



Montana Solid Waste News

Fall 2012



THE STATE OF WASTE IN MONTANA

Kathy O'Hern

Yeah, we've got trash in our state, and lots of it. And a good portion of it ends up in Montana landfills, but not all of it!

For the past three years, I've had the interesting assignment of determining how much waste is either recycled, or diverted in some way from Montana's landfills. It's a frustrating exercise because no matter how hard I try, I know that some of the tonnage actually recycled, composted or diverted within the state is missed.

And, on the other hand, it's extremely easy to mistakenly count the same tonnage twice. For example - Montana County X reports that 100 tons of cardboard are recycled, but don't say where it was shipped. In the meantime, I receive a report from Recycler Z listing 5,000 tons of cardboard recycled. After a little investigative work, I find that County X sells their cardboard to Recycler Z. If I hadn't taken the time to verify this, the same 100 tons of cardboard would be counted twice.

Multiply that scenario by every city, county, solid waste facility, recycling program, and recycling company in the state and maybe you can imagine what a fun task this is!

The amount of materials being recycled, composted, or diverted for beneficial use is ever-increasing in Montana. Many communities are making an effort to figure out how to recycle at least a portion of their trash. In this issue read about how one county in Montana – Lincoln County – is dealing with their waste, and how they've worked recycling into their normal routine.

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Solid Waste Program Staff

Rick Thompson, Section Supervisor,
444-5345

Mary Louise Hendrickson, Technical
Lead, 444-1808

Bruce Meyer, Junk Vehicle Program
Manager, 444-2835

Tim Stepp, Environmental Engineer,
444-4725

Mitzi Hansen, Data Control
Specialist, 444-3493

Martin Van Oort, Environmental
Science Specialist - groundwater
and methane monitoring, 444-2802

Kathy O'Hern, Environmental
Science Specialist - compost,
recycling, and training 444-9879

Bob McWilliams, Environmental
Science Specialist - Septic Pumper
Program, 444-1434

Carda Taylor, Environmental
Science Specialist - Junk Vehicle
Program, 444-3048



Address:

Lee Metcalf Building

1520 East Sixth Ave.

PO Box 200901

Main Line 444-5300

<http://deq.mt.gov/SolidWaste>

SOLID WASTE'S JV PROGRAM

Not everyone realizes that Montana's Junk Vehicle (JV) Program is part of the Solid Waste (SW) Section. Bruce Meyer, Mitzi Hansen, and Carda Taylor manage this part of the SW Section. Did you know that Montana was one of the leading states to enact junk vehicle legislation? Its primary purpose is to control junk vehicles from being scattered throughout the countryside, thereby helping to preserve the beauty of our state. The JV Program provides for the recycling of the junk vehicles collected so that this valuable resource may be utilized again. This program is paid for from the small fee that is assessed when you license your vehicle. The benefits of the program are available to all Montanans, so you are encouraged to use them.



If you'd like more information about the JV Program, the website can be accessed here:
<http://www.deq.mt.gov/default.mcp.x>

LINCOLN COUNTY, MONTANA – WHERE THE WILD THINGS ARE!

You can still find wild Norsemen, Vikings and loggers in Lincoln County! This northwest Montana county is also full of majestic mountains, deep valleys, wild rivers, and beautiful mountain lakes. Geographically, it's a large county that encompasses 3,613 square miles, but small population-wise with less than 20,000 residents.

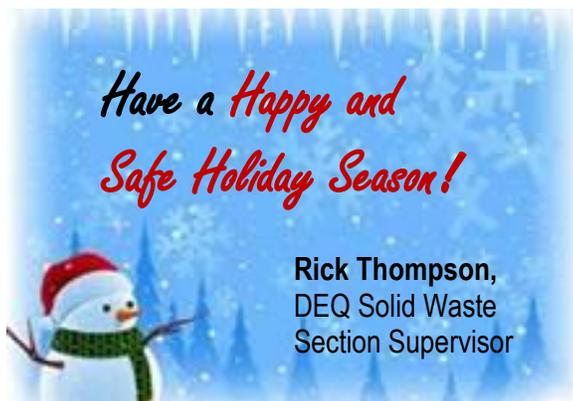
There is only one major Class II Landfill in Lincoln County, and it is located in Libby. Trash is hauled to the landfill from several county-owned container sites; including Eureka – a 70 mile drive along the shores of Lake Kootenai, Happy's Inn – a 35 mile haul, and Troy – a mere 20 miles away. But keep in mind that these are mountainous highways, in the summer full of tourists, and often icy and dangerous during the winter.

Despite their remoteness, Lincoln County residents wanted to recycle. A volunteer movement that started in Eureka in 2007 snowballed to become a county-wide recycling program by 2010. Helped along with two stimulus grants, the county has placed recycling trailers (ProTainer and Dempster) in several communities in which paper, plastic, aluminum cans, steel cans, and cardboard are collected. Recyclables are hauled by county employees to Kootenai Recycling in Libby, where the commodities are baled with a baler purchased in 2011 with the help of stimulus money.

The recycling program continues to grow. A recycling collection and storage building was constructed at the Eureka Class III Landfill in 2011. This building has greatly reduced the number of trips needed to haul recyclables to Libby. Beginning in October 2012, all plastics are accepted for recycling, instead of just #1 and #2 plastics. Additional locations to collect cardboard have been added at the Libby and Eureka Landfills. There are plans to add more drop-off locations to make recycling more convenient for residents.

Funds received from the sale of recyclables are put back into the recycling program, or donated to local animal shelters for spay/neuter programs – where more "wild things" are!

RICK'S CORNER



New Solid Waste Department Vehicle

CIRCULAR DEQ-7 – WHAT THIS MEANS FOR YOUR

GROUNDWATER MONITORING PROGRAM

The Water Quality Planning Bureau issued an updated version of Circular DEQ-7, Montana Numeric Water Quality Standards, in October 2012.

What does this mean for solid waste facilities?

Circular DEQ-7 establishes numeric water quality standards for all state waters, including surface water and groundwater. This circular is updated at least every three years, and is available on the Department of Environmental Quality (DEQ) website at: <http://www.deq.mt.gov/wqinfo/Circulars.mcp.x>. For Class II and Class IV facilities which are required to conduct groundwater monitoring, DEQ-7 contains three values of which a facility owner/operator should be aware. Each of these values is explained below.

The furthest right column in DEQ-7 is the Required Reporting Value (RRV). The RRV is the highest reporting limit which can be used by the analytical laboratory when reporting values to the DEQ. It is the responsibility of each facility to communicate these RRVs to their contract laboratory, and ensure all analyses meet these limits. In some cases the reporting limits may be higher due to matrix interference in a sample, and in such cases the laboratory should report estimated quantities between the reporting limit and the detection limit. The DEQ Solid Waste Section encourages reporting estimated values between the reporting limit and detection limit for all analyses because this provides additional valuable information on water quality, typically at no additional cost. A value reported below the RRV will never be used by the Solid Waste Section to require action on the part of the facility, but can provide valuable early warning of a potential release. This early warning can allow the facility owner/operator to take preemptive action to prevent these low concentrations from increasing, or budget for potential future actions which may be necessary if the concentrations rise.

The third column from the right is the Ground Water Human Health Standard (HHS). The HHS is the equivalent of the Maximum Contaminant Level (MCL) under the Montana groundwater quality standards. According to Administrative Rule of Montana (ARM) 17.50.1307(8) this value is the groundwater protection standard which is applied at the facility relevant point of compliance (RPOC), unless there is no standard listed in DEQ-7 or background concentrations are higher than the



DEQ-7 standard. In either of these exceptions, the background value is then considered the groundwater protection standard. If the parameter of concern has not been detected in the background samples, then the RRV should be used as the groundwater protection standard. Because an exceedance of a groundwater protection standard at the RPOC triggers corrective action, this is the most important value for a facility owner/operator to consider.

The second column from the right is the Trigger Value (TV). The TV establishes the limits of what is considered a nonsignificant change in water quality under the Montana Water Quality Act (WQA). As such the TV may not be exceeded at the facility license boundary. In the case of carcinogens, for which there are no TVs, or parameters where the TV is less than the RRV, the RRV (i.e. background) is the standard at the facility license boundary. It should be noted that nondegradation policy only applies to high quality waters, with a specific conductance of less than or equal to 2,500 microSiemens/cm. Although there is currently no mechanism for the application of the MWQA included in the solid waste rules, the Montana groundwater quality standards are applicable to a discharge from a solid waste management system (see 75-5-605(1)(a)MCA.)

The current update of DEQ-7 did not change the HHSs for any parameter monitored at solid waste facilities, but did modify some TVs and RRVs. This would be a good opportunity to review the standards in DEQ-7 with your consultant to determine how they may affect your facility. In particular, many facilities do not meet all RRVs during routine groundwater monitoring. If this is the case for your facility, you will be notified in the review of a future groundwater monitoring report.

Call Martin Van Oort, 406-444-2802 with your groundwater questions.

REVIEW OF E-WASTE/ HHW TRAINING IN SEPTEMBER



On September 12, 2012, a 4-hour E-waste and Household Hazardous Waste (HHW) training was held at the Holiday Inn in Bozeman. Twenty-five people attended the training; and attendees agreed that they took useful information back to their facilities.

First, Jackie Couture and Butch Renders spent an hour describing how Richland County, in eastern Montana, implemented a very successful, and on-going, electronics collection program called "E-Rase your E-Waste!" This program began as a grassroots effort in 2005 to keep harmful electronics out of the landfill, and has grown dramatically since then. So far during 2012, 57,939 pounds of electronic wastes have been collected in Richland County! Jackie offers to share what Richland County has learned with other communities in Montana that want to implement an e-waste program.

Next, Bridget Kelly, a HW trainer from PSC Environmental Services, presented a lively three-hour session about HHW, and the impact that common chemicals might have in Transfer Stations, hauling vehicles, and landfills, especially when mixed with one another. She used actual samples of various HHW products to (safely) demonstrate what can happen when chemicals collide. She drove home the issues associated with HHW to all attendees, and made it fun and interesting at the same time. Bridget will be back to teach the 24-hour HAZWOPER Course in January.

SAVE THE DATES FOR 2013 TRAININGS

Beginning in January 2013, several trainings are planned for the months before the busy summer season begins. These trainings begin with the 24-hour HAZWOPER Course January 15-17, 2013, in Billings. Bridget Kelly from PSC Environmental Services will teach the HAZWOPER Course. Bridget's classes are OSHA-certified; for more information and registration see the Training website: <http://www.deq.mt.gov/solidwaste/training.mcp.x>.

These trainings will follow:

- | | |
|-------------------|--|
| March 13-14, 2013 | <p>Coping with Personnel, the Public, and the Generation Gap in the Workplace
 Instructor – John Moore, Professional Development Center
 Location – Helena</p> |
| April 23-26, 2013 | <p>SWANA-certified Manager of Landfill Operations (MOLO) Course
 Instructor – Neal Bolton, Blue Ridge Services
 Location – Butte</p> |
| May 15-16, 2013 | <p>Asbestos, Meth, and Debris Management at Solid Waste Facilities
 Instructors not yet confirmed
 Location – Missoula</p> |



FREE COMPREHENSIVE OPERATIONS REVIEW WEBINAR

On Wednesday, December 12, 2012, 8am MST, Blue Ridge Services is offering a FREE webinar for Solid Waste Facilities. The webinar will cover topics such as equipment utilization, staffing levels, cost vs. benefit, operational productivity, and airspace utilization.

For more information contact Sarah Bolton at sarah@blueridgeservices.com, or register by accessing the following link:

Click [HERE](#) to register

SAFETY TRAINING DVD LIBRARY

The Solid Waste Program has developed a SAFETY TRAINING DVD Library for licensed facilities. These DVD's were developed by Blue Ridge Services. If you would like to borrow any of the DVDs for your safety meetings, call 406-444-5300 or e-mail wutbcomments@mt.gov. The DVD will be mailed to you along with a stamped return envelope. The DVDs will be loaned out for two weeks at a time.



Following is a list of the available safety topics:

Working in Dusty Conditions
 Traffic Safety/Road Design
 Working in Extreme Weather – Hot Weather
 Preventing Landfill Fires
 Extreme Conditions – Rain Storms – Wet Weather
 Methane Gas Safety
 Slope Stability – Excavation Slopes

Leachate Management & Handling
 Landfill Odors: Safety Issues
 The Basics of Transfer Station Safety
 Equipment Safety – General Issues
 Bloodborne Pathogens
 Dealing with Unruly Customers

QUESTION FROM A SOLID WASTE FACILITY



Question: Can wood chips be used as alternative daily cover (ADC) at my landfill?

Answer: First, a landfill operator would need to submit a plan for use of this ADC to DEQ's Solid Waste Program (SWP) for approval per ARM 17.50.1104(2)...*operator shall submit for departmental approval procedures for use of any alternative daily cover materials...*; and the operator must demonstrate that the ADC meets the requirements outlined in ARM 17.50.1104(b)...*the alternative daily cover will control disease vectors, fires, odors, blowing litter, and scavenging, and minimize leachate without presenting a threat to human health or the environment.*

The SWP recently reviewed an ADC demonstration project from a landfill in California that was provided to us by a Montana landfill. This demonstration project tested Green Material (GM), which is landscape or bedding material that doesn't need to be ground or chipped, and Processed Green Material (PGM), which is landscape material that is large enough that it must be chipped prior to use, for performance as ADC. The demonstration showed that the GM and PGM met the requirements listed above for ADC. After reviewing the results of the demonstration project, and the landfill's modified operating procedures, the SWP made the decision to allow GM and PGM to be used as ADC at this Montana landfill. The GM and PGM ADC must be managed properly, and must be covered with six inches of cover soil weekly, per ARM 17.50.1104(2)(a): *the procedures for the use of alternative daily cover materials must provide for the application of six inches of approved cover soil at least once per week;*

If your landfill wishes to begin using GM or PGM as ADC, a modification to the Operation & Maintenance (O&M) Plan must first be submitted to the SWP. It's particularly important to show how this material will be managed because of potential heat caused from GM and PGM decomposition. The SWP will consider the use of ADC relevant to each individual facility. An approval from the SWP must be received prior to using GM or PGM as ADC.

Submit your question to kohern@mt.gov

SOLID WASTE INDUSTRY NEWS

SOLID WASTE NATION'S 4TH MOST DANGEROUS PROFESSION

September 2012

Alan Gerlat, Waste Age

Fatalities in waste and recycling collection for 2011 pushed the industry to the fourth most dangerous occupation compared with seventh a year ago.

Refuse and recyclable material collectors suffered 34 deaths in 2011 compared with 26 in 2010, according to new statistics from the Washington-based U.S. Labor Department's Bureau of Labor Statistics. For 2011 waste and recycling collection had a fatality rate of 41.2 per 100,000 full-time equivalent workers. The rate was 29.8 in 2010.

"We're concerned that this new data shows a partial reversal of some the great progress we've made in reducing fatalities over the past decade," says David Biderman, general counsel and director, safety, in an interview. "We're going to work to better understand what the root causes of these accidents are and provide better safety-related information to our members and others in the industry."

He says that the statistics will need additional study since they just came out, but "we've seen over the past several years an increase in the proportion of these fatal accidents that have occurred at small haulers. We're very concerned about this trend and hope to be able to provide these companies with the safety tools to prevent these incidents from happening in the future."

Fishing workers once again had the highest fatality rate, followed by logging workers and aircraft pilots/flight engineers.

WASTE INDUSTRY SUPPORTS MEMORIAL AT LANDFILL

October 10, 2012

Jim Johnson, Waste & Recycling News

Rich Lorey was appalled when he learned that the ashen remains from the Dover Air Force Base mortuary were sent to the King George County landfill in Virginia near his home between 2003 and 2008. He ended up spearheading a drive to win permission to have a plaque placed at the landfill to recognize the ultimate sacrifice these service members gave to their country.

After a recent Waste & Recycling News story about efforts to pay for a bronze plaque to memorialize war dead who had their partial ashen remains buried in a Virginia landfill, the donations streamed in from around the country. Generous readers sent in more than \$1,500 for the project, which cost a total of \$3,500. That was more than enough to push fundraising over the top and provide more than enough extra cash to create a maintenance fund for the memorial.

By the time all was said and done, there's a least \$1,500 extra thanks, in large part, to folks in the solid waste business opening up their hearts and their wallets. Other money also continued to come in locally to help the cause.

Lorey, an Army veteran himself, is touched by the sacrifice that service members and veterans make to keep this country free. He was also touched by the generosity of Waste & Recycling News readers.

Rich Lorey has a simple message to the solid waste industry: "Thanks everybody."

CALIF. TRANSFER STATION CATCHES FIRE, DESTROYS NEARLY 80 TONS OF RECYCLABLES

October 2, 2012

Shawn Wright, Waste & Recycling News

A fire over the weekend destroyed an estimated \$160,000 worth of recyclable material at a California waste transfer station.

The fire began around 3:30 p.m. on Sept. 29 at Escondido Disposal Inc. in Escondido, Calif., and took about seven hours for the Escondido Fire Department to extinguish, the North County Times reported.

Nearly 80 tons of recyclable material, including paper and plastic, was destroyed. As of Oct. 1, firefighters were still trying to figure out how the blaze began.

The building remains operational because it was not severely damaged, the newspaper said. Investigators said that because the fire spread throughout the building, its point of origin could not be determined.

"There are a couple of working theories, but they would just be guesses at this point," Capt. Britt Matthews told the newspaper.

NEW YORK MAN PLEADS GUILTY TO OPERATING AN UNPERMITTED LANDFILL

October 26, 2012

Jeremy Carroll, Waste & Recycling News

A Carmel, New York, man pleaded guilty to operating an unpermitted C&D landfill on his property, the New York attorney general announced.

Anthony Adinolfi created an illegal landfill in 2010 on a residential property in the New York City Watershed, officials said. The site included C&D debris and coal ash. Some of the material eroded and was discharged into nearby waters, officials said.

Officials said throughout the year of operation, sometimes as many as 10 to 15 trucks a day dumped at the site, and Adinolfi's company, Dirtman Enterprises Inc. earned more than \$300,000 by taking in the trash.

Adinolfi faces four months in jail and five years of probation when he is sentenced later this year.

RECYCLING WORKER CRUSHED AT ONTARIO FACILITY

October 3, 2012

American Metal Market

A worker was killed at Plank Road Auto Wreckers' recycling facility in Sarnia, Ontario. An employee was using a gas tank to prop up a vehicle while draining its fluids when the vehicle shifted. The victim was working in the back of the facility and was not discovered until several hours later.

After discovering that vehicles were stacked 16 high and leaning, two stop-work orders were issued. The height of the piles of stacked vehicles must be lowered, and certified equipment to prop up vehicles are to be purchased for future employee safety.

REPUBLIC OPENS 'WORLD'S LARGEST RECYCLING PLANT'

Aug. 9, 2012

Allan Gerlat, Waste Age

Republic Services Inc. opened what it says is the largest recycling operation in the world, a 110-ton per hour, multiple waste stream facility in Milpitas, Calif.

The material recovery facility (MRF) will process residential and commercial single-stream material for recycling, as well as dry and wet commercial recyclables, comprising all the commercial waste from businesses in San Jose, Calif., the Phoenix-based Republic said in a news release. The MRF will process more than 400,000 tons per year and is expected to divert at least 80 percent of the material collected.

The MRF is located at the 342-acre Newby Island Resource Recovery Park and includes a landfill (with gas recovery), a composting facility, a recycling facility, and the local hauling company. Republic said it will provide standard recycling services for all area customers and includes organics recycling that generates energy from waste. The hauling company operates nearly 70 natural gas vehicles, and the site includes a compressed natural gas (CNG) fueling station. The operation employs 289.

"The improvements in our facility allow us to operate at a higher capacity, which increases the diversion rate for our recycling programs and supports our community's green initiatives," said Gil Cheso, division manager for Republic. "We are proud that in partnership with our service cities, we have met or exceeded California's waste diversion requirements. This greatly enhances our overall positive environmental impact."

Republic worked with Bulk Handling Systems (BHS) to design, manufacture and install the custom-designed, automated system.

**You can't change your
destination overnight,**

**But you can change your
direction overnight.**

Newsletter Contact

Send your questions or submissions
for upcoming issues to:

Kathy O'Hern

kohern@mt.gov

406-444-9879