected. In Cheyenne, WY, they then demanufacture all electronic devices to be then sent to appropriate recyclers and hazardous waste facilities.

To further ensure that the e-cycler selected for the event met the guidelines desired by local organizers, they conducted an on-site inspection of Tatoonie's facilities May 25, 2005. Also participating in that inspection effort were representatives from MT DEQ and ARS office in Cheyenne, WY.

Publicity and Outreach

Publicity for the event began in March 2005. The following venues for outreach were used:

- a) Information on the event was distributed to and run in all local newspapers.
- b) Posters on the program were developed by ARS, and placed at local businesses. Electronic versions were also included on the ARS web page, the Safety ARS Web page and the MT DEQ recycling web page.
- c) Brochures containing information on hazardous materials found in computers, impacts to resources, recycling options, benefits of computer recycling, and tips for donating computers were developed by ARS and distributed by event partners. An electronic version was also placed on the ARS and other websites.
- d) Poster displays and educational brochures were placed at the ARS front desk area, and also provided for various conferences, meetings, etc. around the state. (See "Conclusion," for more details.)
- e) E-mail and listserve announcements about the event were distributed to all employees and MT LEPC Chairpersons.
- f) Two public informational meetings (with the chosen recycler present to answer any questions) were held in April of 2005.
- g) Public service announcements (PSAs) were placed on local radio and TV stations.
- h) Television coverage included a 5-minute, noon show, interview in which the ARS Safety Specialist discussed the upcoming event.
- i) On the first day of the actual event, a local television news reporter conducted an on-site interview that was broadcast on its Nightly news program Friday evening, June 24th. A follow-up report on tonnage, participant numbers, and the future of the event, was requested and aired on the nightly news program on Wednesday June 29, 2005.

Volunteer Recruitment

Volunteers and in-kind contributors were provided through several of the sponsoring agencies. Their participation was acknowledged and thanks extended through personalized letters from event organizers and through newspaper articles, and a letter to the editor sent to local newspapers.

III. EVENT EVALUATION, SURVEY AND STATISTICS

Overall comments from the public about the event were very positive. The level of participation and the volume of obsolete computer and other electronic equipment collected far exceeded our expectations. Detailed results from that survey are presented below. Table 1 itemizes event statistics including volunteers, participant numbers, and numbers of monitors, CPUs, printers, periphery and other equipment collected.

Evaluation and Survey

All feedback from the public at the event was positive. A total of 23 vehicles dropped off out-dated electronic equipment. People reported they were glad to see such a great community service and asked if this would become an annual event.

A short survey was prepared for the day of the event and we also obtained copies of the recycling certificates issued to each participant. A copy of a completed survey is listed below and copy of recycling certificates is available if needed. Surveys were completed for 23 participants excluding ARS.

The three basic questions asked and results from the survey include:

1) Are you a resident of Community:

Richland County: 21

Roosevelt County: 1

Williams Co of ND: 1

2) How many of the following did you bring today? (see Table 1 for totals)

*Scanner, modem, tape drive, laptop computer, fax machine, VCR, typewriter, printers, lab equipment

We used Tatooine Electronic Systems' recycling certificates to obtain these numbers since some participants had as much as a pickup truckload of items that made it difficult for them to list them easily.

Table 1 provides a quick overview of event statistics.

Table 1. Electronics & Computer Recycling Collection Event Statistics for June 24 and 25, 2005.

DESCRIPTION TOTAL #'s Collected

Volunteers: 7

Vehicles/Participants: 23

CPUs: **93** (includes 6 laptops)
Monitors: **73**
Printers: **42**
Fax machines: **6**
Slide Projectors: **6**
Electric Typewriters: **5**
TV : **4**
Microwaves: **3**
Copiers: **3**
Scanners: **2**
Old turntable: **1**
VCR: **1**
Gene sequencer: **1**
Scales: **1**

Total tonnage (excluding pallet/gaylord weights) **4.2 Tons**

Pounds collected per capita (Richland Co. population census of 2000 = 9,667)* **0.87 lbs.**

*Source: www.ceic.commerce.state.mt.us

3) How did you hear about today's event?

Community meeting: 3
Posters, flyers, etc. : 2
Radio: 3
Newspaper: 8
Flyer Email, Other* : 7
* Friend (word of mouth)

TOTAL = 23 participants (excluding ARS participation)

Statistics Summary

Total tonnage for equipment collected at both events was **4.2 tons**. ***This collection event was a success with local business and community members and even a few residents from surrounding communities participating.*** The population of Richland County according to census of 2000 totaled 9,667 (source: www.ceic.commerce.state.mt.us) for an estimated 1.15 pounds/capita of computer & electronic equipment collected.

IV. CONCLUSION & EXTENDED IMPACT

The event was successful and public participation and acknowledgement was positive. Event partner involvement was encouraging and helped to build a foundation for future collaborations.

The collection event kept 4.2 tons of electronic waste and, of equal or more importance, their toxins out of the local landfill. Using lead as an example, we collected more than 70 monitors, which can contain up to 6 pounds of lead each. By e-cycling those items, we diverted as much as 420 lbs of lead from our local landfill....even if you assume each monitor contained only half that amount, the total would still be impressive.

This collection was a great success and proves that individuals and local business can and are taking the initiative to prove their commitment to the environment and the safety of human health. Particularly impressive was the fact that individuals participated in the event even though there was a fee to do so, since no outside funding was used.

Participation in the “E-erase your E- Waste” program has helped the ARS, LEPC, RSVP and CERT and the City of Sidney identify environmentally responsible e-waste recyclers. We plan to use that knowledge and other information obtained from this event to help prepare future e-waste collections.

Extended Impact: An unexpected result of this local e-waste collection effort was the amount of interest it generated beyond the intended audience. For example, a newspaper story published in the local paper attracted the attention of officials at the Montana Department of Environmental Quality, which then offered support and advice for the effort, as well as promoting it as an example for communities statewide at several state and even national meetings, using a small display developed by Sidney organizers.

The article also attracted the interest of a local woman who requested copies of brochures to distribute at an upcoming Women’s Voices of the Earth health conference in Bozeman, MT, that included participation from the Montana Nurses Association. That connection led to officials with a major hospital in Billings, MT (the state’s largest city) to call and ask for information on setting up an e-waste recycling event of their own. That is currently ongoing.

Recognizing that they had hit a nerve, local organizers took on the task of documenting their steps in putting together the local “E-erase you E-waste” campaign and then providing that information and assorted publicity materials and templates to other interested parties. In particular, the MT DEQ asked to include those items on its website. The information was also placed on the websites of the local ARS laboratory in Sidney and the ARS Area office in Fort Collins, CO. Templates for posters, brochures and other promotional items were also supplied to waste officials in Williston, ND, who used them in their own e-waste outreach effort that culminated in the sign-ups of their local school district and hospital for e-cycling with Tatoonie. Although not a community-wide event, the effort targeted major e-waste generators in that community.

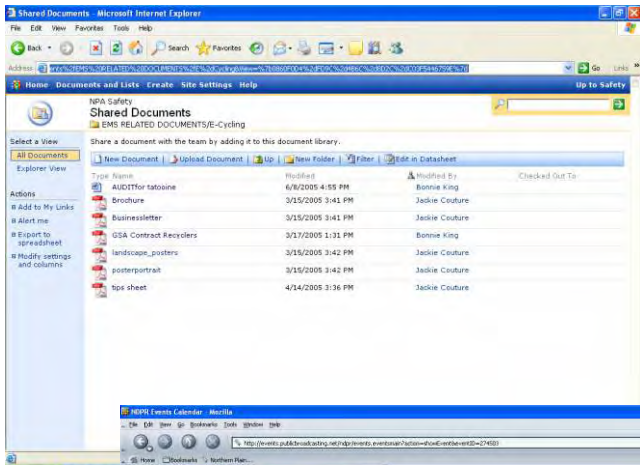
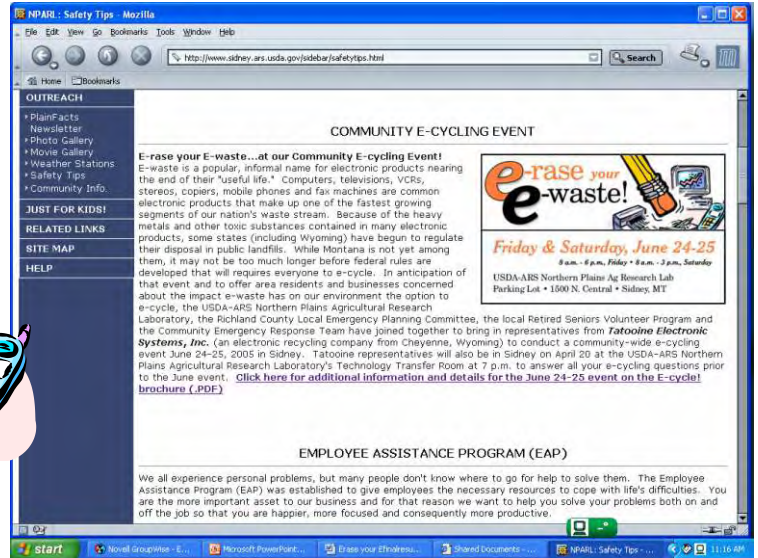
One other indirect benefit to all of Montana is that the Sidney application to host its community-wide “E-erase your E-waste” event triggered a Solid Waste Program awareness of the need for a Programmatic Environmental Assessment for Household Hazardous Waste Collection Events, according to F. Patrick Crowley, Solid Waste Regulatory Program Manager for the Montana Department of Environmental Quality. Completing the EA will make it much easier on anyone seeking permission to conduct similar events in the future, he noted in a July 14th e-mail to Couture, adding. “This keeps these types of events quickly licensable while the DEQ stays in full compliance with the requirements of the Montana Environmental Policy Act (MEPA).”

Please see attached appendices for additional information and samples of publicity and promotional pieces and for pictures and comments regarding the “E-erase your E-waste” event and its organization.

PUBLICITY

e-erase your e-waste!

In addition to promoting the event through press releases in area newspapers and public service announcements on local radio and television stations, event organizers also placed the information and promotional materials on several websites, including those for the USDA-ARS NPARL, the USDA-ARS Northern Plains Area, and the Montana state Department of Environmental Quality. Some of those sites also included the templates designed to aid other communities interested in setting up their own e-cycling event.



E-erase your E-waste organizer Jackie Couture is interviewed by a local television reporter the first day of the event.

PROMOTIONAL MATERIALS

Promotional materials were developed by ARS personnel for the event and included posters, brochures, press releases and other informational items. Templates of some of those materials (logo, posters, brochures) were made available to individuals in other communities after they expressed interest in staging events of their own. In addition ARS organizers put together a "tip sheet" outlining steps they took to set up their event and made it available to all interested parties as well.

Tips for setting up your own e-cycling event...



1. Finding an e-cycler
It's not as hard as you might think. First check with your state and local solid waste officials or Department of Environmental Quality. Another source can be found on the Internet at this site maintained by the National Safety Council:
<http://www.nsc.org/ehc/ep2/enteties.htm>

When selecting an e-cycler you should consider the following:

- Does the electronic recycler have a licensed facility in your state or a state near you?
- Check to ensure the e-cycler doesn't permit exportation of hazardous materials or e-waste to third-world countries, or use other unapproved and/or unprotected workers such as prison labor. Exporting the hazards is unethical and obviously doesn't solve the problem.
- Check to see that the e-cycler has insurance in case there is accidental damage done to the environment.
- Check to see if the e-cycler is "Performance Bonded" - which means there is money set aside to help pay for cleanup if an accident does occur or if the business fails to comply with local, state or federal regulations for e-waste processing. Bonding is further evidence that your chosen e-cycler will actually dispose of your e-waste properly, and if they don't, they may be closed down by the state. In either instance, bonding ensures that you are not liable for any items you e-cycled that may not have been disposed of properly.
- Check to see if the e-cycler has any references available
- Check to see if the e-cycler provides safety training for its employees and has a medical surveillance program.

Other things to consider:

- Does your e-cycler provide certificates indicating proper disposal of their items for its customers?
- Does your e-cycler provide a traveling or other type of scale or do you need to find a site with one?
- Does the scale to be used meet your state's regulations? (In Montana, scales are Department of Agriculture's.)
- And, of course, what does it cost? What is included in addition to the recycling? (transportation, etc.) Does your e-cycler provide special rates for community event?

2. Getting additional help / support for your event


- Contact local agencies working with safety and solid waste, examples may include Planning Committees. Community volunteer groups and civic organizations may work with your program.
- Contact local government officials to get their support, including city and county landfill operators, county sanitarian, public works director, public health official
- Contact the Montana Department of Environmental Quality, or your state's equivalent have a Recycling Program Director that can help guide you. They will be able to regulations pertain to your event and whether you need a permit.

e-erase your e-waste!

Logo designed for the event, which was also made available to other groups wanting to host their own e-cycling event.



Join us for a community-wide "e-cycling" opportunity for area businesses and individuals!



e-erase your e-waste!

**Friday & Saturday
June 24-25, 2005**

USDA-ARS Northern Plains Ag Research Lab
Parking Lot • 1500 N. Central • Sidney, MT

Times:
Friday, 8 a.m. - 6 p.m.
Saturday, 8 a.m. - 3 p.m.

Our e-cycler:
Tatooine Electronic Systems, Inc.
Cheyenne, WY

Cost:
40 cents per pound on all eligible items

Questions:
Contact Jackie Couture at 406-433-9422

Event details

What can I bring?
"E-waste" refers to a wide range of electronic products. Examples include: computers and their components, cell phones, TV's, fax machines, copiers, VCR's, stereos and specialized electronic equipment used in businesses such as hospitals, law enforcement and manufacturing and even the oil fields. Even microwaves are acceptable, although not other appliances.

Which day should I bring it?
Businesses with larger quantities to e-cycle are asked to come Friday, June 24, but both days are open to businesses and individuals alike.

What will it cost?*
For this special event, the charge is 40 cents per pound for all eligible e-waste items. There may be an additional charge if an official receipt certifying that an item was properly disposed/destroyed is needed. There's no charge for general certification.

* Please note: E-waste in Montana is now regulated and the county governments can legally be disposed of at the site. This means that e-waste is now regulated and the county governments can legally be disposed of at the site. This means that e-waste is now regulated and the county governments can legally be disposed of at the site.

Coordinators: USDA-ARS-NPARI, Richland Co. LEPC, and RSVP and CERT volunteers.



e-waste What is it?

As we become more dependent on electronic products to make life more convenient, the stockpile of used, obsolete products grows. The National Safety Council projects that nearly 450 million computers will become obsolete in the next five years and mobile phones will be discarded at a rate of 130 million per year by 2005. Computer monitors and older TV picture tubes contain an average of four pounds of lead and require special handling at the end of their lives. In addition to lead, electronics can contain chromium, cadmium, mercury, beryllium, nickel, zinc, and brominated flame retardants. When electronics are not disposed of or recycled properly, these toxic materials can present problems. Extending the life of your electronics or donating your most up-to-date and working electronics can save you money and save valuable resources. Safely recycling outdated electronics can promote the safe management of hazardous components and supports the recovery and reuse of valuable materials.



e-erase your e-waste!

Hosting your own e-cycling event

This e-cycling event is being coordinated by USDA-ARS-NPARI, Richland County LEPC and the local RSVP and CERT programs as a community service. To encourage other communities, organizations and individuals to consider sponsoring their own e-cycling event, USDA-ARS-NPARI is making free samples of its "E-erase Your E-waste" promotional materials available to all interested parties. The materials are designed so that you can adapt them to fit the needs of your community.


For more information, contact NPARI, Safety Officer Jackie Couture at 406-433-9422 or jcouture@sidney.ars.usda.gov



e-erase your e-waste!

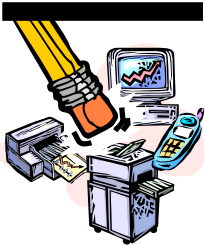
Information on a community-wide "e-cycling" opportunity for area businesses and individuals!

Sample pages of brochure (above) and corresponding template (below).




e-waste

e-erase your e-waste!



e-erase your e-waste!



PHOTOS FROM "E-RASE YOUR E-WASTE"



Our first participant.



CERT volunteers helped e-waste participants.



Piling up!

PHOTOS - E-CYCLER INSPECTION TOUR



Above left, Tatooine employee dismantling computer e-waste. Above, Typical day's collection of e-waste at Tatooine.

ARS rep views plastics and gaylord recycling piles.

SAMPLE COMMENTS

"So nice to connect with you! I've just took a quick glance at the materials and they look good. We are so impressed with what you've already accomplished! This could be a inspiring model for small towns across MT. With your permission, we'd like to put the brochure up on our DEQ website. It could help increase awareness and support of your project. Let me know what you think."

Loni Hanka, Recycling and Market Development Specialist, Montana DEQ

"I wanted to let you know, all the brochures and two plastics folders were taken at the Waste Not Conference. (It was very popular!)"

Loni Hanka

"Thanks for the email....good stuff."

Iver Johnson, Montana DEQ

I received your email and I am so impressed with the information you sent! You have put together an excellent package of resources, which I will be forwarding to my manager. We have already discussed how beneficial (and fun) it would be to have Saint Vincent Healthcare sponsor a community event of "e-rase your e-waste"! Thank you very much for sharing this with us....!

Information Services, St. Vincent Healthcare, Billings, MT

"Great promotional materials and audit information. Thanks for sharing them!"

Kim Holmes, Resource Recycling, Inc., Portland, OR