

Environmental nnections

Fall 2006 CHISAGO COUNTY ENVIRONMENTAL NEWS

SRC builds, installs new automatic sorter



Certainly you've seen SRC's bright yellow recycling trucks stopping at your home and/or business. Founded in 1984, SRC has grown along with Minnesotans' awareness and interest in recycling. Today, according to Rick Prah, who's been with SRC since 1989, the

Environmental Connections provides Chisago County residents with information and news from Chisago County Environmental Services, located in Center City and North Branch.

To contact your Chisago County Commissioner:

1ST DISTRICT—Lynn Schultz, 651-583-2657 or 651-213-0458 (office) North Chisago Lake Twp, Lent Twp, Franconia Twp, North Branch S.

2ND DISTRICT—Rick Olseen, 651-674-7510 North Branch N., Shafer, Shafer Twp, Taylors Falls, Amador Twp, Sunrise Twp.

3RD DISTRICT—Bob Gustafson, 651-257-6218 Center City, Chisago City, Lindstrom, South Chisago Lake Twp.

4TH DISTRICT—Ben Montzka, 651-464-8515 Wyoming, Stacy, Wyoming Twp., and part of Chisago City.

5TH DISTRICT—Mike Robinson, 320-358-3223 Harris, Rush City, Nessel Twp, Fish Lake Twp, Rusheba Twp.

Keep this information by your phone for future reference.

company picks up, sorts, bales, and ships more than 100 cubic yards (that's 140,000 pounds) of paper, cardboard, glass, and cans recycled in northern Washington County and southern Chisago County each **week**.

Given this volume of material, Prah had been trying to better automate the sorting process. "Machines exist that will sort plastic, glass, steel, and aluminum, but the price tag's a bit steep: \$1.4 million." So Prah took another tack: he decided to build a sorter himself.

In addition to making SRC staff's job a lot easier, the new separator makes life more convenient for families and businesses who recycle because they no longer need to separate their glass, metal, aluminum, and plastic. All can be "commingled," that is, thrown together in the same container.

SRC staff still need to watch the as the sorter's conveyor belt carries material to the sorter so they can pull out unwanted items such as plastic bags and paper. Prah urges people to avoid breaking their glass bottles and jars. The problem? Because broken glass bits can be quite small, they can be missed by the sorter and mix with the plastics. To remedy that problem, SRC is considering adding a small screen to filter the broken glass before it runs through the sorter.

With the first such sorter in the area, SRC's goal is to reach 100% commingling. 80–85 percent of people using their service currently recycle, but they would like to see 100%.

More recycling, of course, means less material in landfills. The ideal, says Prah, would be to reach the point where everything we use would be recycled.



A special new furnace at SRC burns used motor oil to heat its recycling center building in winter, saving thousands of dollars in fuel costs annually.

Sunrise River Study is completed

The MPCA listed the North Branch of the Sunrise River as an impaired waterway, under Section 303(d) of the federal Clean Water Act in 1998. The North Branch of the Sunrise River is located in east central Minnesota. It is a tributary of the Sunrise River and part of the larger St. Croix River basin. The river, from its headwaters near Weber in Isanti County to its confluence with the Sunrise River near Hay Creek in Chisago County, is impaired for primary contact recreation and swimming. Over a 20 year period, data have shown frequent excessive levels of fecal coliform bacteria in these waters, especially during times of increased flow due to rain or snowmelt.

Total Maximum Daily Load (TMDL) background

Impaired waters are those that do not meet water-quality standards designed to protect their federally designated uses, including recreation, aquatic life, agricultural irrigation, livestock watering, and more. Examples of pollutants that can place a lake or stream on the impaired list include sediment, nutrients, bacteria, low dissolved oxygen and bio-accumulative toxins including mercury and PCBs. Waters may be impaired by more than one pollutant.

The Total Maximum Daily Load (TMDL) process provided in federal law identifies all sources of the pollutant causing the impairment, allocates needed reductions among them and creates a plan for restoring the water to standards. A lake or stream may need more than one TMDL, depending on the listed impairments. The North Branch of the Sunrise River is also impaired for aquatic life based on the index of biotic integrity for fish and invertebrates.

The problem: Fecal Coliform

Fecal coliform is a group of bacteria that lives in the intestines of warm-blooded animals, including humans. Its presence means the water has likely been contaminated by human or animal feces, indicating the possible presence of waterborne pathogenic bacteria, viruses, or protozoa. These organisms can cause gastric or diarrheal diseases, including typhoid and cholera.

Sources of fecal coliform. An inventory of the predominant fecal coliform sources in the watershed was completed. The sources are livestock, septic systems, septage land application sites, wildlife, and pets.

The top three sources are unregulated livestock facilities, pastures near streams, and septic systems that are determined to be an imminent threat to public health. Together, these three sources represent approximately 80% of the total daily fecal coliform load to the river and are the primary focus of reduction efforts.



Chisago Soil and Water Conservation District Technician, Casey Ambers, uses a Sonde to measure and monitor levels of dissolved oxygen, conductivity, pH, temperature, and turbidity in the North Branch of the Sunrise River.

Reductions needed. To attain the standard of 200 org/100 mL, a reduction of approximately 52% may be necessary. This reduction percentage is a rough approximation, since it does not account for actual flow conditions. Rather, it is a starting point based on recent water quality data for assessing the magnitude of the reduction needed in the watershed to achieve the standard. It is based on the highest observed water quality standard violations and is likely a protective guideline.

Implementation plan. Clean up will take five to ten years, consistent with the uncertainties associated with funding that landowners may need to adopt or install non-point source control measures. We expect that compliance with water quality standards can be achieved in ten years or less. If the water quality goal is not achieved, the MPCA is required to re-open the TMDL. A detailed implementation plan will be developed following completion and approval of this TMDL.

Public involvement

The general public has had numerous opportunities to learn more about and become involved in the development of the draft TMDL project, including:

- Chisago County Water Plan Policy Team
- TMDL advisory committee
- April 2004 public informational meeting
- September 2005 public informational meeting
- Local newspaper and newsletter articles, press releases and letters to the editor
- Chisago County Web site
- Direct mail to local environmental groups

The draft TMDL report is available at www.pca.state.mn.us/water/tmdl.html. Public notice of the draft TMDL is posted in the State Register, and is open for comment in early October. Submit written comments before 4:30 p.m. on November 1st to: Craig Affeldt, 520 Lafayette Road North, St. Paul, MN 55155-4194.

For more information

Attend a public meeting on October 24th, at 7:00 p.m., at the North Branch Area Public Library for an overview of the TMDL study results and to learn more about the various clean up activities that may take place as a result of the study's recommendations.

For more information on the TMDL project, contact **Craig Affeldt** at 651-296-6062 or email him at craig.affeldt@pca.state.mn.us or **Jerry Spetzman** at 651-213-8383 or email him at jpspetz@co.chisago.mn.us.

General information about TMDLs is available online.

Minnesota Pollution Control Agency:
www.pca.state.mn.us/water/tmdl/

U.S. Environmental Protection Agency:
www.epa.gov/owow/tmdl/

TMDLs.net America's Clean Water Foundation and the Association of State and Interstate Water Pollution Control Administrators: www.tmdls.org/

County hires "Garbage Cop" The clean-up continues...



Nearly 60% of complaints received by the County's Zoning Office are about junk vehicles, "trashed out" properties, illegal burning, rotting garbage piles, and other outside storage concerns. To help with the complaint load, the Zoning Office joined hands with the Sheriff's Department to deal with these solid waste issues. On April 1st, Deputy Karl Schreck, the County's new self-described "Garbage Cop," began working to strictly enforce property zoning laws.

How serious is the problem? How frustrated are some County residents? Within days after his position was announced in the last issue of *Environmental Connections*, letters and calls reporting violation began to pour in—some even to Schreck's residence. "Area residents usually know what's happening in their neighborhoods," said Schreck, "and it was obvious that there was a need for additional staff with the time and the authority to help us adequately address the problem."

The County has had a Code Enforcement Officer for many years, but the volume of work has just been too great for one person to handle. More problems actually existed than anyone suspected, and Schreck has been swamped. "In the first four months, I handled more than 50 cases, wrote many tickets that required a court appearance, and issued countless warnings," said Schreck. "And sadly, most properties I examined had at least three violations." Issuing a warning or a ticket is just the beginning of the process. "We have to walk the properties and take photos to document the problem," he said, "and then return at least once to check compliance." Schreck estimates that each case requires, on average, 7 to 8 hours from initial visit to reaching compliance.

Examples of violations Schreck has dealt with include:

- a property with 40 junked cars, along with many junked wash machines, dryers, refrigerators, and piles of rotting garbage; another with 250 junked cars.
- an illegal refrigerator, air conditioner, and freezer recycling operation
- an illegal car crushing operation
- a property with an unlivable house and over two years of garbage rotting in the yard
- illegal burning of brush, sofas, mattresses, and poisons.
- a property with stolen junked cars, a trailer piping sewage into a pond, and a meth operation.

Listen to Schreck, and you'll be immediately struck by his enthusiasm for this new position. "Having another person on board allows us to enforce the codes more effectively now, and more properties are getting cleaned up," he said with a smile. "It's very gratifying. I really feel like I'm making a difference when I drive past a place and see the results of our work."

Note: If you know of a property in violation of these types of zoning regulations, please call: 651-213-6365, or email kjschre@co.chisago.mn.us.



Home Occupations

Home occupations

such as architects,
 artists, clergy,
 clothing alterations,
 domestic
 craftsmanship and
 similar uses,
 don't require
 Conditional Use
 Permits.

Often County residents ask the **Environmental Services** and Zoning Department about the rules for home occupations. County residents may apply for a conditional use permit for the use of their home as a place for the operation of a business or profession provided the occupation is clearly secondary to the principal use of the home as a residence.

Some home occupations do not require a Conditional Use Permit from the County. These home occupations do not require additional parking, or an accessory building, or generate a noticeable increase in traffic. Such home occupations as architects, artists, clergymen, clothing alterations, domestic craftsmanship and similar uses are permitted without a Conditional Use Permit.

The home occupations that require a Conditional Use Permit are those which have the potential for generating a noticeable increase in traffic, require additional parking or require the use of an accessory building (except the use of existing accessory buildings in the Agricultural District to seasonally store recreational vehicles and equipment). Examples of home occupations that require a Conditional Use Permit are barbershops, beauty salons, repair shops, clothing shops, bed-and-breakfast inns, museums, animal hospitals and kennels, schools, and similar uses.

All home occupations need to conform to the following standards:

1. Conduct of the home occupation does not require alterations to the exterior of the residence that substantially alter the appearance of the dwelling as a residence.
2. Only those persons residing in the home and one other person or full time equivalent may be employed within the home.
3. Signage shall consist of no more than one (1) single or double-faced sign with a maximum area of eight (8) square feet per side in the Rural Residential (RR) and Urban Residential (UR) districts and sixteen (16) square feet per side in the Agricultural (A) District.
4. No outdoor display of goods is permitted.
5. Should the occupation be teaching, classes shall not exceed ten (10) students at any one time.
6. Should the home occupation be repair, the items repaired shall be of a size or nature that repair can occur within the home, or an accessory structure to the principal use as allowed by the Zoning Ordinance.
7. No outside storage is permitted.
8. An accessory structure may be used in conjunction with the home occupation only for the purpose of holding equipment used off the site for the storage of goods or articles produced or used by the occupant of the principle structure.
9. The home occupation shall not generate sewage of a nature or type that cannot be treated by a standard on-site sewage system or hazardous wastes without an approved plan for off-site disposal.

Applications for a Conditional Use Permit must be submitted to the Environmental Services and Zoning Department at the Chisago County Government Center in Center City. Conditional Use Permit applications require a public hearing at a Planning Commission meeting and final decision by the County Board.

Questions? Call Environmental Services and Zoning at 651-213-8371. 🌿

Septic Pilot Program *Update*

The Chisago County four-year septic pilot program has reached the halfway mark. The purpose of the program is to find and fix septic systems that are an imminent threat to public health, that is,

systems that are discharging onto the ground or surface waters, or backing up into a dwelling or other establishment. A grant of \$240,000 from the Minnesota Pollution Control Agency provides funds for this project.

The first year of the project resulted in completion of the mapping portion of the project in the nine townships where the County has septic jurisdiction, as well as the City of Rush City. All known data on over 10,000 septic systems has been entered into the septic log, then mapped using the County's Geographic Information System (GIS). GIS mapping shows whether the septic system is compliant, cautionary, an imminent public health threat, needs to be checked for more information, or if the parcel is vacant land. All parcels are color coded for review. Then, the maps are field checked for accuracy. This is labor-intensive work, as each parcel must be checked to make sure addresses are correct, houses are listed on the correct parcel, and cross-checked for recently subdivided land.

Amador Township (268 parcels) and Franconia Township (500 parcels) have been totally field checked and evaluated by County staff. The City of Rush City has also been field checked and evaluated. The County enforces the septic code in Rush City. The village of Sunrise and the North Center Lake area are currently being evaluated.

Note: The septic system evaluation is not considered to be a compliance inspection, and may not be used for a required point of sale property transfer inspection. If a septic system is determined to be an imminent

health threat, action must be taken by the homeowner to repair, replace, or discontinue use of the system within 60 days according to the County's septic ordinance.

Low interest loans and grants may be acquired through an application process. In addition, the County has allocated \$400 of the pilot program grant to be available for each replacement system once a septic design has been approved. To date, over 50 pilot program grants have been awarded. The homeowner must also attend a septic system operation and maintenance seminar by University of Minnesota Extension Service.

In May 2006, the City of North Branch entered into a joint powers agreement with Chisago County to participate in the pilot program. The County has allocated \$30,000 of the grant funds to the City to administer the program and provide cost share grants to residents for system upgrades. To date, North Branch has inspected a total of 1,001 septic systems. Two systems have been found to be an imminent threat to public health and safety.

Since the beginning of the pilot program through this July, the County has replaced 116 systems determined to be an imminent threat to public health, **removing 52,200 gallons per day** of untreated sewage from polluting the environment. ***This is nearly the equivalent volume of two residential inground swimming pools of sewage removed from the environment daily!*** This translates into **1,975,770,000** (one trillion, 975 billion, 770 million) fecal coliform units per day that are no longer reaching the ground or surface waters.

For more information on the septic pilot program, contact County Sanitarian Kellie Strobel at 651-213-8373 or email her at krstrob@co.chisago.mn.us.

Since the beginning of the pilot program through this July, the County has replaced 116 systems determined to be an imminent threat to public health, removing 52,200 gallons per day of untreated sewage from polluting the environment.



Store household chemicals properly (and save money!)

With winter approaching, it's time to think about safe storage for such items as fertilizer, pesticides, and paint. Each year, the Chisago County Household Hazardous Waste Facility (HHWF) collects tons of residential paint and chemicals for disposal. Had many of these items merely been stored properly, they would have stayed viable and not become hazardous waste. Store your household chemicals the right way and you can also save tens to hundreds of dollars a year!

Here are some tips for proper storage from the HHWF:

- **Store chemicals in a dry place.** When storing cans, put them on a shelf, not directly on a cement floor. This keeps them from rusting, and thus ruining the product—and making a mess.
- **Store your chemicals in their original containers with labels intact.** This avoids having an unusable unknown around the house. You can't use a product if you don't know what it is.
- **Invest in a proper paint can opener instead of using a screwdriver.** This keeps the paint can top in good shape so it can seal properly after you've used it. Press the lid back on with a rubber mallet, don't hammer it on with a hammer. Finally, turn the can upside down once to coat the top inside of the can with paint, creating an airtight seal.

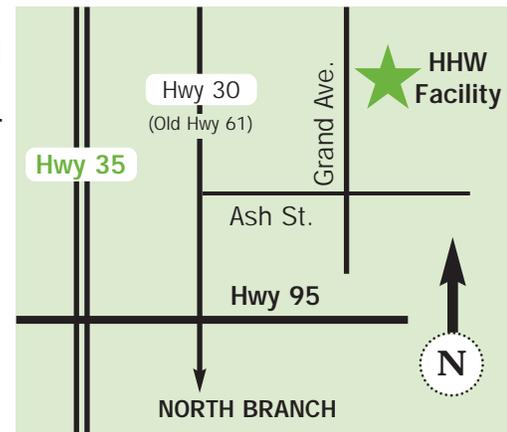
- **Any product with the word "latex" or "do not freeze"** on the label needs to be stored in an area, such as a basement, where the temperature does not fall below freezing. Do not store these products in an unheated garage, even if it is attached. Generally, once latex freezes it becomes unusable. This includes latex based driveway sealers as well as latex paints.
- **Store your fertilizers off the cement garage floor** so that the fertilizer does not absorb water from the floor and become unusable.

If you have any further questions on how to store a chemical product, or if you have any disposal questions, feel free to call the staff at the Chisago County HHWF at (651) 237-0912.

Chisago County Household Hazardous Waste Facility

North Branch
Industrial Park
39649 Grand Ave.
North Branch, MN 55056
(651) 237-0912

OPEN FOR COLLECTION:
Mondays: Noon – 7 p.m.
Last Sat. of each month:
9 a.m. – 1 p.m.
Closed on major holidays



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