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# The Loan Arranger

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Fall/Winter 2008

Revolving Loan and Operator Certification Section  
Environmental Science and Services Division  
Michigan Department of Environmental Quality 

## Retainage on Construction Contracts

By Cindy Clendenon

A previous issue of the *Loan Arranger* (Winter 2002) explained retainage based on Public Law 524, of 1980. Below is a recap.

### When Contracts Include Retainage Provisions

If a construction contract contains retainage provisions, retainage must be managed in a manner consistent with the intent of Public Law 524. When the municipality requests retainage on a Michigan Department of Environmental Quality (MDEQ) disbursement form, the municipality places the disbursed amount to be retained into a separate interest-bearing account. When the retained funds are ready to be released to the prime contractor(s) or construction manager, the municipality releases the retainage plus its accrued interest.

Some municipalities have opted to forgo requesting retainage from MDEQ until it can be immediately released to the contractor. When retainage is not requested from MDEQ, the applicable disbursement form reflects only the nonretained amount shown on the contractor pay certificate. In these cases, the municipality typically draws retainage only near the end of the project, rather than throughout the duration of the project. Because Public Law 524, Construction Contracts with Certain Public Agencies, 1980 PA 524, as amended, predated the SRF/DWRF loan programs, there is legal uncertainty whether this approach is appropriate.

Regardless of the way a municipality handles retainage, the amount of retainage due to the contractor should be clearly indicated on the contractor pay certificate. This allows the MDEQ project manager to reconcile the amount entered on Line 13 (construction costs) of the disbursement form.

### Why Retainage Is Important

A municipality and its engineer should always discuss retainage provisions of the contract with the contractor during the preconstruction meeting, or otherwise prior to the beginning of

construction. The proper handling of retainage will help guard against potential disagreements between the contractor and municipality.

Retainage also is important to MDEQ, because when MDEQ pays retainage to a municipality, the money is expected to be released to the prime contractor(s) or construction manager, typically at the end of the project upon satisfactory completion of the punchlist. If the retainage cannot be released due to unsatisfactory work by the prime contractor(s), and if the retainage is not paid to an approved alternate contractor or force-account employees to remedy the unsatisfactory work, then the municipality must repay the unreleased retainage to the state.

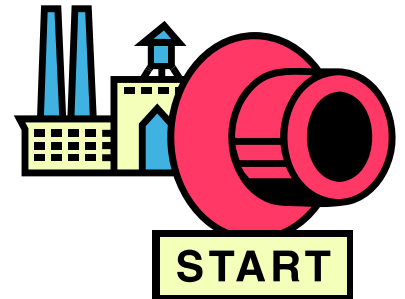
When the project is ready to be administratively closed by MDEQ, the authorized representative must certify that all work has been completed and accepted by the owner, all punchlist items have been addressed, and all requested retainage has been released to the prime contractor(s) or construction manager.

## RSVP Required

By Kelly Hoffman

Have you ever learned about a colossal celebration with balloon animals, circus peanuts, and pointy party hats only to discover with great shock and dismay that the fun festivities took place months ago and you weren't even invited? If so, then you have experienced the heartfelt disappointment a revolving loan project manager has to overcome every time newly constructed infrastructure is operational and we haven't been notified of the initiation of operation date (I/O).

Okay, perhaps that is embellishing just a bit, but it is true that every SRF and DWRF loan recipient has entered into an agreement with the state whereby it has agreed to notify MDEQ, in writing, when the project under construction initiates operation. That is, when the project becomes capable of operation for the purpose for



which it was designed and built. It is important to note that the actual initiation of operation may (and usually does) differ from the expected I/O date submitted in Part III of the loan application. The estimated I/O date in the application determines the loan repayment schedule since principal payments will start within one year of this date. After loan closing, this date cannot be changed regardless of the actual I/O date.

The moral of the story is, please notify your MDEQ project manager when the project under construction is capable of operation...because we like balloon animals too.

**Deadlines for Submission of Project Plans for the Fiscal Year 2010**

**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, 2009.**

**State Revolving Fund/Strategic Water Quality Initiatives Fund– Project Plans** must be received OR postmarked no later than **July 1, 2009.**

**Largest CSO Correction in State History Begins**

**By Michael Cox**

Construction will begin this month on the Upper Rouge Tunnel (URT) the largest project ever funded for combined sewer overflow (CSO) control in the state of Michigan. This project consists of a 7-mile-long, 30-foot-diameter tunnel, with a dewatering pump station to pump flows to the Detroit Water and Sewerage Department (DWSD) wastewater treatment plant, 14-drop shafts to connect existing CSO outfalls to the new tunnel, diversion structures, surge control facilities, and improvements to several outfall sewers. This project will reduce CSOs from 17 locations in Detroit, 8 in Redford Township, and 3 in Dearborn Heights. When the project is complete in July 2015, it will reduce the frequency of CSOs from approximately 50 a year to less than one a year to the Middle Branch of the Rouge River from the Northwest Interceptor (NWI) and tributary sewers. The volume of CSO should be reduced from an average of 1.3 billion gallons to 250 million gallons (MG) annually.

The total estimated cost for this project is approximately \$1.05 billion. The city of Dearborn Heights and Redford Township will pay 6.85 % of the project's costs. The remaining costs will be allocated 83% to the city of Detroit and 17% to suburban communities.

In September 2008, the MDEQ awarded a loan of \$161 million to the city of Detroit for the first segment of the URT, the south portion of the tunnel that will cost \$326 million. At this time it is doubtful that the SRF will be able to fund the entire cost of the URT project. The

city of Detroit will issue bonds for the rest of the project cost.

This project is an integral part of the Long Term CSO Control Plan for the city of Detroit to develop specific facilities to control CSOs. The current NPDES permit requires DWSD to design and construct a CSO control facility that will adequately treat the 28 existing overflows to the Middle Branch of the Rouge River from Detroit, Redford Township, and Dearborn Heights.

After years of study, DWSD selected a 201 MG storage tunnel in 2007 as the most cost effective and environmentally sound alternative to provide adequate treatment of CSOs and to comply with water quality standards at time of discharge. During wet weather events, flows in excess of the NWI capacity will be diverted to the URT via the diversion chambers to drop



shafts and then to the URT. After the wet weather event, a 100 MG pump station will send retained flows to the wastewater treatment plant via the Oakwood-NWI. The only exception would be those wet weather events

that will completely fill the 201 MG URT. Then flows will be diverted to the Rouge River, projected on average to occur less than one time per year.

The project consists of eight contracts:

PC-764-South Tunnel Contract

- Pump station work shaft, DS-1 (drop shaft) just north of the intersection of Warren and Outer Drive in the city of Detroit's Rouge River Park. This shaft will be 80 feet in diameter and excavated to a depth of 200 feet. This pump station work shaft will be used to launch the Tunnel Boring machine (TBM).
- Approximately 18,600 feet of a 30-foot-diameter tunnel, approximately 150 feet below the surface from DS-1 to the DS-7 shaft in Eliza Howell Park north of the Schoolcraft and Virgil Avenue intersection.
- Six adits (horizontal tunnels) and de-aeration chambers to connect the South Tunnel to drop shafts that will be constructed under other contracts.

PC-763 - North Tunnel Contract

- DS-7 - shaft located in Eliza Howell Park. This shaft will be 50 feet in diameter and excavated 177 feet below grade. This shaft will be used to launch a second TBM.
- 30-foot-inside-diameter tunnel, 18,400 feet from the DS-7 shaft to the DS-11 shaft, located west of the Berg Road and Pembroke intersection. This bedrock tunnel will be approximately 150 feet below the surface.
- DS-11 shaft - 76 feet in diameter and 170 feet deep.
- Five adits and de-aeration chambers.

### PC-765

- Warren Siphon - north of the Warren Avenue and Outer Drive intersection.
- DS-2 - near the intersection of Tireman and Spinoza Drive.
- DS-3 - southwest corner of Trinity Avenue and West Chicago.

### PC-766

- DS-4 - southwest corner of 1st Avenue in Fullerton Street.
- DS-5 - southwest corner of Gloucester and Dolson avenues.
- DS-7A - West of Bramell Street and the west, dead-end of Lyndon.
- DS-10 - South of 7 Mile Rd and east of Barry Road.
- DS-11 (aboveground facilities) - South of Pembroke Avenue and west of Berg Road near the Taft Elementary School.

### PC-767

- DS-3A - On the east side of Rouge Park Drive and south of Plymouth Road.
- DS-6 - South of the I-96 service drive and east of Telegraph.
- DS-8 - North of Puritan and west of the Rouge River.
- DS-10A - East of Glenhurst Avenue and west of River Rouge.

### PC-768

- DS-9 - South of McNichols Avenue and west of Beaverland Avenue.

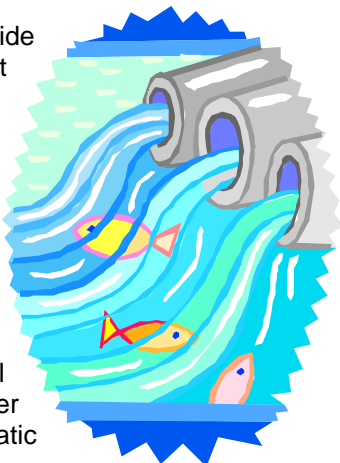
### PC-769

- Three Consolidation Sewers and One Dewatering Sewer - Four sites including Warren and Pearson, Plymouth and Rouge River Park Drive, Bramell and Linden, and Hazelton and Florence Roads.

### P.C-770

- Dewatering Pump Station at the northeast corner of Outer Drive and Warren Avenue.

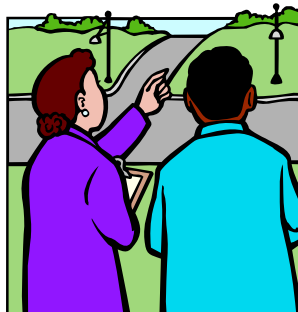
This project will provide water quality improvement to the Middle Rouge River as combined sewage is captured and stored for subsequent treatment. Public health hazards from contact with the river will diminish and water quality parameters such as suspended solids and dissolved oxygen will improve, making the river more habitable for aquatic species.



## Land...Lots of Land

By Chip Heckathorn

Every applicant seeking assistance from the Clean Water State Revolving Fund (SRF) or the Drinking Water Revolving Fund (DWRP), where the acquisition of land is necessary for the construction of the project, must comply with the provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 U.S.C. 4601 *et seq.*). This statute and its implementing rules lay out very specific procedures that must be used whenever an interest in land is



acquired and/or landowners are relocated. These requirements apply regardless of whether the cost of the acquisition is eligible for loan assistance. The law was enacted to ensure, whenever a project uses Federal funds, that the rights of both the buyer and seller are protected, and that a fair price for the land interest is established/paid.

It is imperative that every prospective loan applicant understand these requirements and ensure that both the applicant and the service providers it uses to assist with land acquisition adhere to the requirements of the statute. The need for land acquisition should be established during the project-planning phase, and loan applicants are encouraged, where necessary, to promptly procure the services of individuals/firms that have experience with the requirements of the statute.

In general, whenever fee simple or easement acquisition of real property is required, the loan applicant must:

1. As soon as feasible, notify the property owner of the community's interest/need in acquiring the property and the basic protections provided by the statute.
2. Before the initiation of negotiations, have the property appraised and provide the property owner the opportunity to accompany the appraiser during the appraisal inspection. (An appraisal is not required if the owner is donating the property and releases the purchasing agency from the appraisal obligation or the fair market value is estimated at \$2,500 or less, based on a review of available data.)
3. Use the services of a reviewing appraiser to examine the appraisal(s), make adjustments where necessary, and establish/certify fair market value of the property.
4. Based on the results of the appraisals, establish an amount it considers just compensation for the real property, an amount no less than the established fair market value.

5. Make a written offer to the property owner to acquire the property for the full amount believed to be just compensation.

This constitutes only a short synopsis of the property acquisition requirements. It is imperative that applicants consult the Act; as well as, implementing rules found at 49 CFR Part 24, and obtain the service of qualified professionals to assist with any land acquisition or relocation activities.

In most cases, property acquisition must be completed before the Department will issue its binding commitment of funds, the Order of Approval. Questions should be directed to your project manager.

## MDEQ Announces Loan Commitments



The Department of Environmental Quality's Director, Steven E. Chester, has announced 24 new loan commitments from the revolving fund programs. The State Revolving Fund (SRF) and Strategic Water Quality Initiatives Fund (SWQIF) provide low-interest financing for local units of government to make needed improvements to wastewater collection and treatment facilities, while assistance from the Drinking Water Revolving Fund (DWRf) finances improvements to public drinking water systems. The loans announced in September total \$338,095,000.

"We continue to take huge strides in protecting and enhancing Michigan's irreplaceable water resources," said Director Chester. "While funding needed infrastructure improvements, these loans stimulate construction activity and represent a real investment in Michigan's environmental and economic future. With loan interest rates well below those otherwise available in the open market, the SRF and DWRf also allow communities to pass savings along to users of their water and wastewater systems."

The funded SRF projects will see wastewater infrastructure improvements in 14 communities across the state, from Jackson County to West Iron County, and from Monroe to Muskegon. Significant combined sewer overflow control projects will continue in the Rouge River Basin in the cities of Detroit and Inkster. Eight other communities will upgrade their wastewater collection and treatment facilities. Much of the SRF lending is supported by proceeds from the sale of Great Lakes Water Quality Bonds, which were authorized by Michigan's voters in November of 2002.

These commitments bring SRF financing awarded to Michigan communities to date to over \$3.1 billion. These

projects are further examples of the commitments being made by local units of government in Michigan to ensure protection of the state's valuable water resources and the public health of its citizens.

The funded DWRf projects will see treatment facilities upgraded in St. Joseph, Ravenna and Milford, while Wexford County will construct a new public water system to provide potable water to residential wells impacted by groundwater contamination originating from the county landfill. Flushing, Stockbridge and Detroit will finance improvements to their water distribution systems.

The improvements financed by these loans will help ensure compliance with the requirements of the Safe Drinking Water Act and protect the public health of system users. Since the inception of Michigan's DWRf program in 1998, over \$527 million in assistance has been tendered.

## Interest Rates Set for Fiscal Year 2009

The MDEQ has set the fiscal year (FY) 2009 interest rates for the three revolving loan funds, the SRF, the DWRf, and the Strategic Water Quality Initiatives Fund (SWQIF) at 2.5% for another year.

These rates are based upon the demand for financing in the coming year, anticipated future demand for financing, consideration of market interest rates available for borrowers, and evaluation of additional costs to borrowers for program participation in each fund. These factors are all exerting an upward pressure on program interest rates. With program demand escalating, particularly in the SRF and SWQIF programs, an increase in loan rates in FY 2010 and future years seems likely.

These rates will be incorporated into the state's Intended Use Plans for submission of capitalization grant applications, in accordance with the 1987 amendments to the federal Clean Water Act, and the 1996 amendments to the federal Safe Drinking Water Act.



## Discount Rates Set for 2009

The Environmental Protection Agency has set the discount rate for FY 2009. For project planning, that begins on or after October 1, 2008, a discount rate of **4 1/2%** (0.045) should be used. This rate has been lowered from the 4 7/8 percent used for planning that began in FY 2007 and continued in FY 2008.

Remember, this is NOT a rate that should be used to calculate debt retirement needs, but rather is used in cost effective analyses to "bring" future expenditures back into today's dollars for total present worth or equivalent annual cost comparisons.

## Making Tracks



This summer the Revolving Loan and Operator Certification Section (RLOCS) has welcomed three new staff and promoted one of our own.

Congratulations to **Ms. Karol Patton**, who has recently been promoted to lead worker in the East Unit. Karol began in the East Unit as a project manager during 1990 - 1993, and returned to the West Unit as a project manager in 2002. In between, she worked in the MDEQ Nonpoint Source (NPS) Program, assisting watershed groups and serving as the NPS Program's Information/Education Coordinator. Karol received her Bachelor of Science Degree in Wildlife Biology from Michigan State University. During her post-graduate studies in wildlife biology, she interned with the U.S. Fish and Wildlife Service, where she worked with the endangered species and wetland permit programs.

Karol lives with her new husband Bryan and blended family of four teenage daughters. Her oldest daughter currently attends Central Michigan University, working toward a Bachelor of Science degree in Biology. Her eldest stepdaughter just completed Air Force basic military training and is stationed at Keesler A.F.B. in Mississippi. Her remaining daughter and stepdaughter are both high school juniors. Karol enjoys gardening, camping and most outdoor activities whenever she can.

Protecting and improving water quality and assisting others to do the same is very important to Karol. She looks forward to continuing that work on the east side of the state.

**Ms. Debra Foye** has also joined the East Unit. Debra holds a Bachelors of Science degree in Reclamation from the University of Wisconsin-Platteville and recently received her Masters degree in Agronomy (crop and soil science) from Purdue University in West Lafayette, Indiana. She looks forward to putting her education, prior experiences in the environmental field, and a long time interest in good soil and water stewardship to use in helping communities improve water quality for their citizens and surrounding areas.

**Ms. Valorie White** joins the West Unit. She graduated from Albion College with a Bachelors of Arts in Biology and a concentration in Environmental Sciences. For more than three years, she has worked in the MDEQ's Remediation and Redevelopment Division, out of the Jackson District Office. She assisted in administering the program requirements pursuant to Part 201 Generic Cleanup Criteria, and Part 213 Risk Based Cleanup Levels of the Natural Resources and Environmental Protection Act, PA 451, as amended. Facilitating

the cleanup of a variety of contaminated sites. Now she looks forward to using the skills and experiences she has gained to help Michigan municipalities through the SRF and DWRF programs.

**Ms. Izabel Hartman** also joins the West Unit. Izabel recently graduated from Central Michigan University with a Bachelor of Science degree in Biology (with a concentration in Natural Resources) and Environmental Science. Prior to coming to the MDEQ, Izabel worked at the Chippewa Nature Center in Midland where she taught environmental education and stewardship programs to the public. She has also been a volunteer for various organizations where she helped with projects, such as conducting amphibian/bird counts and assisting in educational events. Izabel is looking forward to helping communities improve their water quality through upgrades to their drinking water and wastewater treatment facilities.



**Thoughtful planning now may enable a community to be ready to apply for DWRF, SWQIF, and/or SRF assistance in FY 2010 and beyond. Contact the Revolving Loan and Operator Certification Section (addresses on back page) for more information on community participation in the loan programs.**



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, Ms. Deana M. Kinney, at [Kinneyd@michigan.gov](mailto:Kinneyd@michigan.gov)

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