
The Loan Arranger

**Fall/Winter
2013**

Revolving Loan Section
Office of Drinking Water and Municipal Assistance
Michigan Department of Environmental Quality



Project Highlight:
Smiths Creek Landfill Bioreactor, Kimball Township, St. Clair County
by Debra Foye

One of the more unique projects to come through the Revolving Loan Section in recent years is that of the Smiths Creek Landfill Bioreactor located in Kimball Township, St. Clair County.

In February of 2007, Smiths Creek Landfill (SCL) became the first landfill in Michigan to receive a Research, Development, and Demonstration Project (RDDP) construction permit that would enable the landfill to inject septage waste liquids into the landfill and recirculate leachate within the cells. This is in stark contrast to most landfills, known as “dry tombs,” which try to keep moisture levels to a minimum. A bioreactor landfill specifically seeks to increase the moisture content of the waste.

A landfill bioreactor increases the breakdown of organic wastes in the landfill by injecting a liquid, in this case septage, to speed up decomposition. SCL’s bioreactor will extend the life of the landfill and reduce the amount of land necessary for landfill use. Through the injection of the septage into the landfill, the methane gas that is produced by the landfill is increased. The power generated by the methane produced at the landfill is being used to power the leachate pump station, on-site landfill buildings, and will potentially be used as a back-up energy source to power other county buildings.

The facility has accepted an average of 4,000 gallons per day of residential septage, but has an overall capacity to receive up to 23,000 gallons per day. To date, the facility has received more than 4.2 million gallons of septage. Septage is being successfully diverted from being land applied, which often causes water quality problems. SCL is also the only septage receiving facility that accepts non-sanitary sewered septage for treatment in St. Clair County.



Septage Containment Area (William Liu, CTI & Associates)

The portion of the project that was funded through the State Revolving Fund (SRF) in the 2010 fiscal year consisted of:

- the construction of leachate pre-treatment facilities and a pump station at the landfill;
- the installation of approximately 21,000 feet of force main along Smiths Creek Road to the airport for leachate transportation;
- airport lagoon improvements, including relining;
- force main construction from the airport to the existing city of Port Huron wastewater treatment plant interconnect; and
- the construction of the gas to energy facility on the landfill property; and the continued construction of additional cells of the septage treatment bioreactor at the landfill.

St. Clair County received principal forgiveness not to exceed 40 percent of the total amount of the loan of \$14 million through the American Recovery and Reinvestment Act (ARRA) program. Existing county funding allocated to the operations at the landfill have been sufficient to finance the annual debit requirement for the project, therefore, there has been no additional cost to the residents of St. Clair County.

In 2010, the United States Environmental Protection Agency (EPA) awarded SCL a *Performance and Innovation in the SRF Creating Environmental Success* (PISCES) award for Region 5. The award recognizes projects identified by SRF programs as examples of innovative and sustainable water quality.

The 2010 project is nearing optimal conditions for degradation, and a large portion of the available landfill gas in that area has been collected. While the county will continue to operate the existing sections of the bioreactor in order to efficiently degrade waste and treat incoming septage, the septage bioreactor will be extended into two other areas of the landfill. A fiscal year 2014 project will expand the type of waste being used for landfill gas production. The 2010 project septage was injected into municipal solid waste only, while the 2014 project will take advantage of municipal, commercial, demolition, and industrial waste streams, also known as co-mingled waste. The project will also allow the landfill the capacity to accept and use septage from an increased geographic area. Currently, septage received at the landfill is limited to residential septage generated within St. Clair County, but expansion outside of the county to the 25-mile radius allowed is expected, pending signed agreements with those communities outside the county.

SCL's bioreactor projects have been a prime example of coordination and innovation in the areas of solid waste and wastewater treatment. Initially, such a project would not have been allowed to take place, but St. Clair County worked with the State of Michigan to revise regulations to allow for the RDDP. The original RDDP received support from the public as well as state and federal agencies. Expansion of this technology into other areas of the landfill requires a new RDDP, which is currently being processed.

With the success seen by the bioreactor thus far at SCL, it is believed that other landfills will adopt this technology and provide a viable treatment option for septage, a way to more efficiently utilize the waste in landfills, and produce usable landfill gas more efficiently.

WE NEED YOUR STRAWS! DRINKING WATER (FUND) GLASS IS FULL
by David J. Worthington



Attention public water suppliers! Do you have high-priority capital improvement needs for your community drinking water system? Perhaps a new well or a water intake is warranted? Is your storage tank lacking the capacity to meet projected 20-year demands? Are your treatment facilities struggling to meet standards or approaching the end of their useful life? Are you plagued with old, undersized water mains that are frequently breaking or causing other reliability problems? Do you have dead ends that are negatively affecting water quality and pressure? Do you have outdated pumps and motors, inadequate meters, or a tank coated with lead paint?

If you answered yes to any of these questions, note that the Drinking Water Revolving Fund (DWRf) has been assisting communities in taking care of such needs since 1998, and there is money anticipated in fiscal year 2015 for new applicants. Please consider talking with one of our project managers and your DEQ district engineer to see if a DWRf Project Plan for drinking water system improvements makes sense for you.

If you are interested in pursuing a project, our due date for submitting final Project Plans is May 1, 2014. Please realize that the DWRf does not fund projects that are "primarily for growth" or "primarily for fire protection."

Deadlines for Submission of

Project Plans for the Fiscal Year 2015 Project Priority Lists:

Drinking Water Revolving Fund – Project Plans must be received in our office by close of business
OR postmarked no later than **May 1, 2014**.

State Revolving Fund/Strategic Water Quality Initiatives Fund– Project Plans must be received
OR postmarked no later than **July 1, 2014**.

SAW Wastewater Projects Funding Requirements

by Karen Nickols

The Stormwater, Asset Management, and Wastewater (SAW) program provides funding to public bodies (city, township, villages, and public universities) and authorities (joint public bodies or airports) to address water quality problems. The SAW program provides funding for four different categories: (1) asset management for a wastewater and/or stormwater system; (2) innovative wastewater and stormwater technologies; (3) user charge development, planning, and/or design of a wastewater or stormwater system; and (4) a stormwater management plan. The purpose of this article is specifically focused on the SAW grant and loan requirements pertaining to wastewater projects.

Eligible applicants can apply for either SAW planning and/or design grants. The grant funds can be used for the planning and design of wastewater projects and for the development of an asset management plan. Projects receiving SAW grant funding must issue a notice to proceed within three years of the grant award. User Charge Development funds can be requested with either a planning or design application. There is a \$2 million dollar cap per applicant with a 90-percent state/10-percent local match on the first million dollars and a 75-percent state/25-percent local match for the second million dollars. If an applicant meets the disadvantaged community criteria, that applicant is eligible to receive a 100-percent grant with no match required. For planning and design grants that use consulting engineers to complete the approved scope of work, executed contracts with costs more than \$50,000 need to be submitted prior to requesting payment for the associated work. In addition, the executed contracts must show a clear explanation of the scope of services being provided by the contract and the contract period. Should an applicant decide to use its own staff to complete work associated with the grant, force account work for municipal employees is eligible for SAW planning and design grant assistance. However, the fringe benefit rate is limited to 40 percent of the employee's wage. No overtime, holiday, or indirect costs can be paid by a SAW grant.

The requirements for a planning grant application include detailed project information identifying the scope of work, authorizing resolution, and the sample grant agreement similar to the S2 grant program. A SAW planning grant for a project, which must issue a notice to proceed within three years of grant award, can be funded through a variety of funding sources: through a SAW loan or other funding; through the U.S. Department of Agriculture (USDA) Rural Development Program; or through a State Revolving Fund or Strategic Water Quality Initiatives Fund (SRF/SWQIF) loan. The requirement for a SAW planning grant is dependent on the funding source chosen by the applicant to construct the project. It can either be a Project Proposal (SAW Loan or other funding source), Preliminary Engineering Report and Environmental Report (USDA Rural Development Program), or SRF/SWQIF Project Plan (SRF/SWQIF Loan).

Project design is also eligible under a SAW grant application. In order for an applicant to be eligible for a SAW design grant, a Project Proposal (SAW Loan or other funding source), or a Preliminary Engineering Report and Environmental Report (USDA Rural Development Program), or an SRF/SWQIF Project Plan (SRF/SWQIF Loan) is required to be submitted as part of the design grant application. The applicant must develop and submit the project plan sheet and specifications and issue a notice to proceed within three years of the grant award to fulfill the requirements of the design grant.

SAW construction loans are eligible for those applicants that have an approved asset management plan or an approved innovative technology project. The required attachments for the SAW loan application include:

- The project proposal;
- Current year budget;
- Most recent official statement or prospectus, if applicable;
- Direct or overlapping debt schedules and a list of future debt that has been authorized but unissued;
- Explanation of payment default on any security;
- Disclosure of any pending litigation or legislation that is material to your financing or could have an adverse impact on the financial condition of the borrower;
- Total system revenue and expense projection for the first two years after the proposal project is initiated; and
- A financial projection demonstrating revenue supporting debt service, including a bond repayment schedule.

Once an application is accepted for SAW loan funding, the Revolving Loan Section requires the receipt of the project plan sheet and specifications within six months. A notice to proceed is required within one year of the loan award. SAW loans do not require the use of the federal Davis Bacon wage rates nor require a public hearing. A SAW loan will not retroactively pay for previously constructed projects. A fact sheet (shortened environmental assessment), final project plans and specifications, and a construction permit are required before construction can start.

Interested applicants will need to carefully read the application and associated appendix to ensure the correct information associated with the selected construction funding source is submitted. For more information, please refer to the SAW program website at <http://www.michigan.gov/cleanwaterrevolvingfund> or call the Revolving Loan Section at 517-284-5433 with any questions. Revolving Loan Section staff is available to answer any questions you may have.

SAW Stormwater Projects Funding Requirements *by Jaclyn Merchant*

The new SAW program is available to municipalities for a wide variety of grant-funded activities and one of the most popular is for stormwater projects. SAW grant funding can be used to develop a Stormwater Management Plan (SWMP) or a Stormwater Asset Management Plan (AMP). Grant funding can also be used for planning and/or design activities related to stormwater projects.

Under the SAW program a SWMP can include a Municipal Separate Storm Sewer System (MS4), a nonpoint source watershed management plan, or a SAW SWMP. Appendix D of the SAW grant application provides a detailed description of each document as well as links to the MS4, the nonpoint source guidance, and DEQ programs.

An applicant can also use grant funding to develop a Stormwater AMP. Communities should note that upon accepting grant funding, they will be required to complete and begin implementation of the AMP within three years. Within three years, the applicant will also need to submit to the DEQ a form certifying that the Stormwater AMP has been completed. In a Stormwater AMP, an applicant is not required to include a funding structure, but the applicant is required to conduct an analysis of the costs needed to maintain the stormwater system and maintain the AMP.

If an applicant would like to construct a stormwater project, grant funding is available to develop the planning document associated with a variety of funding sources. For example, if an applicant will be using Rural Development funding to construct a stormwater project, the applicant can receive SAW grant assistance to develop the Preliminary Engineering Report needed to acquire Rural Development funds. The same goes for the development of a Project Plan for a State Revolving Fund loan or the development of a Project Proposal for SAW loan funding. If the applicant is using an alternate funding source, then a SAW Project Proposal will be required. Grant funding for the design of a project is also available under the SAW program for stormwater projects. Regardless of the funding source for construction of the project, plans and specifications suitable for bidding will need to be developed. An applicant can receive SAW grant funding for design activities associated with a Total Maximum Daily Loan Implementation project.

When filling out the SAW application, applicants should be sure to carefully follow the instructions. Each SAW Application Appendix has a list of information needed with the application depending on the type of grant the applicant is seeking. The Revolving Loan Section looks forward to receiving SAW grant applications for stormwater projects!

TIDBITS – FYI

- SAW applications can be submitted anytime on or after December 2, 2013.
- The interest rate for DWRP, SRF, SWQIF, and SAW loans closing in fiscal year 2014 is 2.5 percent.
- No money remains in the S2 Grant program.
- The Office of Drinking Water and Municipal Assistance has moved to the 4th floor South, still in the same building. All phone numbers in Constitution Hall have changed. You can find those on our website at <http://www.michigan.gov/cleanwaterrevolvingfund>, then click on Revolving Loan Section Contact Information, or call our main line at 517-284-5433. Our fax number has also changed to 517-373-4797.

- The discount rate is not currently available for fiscal year 2014 project planning. After the new rate has been set by the Environmental Protection Agency, it will be posted on our website. This rate is to be used for project planning that begins on or after October 1, 2013, for preparation of the cost-effectiveness analysis. Remember, this is NOT a rate that should be used to calculate debt retirement needs, but rather is used in cost-effectiveness analyses to “bring” future expenditures back into today’s dollars for total present worth or equivalent annual cost comparisons.

Cleaning Your Sewers?

Material Removed from Pipe is Regulated as Liquid Industrial Waste

by Cindy Clendenon

Many communities receive S2, SRF, and new SAW grants and loans from the Department of Environmental Quality (DEQ) to fund project planning for sanitary sewer infrastructure improvements. Planning activities often involve sewer cleaning to enable televising.

In some cases, sewer cleaning may simply jet the residue downstream in the sewer pipe, without ever removing it. This may happen when the quantity and nature of the residue will not cause problems if left inside the pipe. Although state law does not prohibit this activity, communities and their engineers should consider local sewer system conditions, the nature of the sewer material, and technical specifications for sewer cleaning to determine whether removal of cleanout debris is warranted.

Whenever sanitary sewer cleanout waste is removed from the pipe for transport and disposal, it becomes regulated as a Liquid Industrial Waste (LIW) under Part 121 of Michigan’s Natural Resources and Environmental Protection Act (NREPA), 1994 Public Act 451, as amended. The same is true of the cleanout waste removed from catch basins.

Loans and grants from DEQ require adherence to all applicable environmental laws and regulations. Communities and their engineers should ensure that sewer and catch basin cleanout wastes, when removed from the system for transport and disposal, are handled properly.

Remember six things:

1. The generator of the LIW must meet generator requirements, such as notifying the DEQ and obtaining a site identification number.
2. Haulers must be specifically permitted and registered to transport LIW, and must meet all transporter requirements.
3. Haulers must manifest each load of LIW according to DEQ manifest requirements.
4. LIW can be disposed only at designated facilities authorized by DEQ.
5. A publicly-owned wastewater treatment plant that is authorized to receive LIW must comply with Part 121, in addition to other applicable regulations such as its discharge permit and Part 31, Water Resources Protection.
6. Any LIW going to a landfill must first be processed to remove the liquids, and the landfill must comply with Part 121 and also Part 115, Solid Waste Management.

For questions about sanitary sewer cleanout waste and catch basin cleanout waste as a LIW, contact Jeanette Noechel of the Office of Waste Management and Radiological Protection, Hazardous Waste Program, at noechelj@michigan.gov or 586-753-3846. Webpage links for LIW are available at www.michigan.gov/deqwaste.

Factsheets on sanitary sewer cleanout waste and catch basin cleanout waste can be accessed by going to the DEQ waste program page above, clicking on “Hazardous and Liquid Industrial Waste Transporters,” clicking on “Disposal of Hazardous and Liquid Industrial Waste Types,” and then clicking on the relevant waste type. For convenience, direct links to these two factsheets are available via the SRF loan program website under “Other Web Resources.”

*If you know someone, who would like to be added to **THE LOAN ARRANGER** mailing list, or have an address change, please e-mail the editor at WinegarC@michigan.gov. If you are interested in receiving **THE LOAN ARRANGER** electronically, please e-mail a request to the editor and your e-mail address will be added to our growing on-line community.*

The Loan Arranger

OFFICE OF DRINKING WATER AND MUNICIPAL ASSISTANCE
MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
P.O. BOX 30241
LANSING MI 48909-7741

PRESORTED
FIRST CLASS
U.S. POSTAGE PAID
LANSING, MI
PERMIT NO. 1200

Return Service Requested

State of Michigan
Rick Snyder, Governor
Michigan Department of Environmental Quality
Dan Wyant, Director
Office of Drinking Water and Municipal Assistance
Liane J. Shekter Smith, P.E., Chief
REVOLVING LOAN SECTION
Sonya T. Butler, Section Chief
Wendy Fitzner, Project Management Unit – East Chief
Kelly Hoffman, Project Management Unit – West Chief
Telephone: 517-284-5433 Fax: 517-373-4797
INTERNET: www.michigan.gov/deq
The Loan Arranger is published bi-annually by the Revolving Loan Section.
Correspondence may be addressed to *The Loan Arranger* Editor:
REVOLVING LOAN SECTION
OFFICE OF DRINKING WATER AND MUNICIPAL ASSISTANCE
MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
P.O. BOX 30241
LANSING MI 48909-7741

The Michigan Department of Environmental Quality (DEQ) will not discriminate against any individual or group based on race, sex, religion, age, national origin, color, marital status, disability, or political beliefs. Questions or concerns should be directed to the DEQ, P.O. Box 30473, Lansing, MI 48909.



PRINTED BY AUTHORITY OF PART 53 of 1994 PA 451
MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
TOTAL NUMBER OF COPIES PRINTED: 1350 TOTAL COST: \$952.48 COST PER COPY: \$0.71

