

The Remediator



Newsletter of the Remediation and Redevelopment Division

Summer 2005

Volume 1, Number 1

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*Andrew Hogarth, Chief,
Remediation and
Redevelopment Division*

From the Division Chief

Welcome to the first edition of **The Remediator**! This publication will be prepared two to three times a year to provide insight into the Remediation and Redevelopment Division (RRD) operations. We will be providing timely information about RRD issues and events that may impact Michigan's citizens and the regulated community. For example, we will highlight the status of new Operational Memos under development, discuss policy or procedural issues of interest, and highlight specific projects. This first issue contains information on operational memoranda, Brownfield news, and updates on the status of the Refined Petroleum Cleanup Advisory Council. The newsletter is being prepared to help provide better communication to those outside the division in a cost-effective manner. We welcome your thoughts and suggestions for future issues. If you have suggestions, please send them to the editor, Robert Reisner, at reisnerr@michigan.gov.

New Refined Petroleum Fund (RPF)

On October 12, 2004, the Refined Petroleum Fund (RPF) was created through the enactment of legislation revising Part 215, formerly Michigan Underground Storage Tank Financial Assurance (MUSTFA), of the Natural Resources and Environmental Protection Act. The revisions, in addition to the name change, extended the collection of the 7/8¢ per gallon fee on refined petroleum products through December 31, 2010 to fund programs related to the sale, use or release of refined petroleum products. The legislation also created a Refined Petroleum Cleanup Advisory Council (Council), to make recommendations for a refined petroleum cleanup program designed to benefit owners and operators and address 'orphan' sites - those with no identified liable party or a liable party that is insolvent.

The RPF legislation directed the transfer of all monies left over from the MUSTFA fund, estimated at \$60 million, and the deposit of all future fee revenues, estimated at \$60 million per year, into the fund. ...*Continued*

RPF More Info...

For more information about the Refined Petroleum Fund, the make-up of the Council and the direction given to the Council, this link will take you to the full text of the revised [Part 215](#).

Pertinent sections of Part 215 that give insight into the intent of the legislation, are sections 21504 (Objectives), 21505 (Legislative findings), 21506a(4) (RPF creation and how funds shall be expended) and 21552 (Creation of the Council).

For any additional information, please contact Joyce Broka, at 989-686-8025 or at brokaj@michigan.gov

DID YOU KNOW?

The State of Michigan cleans up its own contaminated sites.

The \$30,000,000 State Owned Sites Cleanup Fund was created in 1996 and is administered by the Brownfield Redevelopment Board and RRD. State departments have reported 198 environmentally contaminated state owned or operated sites to date. Of these, cleanup work has been completed at 87 sites; 75 sites are in some stage of remediation; the state was found not to be liable at 27 sites; and 9 sites have not yet been started due to lack of funding. **Sites cleaned up under the state owned sites cleanup that have been sold have brought \$16.2 million back to the state.** To learn more visit our website at <http://www.michigan.gov/MDEQ/SSCUP>

The legislation limits the use of the fund to one or more of the following purposes:

1. For gasoline inspection programs in the Department of Agriculture
2. For corrective actions to address releases of refined petroleum under a refined petroleum product cleanup program established following the issuance of recommendations from the Refined Petroleum Cleanup Advisory Council
3. For administrative costs of the Departments administering the fund and implementing the programs receiving revenue from the fund (Departments of Agriculture, Environmental Quality, Attorney General, and Treasury)

The appointments to the Refined Petroleum Cleanup Advisory Council were completed in March 2005 and are as follows:

Governor Appointees

Mr. Allen A. Cholger, International Representative, Pace International Union
Mr. James P. Clift, Michigan Environmental Council
Mr. Edward S. Weglarz, Service Station Dealers Association of MI

Senate Appointees

Mr. Kenneth W. Vermeulen, Warner Norcross and Judd
Mr. Jerry Hop, J&H Oil Company

House Appointees

Mr. William J. McCarthy, Blarney Castle Oil Company
Mr. Richard D. Wilcox, Wilcox Professional Services, LLC

Members of the Council elected Mr. Vermeulen as Chairperson and Mr. Weglarz as Vice-Chairperson. Six meetings have been held to date and staff from the RRD have given brief presentations on the history and current status of the Leaking Underground Storage Tank (LUST) Program, the estimated LUST public funding need, RPF financial overview, and potential issues for consideration by the Council.

On June 7th the Council made its recommendation to the Governor and Legislature on how monies transferred from the former MUSTFA fund should be expended. A copy of the letter can be found at the following link: <http://www.deq.state.mi.us/documents/deq-rrd-FirstRecommendationOfRPAdvisoryCouncil.pdf>

The next Council meeting is scheduled for August 22nd and additional meetings will be scheduled as necessary in order to allow the Council to prepare its recommendation on the expenditures of future RPF revenues to the Governor and Legislature.

Lower Ecorse Creek, Superfund Site, Ready to Close

Early this year, the Environmental Protection Agency (EPA) submitted a request to close out and de-list the Lower Ecorse Creek Dump (LEC) National Priorities List (NPL) site, located in Wyandotte, in Wayne County. All of the state reviews have been completed and the MDEQ Director sent a concurrence letter to the EPA on March 31, 2005.

The LEC is a superfund site where waste material from a variety of industrial sources was used to fill in wetland areas along the Lower Ecorse Creek. The majority of the contamination was ferric ferrocyanide, also called Prussian blue, which is a cyanide containing waste product from coal gasification.

In August 1993 the Agency for Toxic Substances and Disease Registry released a Public Health Advisory on the site as it posed an urgent public health hazard due to areas of surface soil being contaminated with a cyanide-iron complex, and because cyanide contaminated groundwater seeped into basements of homes on the site. In 1994, the EPA placed the site on the National Priorities List. From 1994 until 1996 a remedial investigation took place, and remediation commenced upon the signing of the Record of Decision in 1998. Contaminated soils were removed from 49 separate areas affecting 14 separate residential lots. Approximately 3,500 tons of contaminated soils and 90,000 gallons of contaminated groundwater were disposed of off-site. Remediation of the contamination has significantly reduced the potential for human exposure and deed restrictions limiting potential contact with contaminated soils have been placed on certain areas of the site as appropriate **Continued**



Understanding RRD Operational Memoranda: Questions and Answers

What is an Operational Memorandum?

Operational Memoranda, commonly referred to as Op Memos, are documents that have been used by the MDEQ to assist the Parts 201 and 213 regulated community and Part 215 qualified underground storage tank consultants in pursuing cleanup of sites of environmental contamination. Op Memos often translate complex legal requirements of the statutes and rules into simpler English, provide predictability, and promote consistency between field offices implementing the programs.

Op Memos aid the regulated community and MDEQ staff in meeting the requirements of statutes and rules. Op Memos cannot establish requirements not supported by statute or rules. They clarify statutory and rule requirements and provide additional information regarding the intent of the requirements to support consistent exercise of professional judgment in a manner that produces acceptable outcomes. The Op Memos also provide an efficient means to broadly disseminate the information that otherwise would need to be provided on a case-by-case basis.

Why are RRD Op Memos being developed to revise former ERD and STD documents?

Both the former ERD and a portion of the former STD used Op Memos at the time they were combined to form the Remediation and Redevelopment Division in the September 2002 MDEQ reorganization. In December 2002, Part 201 Administrative Rules were enacted that address the cleanup criteria for both the Part 201 and Part 213 cleanup programs. The revised and combined Operational Memoranda **a)** reflect the coordination and integration of the provisions of the programs where the statutes have common requirements **b)** integrate rule provisions of the two programs, and **c)** update the Op Memos with current science (e.g., low flow groundwater sampling, lead fraction analysis). ...**Continued**

The EPA will now solicit comments or concerns about the action from the public. Once the comments and concerns have been addressed, MDEQ and EPA will de-list the site. Contact Sunny Krajcovic at 517-241- 8857 or at krajcovj.michigan.gov for more information.

Understanding RRD Operational Memoranda

Last fall the RRD began to release RRD Operational Memoranda as part of a process to update former Storage Tank Division (STD) and former Environmental Response Division (ERD) guidance for the Part 201 (Environmental Response) and Part 213 (Leaking Underground Storage Tanks) cleanup programs. The release of the RRD Operational Memoranda has led to a flurry of questions. The following information and the questions and answers at the left are offered to help address some of the questions that have been frequently posed.

Current Status of Op Memos 1 through 7

RRD Operational Memorandum No. 1, Criteria and Technical Support Documents

RRD Op Memo No 1 was issued December 10, 2004. Criteria changes were effective February 1, 2005. Changes to the criteria allowed by the Part 201 rules (R 299.5103(I), R 299.5706a) include 1) changes in the target detection limit (where it was used in place of the risk based criteria); 2) changes in federal or state drinking water standards; 3) contaminants with no previous criteria; and 4) contaminants for pathways previously identified as NA (insufficient data to develop criterion) or ID (a criterion or value is not available or, in the case of background and CAS numbers, not applicable). For the hazardous substances where criteria were developed - acetate, dicamba, methane, metribuzin and sodium azide - a public comment period was provided. No comments were received pertaining to the new criteria. Technical support documents are being revised to reflect rule provisions and will continue to be released as developed.

RRD Operational Memorandum No. 2, Sampling and Analysis

RRD Op Memo No. 2 was issued October 22, 2004. Target detection limits, analytical methods designated capable of achieving the target detection limits, and sample collection protocols were effective February 1, 2005. Additional clarifications were made February 15, 2005. A [Frequently Asked Questions document was prepared and distributed February 17, 2005](#) to address numerous comments on the document.

The MDEQ continues to review concerns regarding sampling methods as they arise. Addendums to the Frequently Asked Questions document will be developed and distributed to inform all interested parties about decisions as issues are resolved.

[A July 2005 addendum to the Frequently Asked Questions](#) has been distributed to address additional approved methods for analyzing hexavalent chromium, lead fraction analysis for clay soils, elevation of reporting limits, and soil coring devices.

Soil Lead Fraction Analysis

A concern regarding the cost of lead fraction analysis, and the benefits from the sampling has been raised. The amount of lead in soil has historically been evaluated by analyzing lead concentrations. ...**Continued**

What is the applicability of the Op Memos?

RRD has received many questions on the applicability of the Op Memos. Op Memos do not change the meaning of any statutory or rule obligation, nor do Op Memos create any legal obligations. RRD is routinely asked for examples of acceptable approaches and ranges of acceptable assumptions related to many of the complicated provisions of the cleanup programs. Op Memos describe the simplest and most commonly effective means to comply with statutory or rule based requirements. Other approaches can be used so long as it can be demonstrated that variation from the Op Memos still meets the obligations in the statute and rule.

For a Part 213 cleanup a Qualified Consultant/Certified Professional (QC/CP) can use the Op Memos to help them make investigatory or remedial decisions. However, compliance with the statutes and rules is determined by the MDEQ through the existing audit process. Additionally, approvals for mixing zone determinations, Part 22 Groundwater Discharge Permit exemptions, Part 201 Rule 705 waivers, and the use of local ordinances as institutional controls can only be made by the MDEQ.

Applicability of the Op Memos to BEA Investigations and Due Care Compliance?

The focus of Op Memo No. 2, Sampling and Analysis, is the characterization for remedial investigation that determines the nature, extent, and impact of a release or threat of release and the collection of data to support the preparation of a remedial action plan, corrective action plan, or final assessment report. This is not the same goal as the BEA investigation and Due Care Compliance. Additional information is available in [Op Memo No.2, Frequently Asked Questions](#). Op Memo No. 1, Generic Cleanup Criteria, provides general information about the cleanup criteria and direction for development of site-specific or facility-specific criteria that are applicable to BEA investigations and Due Care Compliance analysis. Op Memo No 5, Venting Groundwater also provides general information about the pathway that is applicable to BEA investigations and Due Care Compliance analysis.

How are the Op Memos being developed?

As a result of input received after the initial release of Op Memo No 2, RRD has adopted a two step process to seek public input on Op Memo content. A preliminary technical peer review process is being implemented for a review of the RRD initial draft documents. RRD solicited volunteer environmental professionals with a wide range of practical experience relevant to the subject matter from the Michigan Association of Environmental Professionals, the Michigan Chapter of the American Institute of Professional Geologists, and the Michigan Environmental Laboratory Association. After receipt of the peer review comments, RRD will develop an interim Op Memo that will be released for initial implementation and a more extended review and comment period. This will provide any interested party an opportunity to review and comment so that concerns can be identified and addressed as the documents are finalized. ... **Continued**

in the total soil sample. However, substantial evidence indicates that the fine soil fraction, defined as less than 250 microns in size, is more appropriate for comparison to soil direct contact criteria and particulate inhalation criteria because the particle size fraction of soil and dust likely to be ingested or inhaled is the fine soil fraction. To address lead contamination in Michigan, various governmental agencies were called upon to take action to ensure that steps were being taken to reduce lead poisoning. The State of Michigan's report "[Childhood Lead Poisoning Prevention: A Call to Action](#)" directed the MDEQ to review the most recent toxicological and other pertinent data to determine if the current Part 201 residential cleanup criterion is protective and to determine the most appropriate method of soil sampling. The MDEQ-Toxic Steering Group-Lead Subcommittee (TSG-LS), as part of the charge to determine the most appropriate method of soil sampling for lead, reviewed existing studies and data. EPA's review of lead data from CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act) sites demonstrated that the lead concentrations in the fine fraction often exceed the lead concentrations in the total soil samples. A similar review of Michigan specific data demonstrated the same. Exposure to lead in ingested soil and dust is best represented by the lead concentration in the particle size fraction that sticks to hands or that is most likely to accumulate in the indoor environment as a result of wind-blown soil deposition and transport of soil on clothes, shoes, pets, toys and other objects. Additionally, exposure to lead in inhaled soil and dust is best represented by the lead concentration in the particle size fraction likely to enter the respiratory system and become lodged in the alveoli.

Prior to revising the lead analysis requirements the MDEQ understood that the costs associated with lead sampling would significantly increase, but implemented the TSG-LS recommendations as part of the Childhood Lead Poisoning Prevention Initiative. Recently, RRD has been provided a data set of total, fine and coarse lead samples from numerous Phase I and Phase II investigations and has been asked to evaluate whether total lead sampling can be allowed as a screening tool. The data indicates that for low level total lead concentrations (1-50 parts per million) it is unlikely the fine fraction would exceed criteria. This supports allowing total lead sampling to screen sites to determine if concentrations are at a level that should trigger fine fraction analysis. Further evaluation of the concentration that would trigger additional fractional sampling is ongoing.

Low Flow Groundwater Sampling

Low flow groundwater sampling methodology has also been portrayed as a costly requirement with no additional environmental benefit. However, numerous journal articles document the environmental benefits of low flow sampling. Volatile organic compounds may be significantly underestimated and metals may be significantly overestimated using other sampling methodology (by orders of magnitude). There also are numerous references which document cost savings for long term compliance monitoring using low flow sampling methods. To allow further discussion of these issues a meeting was held April 28, 2005 with interested environmental consulting firms. The consensus was that in most situations low flow sampling is appropriate for sample collection. Discussion focused on situations where low flow sampling might be problematic. Information was presented on a no-purge groundwater sampling method as an alternative for non-remedial decision making. A presentation was made discussing the application of an ultra low flow method to avoid turbidity for contaminants associated with particulate matter. A general discussion of sampling issues, including sampling options for very low yield wells, followed the presentations. Shell Oil will make a formal proposal for the use of no-purge sampling for MDEQ review. Additional guidance regarding sampling options for very low yield wells is anticipated to result from on-going discussions. A summary of the discussion at the initial meeting has been disseminated to interested parties and is available upon request.

... **Continued**

How are the Op Memos, and information regarding the Op Memos being distributed?

Notice of the release of Op Memos, attachments, and any additional clarifications or information is being distributed through the RRD Listservers. If you are not currently registered with the listservers and would like to receive notices you can register at the bottom of the RRD home page, <http://www.michigan.gov/deqrrd>.

RRD Operational Memoranda can be accessed on the Internet from the RRD home page (link above), under the "What's New" section and also under the "Operational Memoranda" section.

- Op Memo No. 1 Criteria and Technical Support Documents
- Op Memo No. 2 Sampling and Analysis
- Op Memo No. 3 Part 213 Site Classification
- Op Memo No. 4 Site Characterization
- Op Memo No. 5 Venting Groundwater
- Op Memo No. 6 Land and Resource Use Restrictions
- Op Memo No. 7 Michigan RBCA Process

Questions regarding Op Memos may be directed to Patty Brandt at brandtp@michigan.gov or at 517-373-4710.

Links to Recently Released RRD Reports

[FY2004 Consolidated Report](#)

[The Superfund Program in Michigan: Fiscal Year 2004 Legislative Report](#)

[FY'05 CMI Proposal](#)

Attachment 8, Assessments for Sites Contaminated with Petroleum Products

This attachment will be revised to contain the methods information for petroleum products (e.g., non-specific petroleum hydrocarbons, diesel range organics, gasoline range organics, oxygenates) that are footnoted and referenced elsewhere in Op Memo No. 2. The site characterization document will be developed using the peer review process (described in 'How are the Op Memos being developed', at the left). The site characterization guidance will be revised as an attachment to Op Memo No. 4.

RRD Operational Memorandum No. 3, Part 213 Site Classification
RRD Op Memo No. 3 was issued August 21, 2003.

RRD Operational Memorandum No. 4, Site Characterization and Remediation Verification

RRD Op Memo No 4 remains under development. Documents that provide direction for compliance with site characterization and remediation verification are being developed for the following subject areas:

- Attachment 1 Soils
- Attachment 2 Groundwater
- Attachment 3 Sediments
- Attachment 4 Soil Gas and Indoor Air
- Attachment 5 Methane
- Attachment 6 Non-aqueous phase liquid
- Attachment 7 Groundwater Modeling
- Attachment 8 Monitored Natural Attenuation
- Attachment 9 Groundwater Not In An Aquifer
- Attachment 10 In-situ Injection
- Attachment 11 Petroleum Site Characterization

The peer review process has been initiated for several of the attachments. Sediments and Groundwater Modeling drafts were sent to a peer review group March 22, 2005; the In-situ Injection draft was sent to a peer review group April 1, 2005; and the Monitored Natural Attenuation draft was sent May 3, 2005. Comments have been received and interim Op Memos are being developed. The next peer review drafts to be released will be Methane and Soil Gas and Indoor Air; the remainder will follow as developed.

RRD Operational Memorandum No. 5, Venting Groundwater, Current Status

RRD Op Memo No 5 was issued September 30, 2004.

RRD Operational Memorandum No. 6, Land and Resource Use Restrictions, Current Status

RRD Op Memo No 6 remains under development. It is intended to replace current guidance contained in STD Op Memo No 12, dated July 24, 2000.

RRD Operational Memorandum No. 7, Michigan RBCA (Risk Based Corrective Action) Process Current Status

RRD Op Memo No 7 remains under development; it is intended to replace current guidance contained in STD General Guidance for Evaluating and Characterizing Petroleum Releases dated September 15, 1999.

Contractor's Corner

Status of New RRD Level of Effort and Project Management Contracts

RRD's current Project Management (PM) and Level of Effort (LOE) contracts for publicly funded cleanup projects are due to expire in December 2005. To avoid any gaps in our contracting, we have been involved in several discussions with the Department of Management and Budget (DMB). It does not look like the PM Contract will be re-bid or extended, as the DMB does not believe it is a cost effective contracting method. In response, we have met with all of the PM firms, trying to find out whether or not their projects can be completed by the end of the contract. If it is believed they cannot be completed, we have asked the PMs to identify a good stopping point, so the projects can be addressed in another way. We understand there are many projects that are, or will be, in long term monitoring or operation and maintenance, and those will be addressed after we have had discussions with DMB as to how to proceed.

As for the LOE Contract, our discussions with DMB have been completed and will result in contracts totaling \$30 million with 10 firms (having \$3 million in project assignment capacity each) over a 3 year period, with the flexibility of two one-year extensions.

We have discussed the possibility of "bundling" several like projects (most likely Part 213 sites) in a close geographic area to be bid together. Another option for 213 sites is our Pay-for-Performance Contract, which has been used sparingly in the past, but with good success. This type of contract requires a site to have its' degree and extent of contamination very well documented prior to establishing a contract for the cleanup.

Another contracting mechanism is the use of DMB's Discretionary Contract, which has 23 firms identified as being able to perform environmental work. These would be used typically for smaller or emergency projects, as the total contract limit for each firm is \$250,000. These contracts are for a period of three years. Procedures for using this contract are currently being revised.

For additional information, contact Gary Simons at 517-373-2811 or by e-mail at simonsg@michigan.gov.

Some Helpful Definitions

PM Contract: This contract allows the department to obtain management services from professional firms that are capable of all aspects of project management. They are responsible for procuring and holding contracts with firms providing services such as remedial investigations and feasibility studies, preparing remedial designs and bid specifications, performing construction activities, related oversight, and other related tasks. This contract does not allow the PM firm to "self perform" activities but provides only for project management services.

LOE Contract: This contract allows the department to obtain services from professional firms that are able to evaluate, design, and supervise the implementation of remedies for contamination at publicly funded clean-up sites. These firms must be able to perform remedial investigations and feasibility studies, prepare remedial designs and bid specifications, and perform construction oversight and other related tasks. The LOE firms do not hold contracts with trade firms that perform construction-related work, but work to help the RRD to secure such contracts through the DMB procurement process.



CMI Fiscal Year 2005 Supplemental Funding Proposal

On April 28, 2005, Governor Granholm signed Public Act 11 of 2005, which contains an appropriation of \$37,618,035 from the Clean Michigan Initiative Bond Fund (CMI) for response activities overseen by the RRD.

The CMI was created under Section 6(1) of Part 196, Clean Michigan Initiative Implementation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451), and authorizes \$675 million in general obligation bonds. Section 8 of Part 196 allows \$155 million to be used to clean up contaminated sites to promote redevelopment and \$93 million to be used at contaminated sites that pose an imminent or substantial endangerment to the public health, safety, or welfare or to the environment.

The basis for the appropriation is the recent RRD funding proposal that requested \$35,617,401 for 46 projects in which the sites pose an imminent or substantial endangerment to the public health, safety, or welfare or to the environment and \$2,000,634 for one project in order to promote redevelopment.

The funding proposal can be viewed at the following link: [FY05 CMI Supplemental Funding Proposal](#). If you have any questions regarding the proposal, you may contact Mr. Robert Reisner by phone at (517) 335-6843 or e-mail at reisnerr@michigan.gov.



Before



After

Edgewater Development in Berrien County, redeveloped with the assistance of CMI Funding



FORT BRADY, SAULT STE. MARIE

Fort Brady was established by the Army in 1886 to protect the Soo Locks, and remained in operation through WWII, during which time it grew to 300 acres. The fort was operated by the Army's 8th AAA Battalion.

In 1944 Fort Brady was deactivated and the property given to the Michigan College of Mining and Technology at Houghton, which established a branch at on the site in 1946. After renovations, the building and grounds were sold to Lake Superior State College. The site is currently listed on the Michigan State Historic Preservation Office's inventory of historic properties

The facility consisted of 64 buildings including housing and a hospital. Military munitions were produced or demilitarized on site. Environmental concerns include possible buried munitions, munitions constituents, tear gas agents, USTs, and a landfill.

The Army Corps of Engineers is currently conducting a Preliminary Assessment and Site Investigation which will lead into a full remedial investigation.

The RRD is providing state oversight of the project.

RRD Acronym of the Day:

What is a GHUSL?

GHUSL stands for Groundwater Household Use Screening Level. The GHUSL is a level in groundwater that is protective of dermal exposure while bathing or showering and of inhalation exposure to contaminants that vaporize during household activities such as bathing and dish or clothes washing. The GHUSL is considered when bottled water is being provided as an alternative source of drinking water but other residential household uses of contaminated groundwater continue until a permanent replacement water supply is provided.

FORMERLY USED DEFENSE SITES (FUDS)

The U.S. Department of Defense (DoD) is responsible for environmental restoration of properties that were formerly owned or operated by the United States under the jurisdiction of the Secretary of Defense. Properties transferred from DoD control prior to October 17, 1987 are known as Formerly Used Defense Sites or FUDS. The scope and magnitude of the FUDS program in Michigan is significant. The DoD has identified more than 250 properties as possible FUDS. Information about the origin and extent of contamination, land transfer issues, past and present property ownership, and program policies must be evaluated before DoD considers a property eligible for Defense Environment Restoration Account (DERA) funding under the FUDS Program. The DOD and RRD Superfund staff on behalf of the State of Michigan, work closely together to expedite the cleanup of DoD FUDS under federal and state law. Services provided by the MDEQ to the DoD are fully funded under DERA and administered through the Defense and State Memorandum of Agreement signed by the State and the DoD.

FUDS cleanup projects fall into one or more categories:

1. **Hazardous, Toxic, and Radioactive Waste:** Cleanup and removal of hazardous substances include removal of underground and aboveground storage tanks, drums, and electrical transformers. Other projects in this category include the removal or treatment of soil or groundwater contaminated with hazardous substances, removal of other hazardous substances or waste, and the cleanup of contaminated landfills.
2. **Building Demolition and/or Debris Removal:** Demolition and removal of structurally unsafe buildings or towers and removal of unsafe debris.
3. **Ordnance and Explosive Waste:** Identification and removal of abandoned ordnance and explosive waste such as bombs, bullets, and rockets. Included are projects that remove or remediate explosives-contaminated soil and chemical warfare material.

The Army Corps of Engineers works with RRD Superfund staff to identify, evaluate and remediate sites within the state.

To learn more about FUDS, please contact William Harmon at (517)335-6237 or harmonw@michigan.gov, or Robert Delaney, at (517)373-7406 or delaneyr@michigan.gov

RRD Wins \$200,000 EPA Brownfields Cleanup Grant!

On May 10, 2005, the U.S. Environmental Protection Agency (EPA) announced that the Michigan Department of Environmental Quality had won a \$200,000 brownfield cleanup grant that will be used to clean up the Hoff Industries site at 719 Prospect Avenue in Grand Rapids, a former industrial metal plating and finishing facility. Funds will be used for cleanup of hazardous substances, demolition of hazardous structures, and for soil and groundwater testing.

The target site is in the City of Grand Rapids, which has a population of 197,846. Between 2000 and 2003, the city lost 7,055 jobs, causing unemployment in the area to increase to 9.4 percent, higher than the county, state, and national averages. Almost 33 percent of its residents are minorities, and the family poverty rate is almost 12 percent. The community also contains a multitude of contaminated sites, including two Superfund sites and numerous leaking underground storage tanks. The two-acre target site is adjacent to houses on two sides and within a mile of 12 schools. Potential contaminants at the site include heavy metals, degreasers, solvents, and volatile organic compounds. Illegal dumping has also occurred at the site. The cleanup and redevelopment of the target site will provide jobs for the community, increase the tax base for the city, and increase property values for neighboring residents.

Out of 26 applicants across Michigan, 17 were selected to receive grants. The number of grants given to Michigan was second only to California, with 18. Many of the grants are for site assessments at petroleum or hazardous substances brownfield sites.

Brownfield Cleanup Revolving Loan Fund- New Program Will Assist Michigan Communities

The MDEQ is seeking applicants for its EPA-funded Brownfield Cleanup Revolving Loan Fund (BCRLF). The MDEQ can loan eligible local governments up to \$1,000,000 for cleanup activities at eligible brownfield sites. The BCRLF was awarded to MDEQ to provide gap and long-term financing to communities. A 20% match is required of all applicants which can come from local or state funds. Loan terms are generous and are similar to the state revolving loan fund- 5 years interest free and up to 15 year amortization schedules. Repayment can come from tax increment financing or other development-related income. Eligible entities include municipal governments and brownfield redevelopment authorities. For the application please see: http://www.michigan.gov/deq/0,1607,7-135-3311_4110_29262-112032--,00.html

For additional information, please contact Ronald Smedley, Brownfield Coordinator, at 517-373-4805 or smedleyr@michigan.gov.

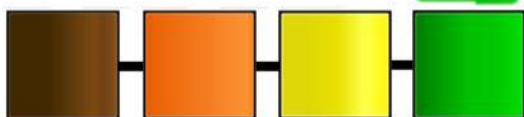
EPA Brownfield Grants- Additional Funding for Assessments and Cleanups

Looking for some extra cash to help improve the redevelopment outlook for a state-funded or nominated cleanup site? If so, the Environmental Protection Agency's (EPA) Brownfield Grant Program may be your answer.

Public Law 107-118 (H.R. 2869), or the Small Business Liability Relief and Brownfields Revitalization Act, authorized funding for the EPA's Brownfield Grant Program, which provides funding to a variety of assessment, cleanup, and job training programs.

Brown to Green

Graphic courtesy of Brian Jeffs



Michigan's local units of government (LUGs) received \$12.665 million from 1997 until 2002 under the EPA's original pilot grant program, most making use of the funds to perform site assessments. In 2003, the EPA awarded \$5.3 million to 10 Michigan recipients, including the MDEQ, and in 2004, 14 Michigan LUGs and the MDEQ were awarded \$7.05 million out of

a nationwide total of \$75 million worth of grants to about 200 eligible recipients. Many of the recent Michigan grant recipients are using their funds for area-wide hazardous substances site and petroleum site assessments. A small number are using funds to perform site cleanups, and Genesee, Wayne, Oakland, and Washtenaw Counties have funded their local brownfield cleanup revolving loans.

RRD is currently managing a site-specific assessment grant of \$250,000 that was awarded in July 2004. The grant is being used to complete Phase I and Phase II site assessments, and remedial action plans at six petroleum contaminated and one hazardous substances contaminated site in Berrien, Saginaw, Tuscola, and Arenac Counties. The assessments are being completed in conjunction with underground storage tank (UST) removals and a cleanup and demolition project that were funded by Clean Michigan Initiative (CMI). Mike Jury in the Saginaw Bay District and Debra Clark in the Kalamazoo District worked with Ron Smedley in the Funding and Support Unit to identify the eligible sites and develop a comprehensive approach to fully investigate, remediate and prepare the sites for sustainable reuse. Mr. Smedley has met with the Watervliet Township Supervisor to discuss the potentials for one of the sites, located just west of Watervliet on Red Arrow Highway. The township had earlier assisted the state by paying for the building demolitions at this and another UST site. An even more successful project, the former Jughead's Mini Mart in Tuscola County, had been purchased at the state's tax sale in September of 2004. Although the MDEQ had planned on removing the abandoned USTs at this location, the new owner stepped up and paid for the removal, coordinating with Pete Johannes, the project manager on the continuing EPA-funded site assessment. This property should be redeveloped within a year, and is a great example how federal and state government agencies and the private sector can work together to achieve a common goal.

Sites eligible for EPA funding for assessment or cleanup will usually be tax-reverted and owned by either the state or a local unit of government. The sites must be suspected of having contamination, with no associated viable liable parties. One example of an eligible property is a former plating operation in Grand Rapids. RRD's 2005 application was for cleanup funds to supplement a proposed CMI project for cleanup and demolition at this tax-reverted site (see side bar). The Superfund Site Assessment Pre-Remedial Group performed a quick and thorough assessment of the property, a pre-requisite for the cleanup grant.

The federal funding available for FY 2006 is estimated to be close to \$200 million nation-wide, and the proposal deadline should be late fall. If you have a property in mind, please contact the Funding and Support Unit at 517-373-4805 or email smedleyr@michigan.gov to discuss the project. Due to the time it takes to gather the background information, seek local support, determine the scope of work, and write the proposal, please contact as soon as possible.

Potential Topics Identified for Part 201 Discussion Group Consideration

Mechanisms for ongoing input on program development issues.

What should be done to make the program more effective?

Are long-term elements of response activity reliable (e.g., land use restrictions)?

Can/should the program be changed to reduce the complexity?

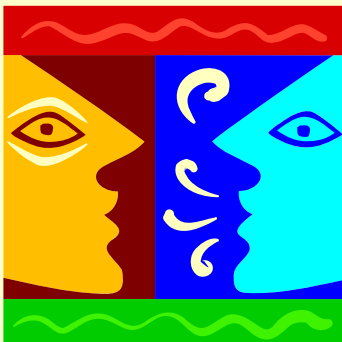
Are redevelopment tools achieving the desired outcomes?

Do we need more and/or different redevelopment tools?

Are enforcement efforts adequate to assure compliance by regulated parties?

Are technical standards adequate to assure protectiveness?

Is public participation in the program effective (e.g., in the remedy selection process)?



Are guidance materials effective, readily available, responsive to the regulated community and consultant needs?

What is the most effective way to get input on development of program materials?

What is the best way to secure stable funding for the program?

Part 201 Discussion Group Formed

A Part 201 Discussion Group has been established to provide a forum for RRD to seek informal input from a range of interested parties on the program's progress to-date and on its future direction. Discussion Group members were chosen to bring a broad range of experience to the process. The objective of the Discussion Group is to provide feedback on the effectiveness of the program in meeting statutory and program goals. The Part 201 Discussion Group will not exist indefinitely and will not serve the same function as the former Part 201 Program Advisory Group. A meeting schedule will be established to allow for continued discussion. A wide-ranging discussion of issues is expected. The initial meeting was held April 22, 2005. Additional information is available from Lynelle Marolf at 517-373-9893 or by e-mail at marolf@michigan.gov.

Part 201 Discussion Group members:

Anne P. Couture, Couture Environmental Strategies, LLC
 Phillip Davis, Ph.D., Creative Resolutions
 Rick Plewa, Comerica Bank
 James Clift, Michigan Environmental Council
 Bruce Rasher, Consumers Energy
 Allen Reilly, Horizon Environmental
 Greg Rose, Daimler-Chrysler Corporation
 Kirk Reilly, Technical Outreach Services for Community Programs,
 Michigan State University
 Allen Wasserman, Williams Acosta
 Cathy Milburg, Michigan Avenue Business Association
 Andrew Such, Michigan Chemistry Council

Brownfield Workshops for Communities; More Next Year

The RRD, along with Michigan Economic Development Corporation, Department of History and Libraries, and the Department of Transportation, conducted four Brownfield Workshops throughout the state this winter. This was a group effort to provide information to local units of government (LUGs), consultants, developers and lending agencies interested in developing brownfield properties.

The workshops provided information on services that the Department of Environmental Quality can provide to communities, such as free site assessments, grants and loans, tax incentives, tax increment financing, funding for infrastructure improvements and using environmentally friendly design techniques in redevelopment. This year we also included a presentation on historic preservation issues.

Sunny Krajcovic, of the Superfund Section, gave a presentation on how a LUG can qualify for a free brownfield assessment, to be conducted by the Pre-Remedial Group of the Superfund Section. The purpose of the assessment, which is similar to a Phase I, II site assessment, is to help reduce barriers to redevelopment. The federally funded Brownfield Redevelopment Assessment program has been ongoing since 1996. 114 assessments have been completed. The Department's goal is to complete 11 such assessments each year, two of which are required to be oil and gas related.

The workshops were held in Grand Rapids, Lansing, Livonia and Escanaba. They were day long sessions and each workshop was booked to capacity. The workshops will be held again next January and the department has decided to increase the number of workshops and their capacity. Contact Sunny Krajcovic at (517)241-8857 or by e-mail at krajcovj@michigan.gov for more information.

Links to Recent Press Releases Related to RRD

July 2005

7/5/05: Contamination cleanup effort in Romulus.
http://michigan.gov/deq/0,1607,7-135-3308_3323-121776--,00.html

7/5/05: Three New Brownfield Redevelopment Grants Will Clean Up Communities, Create Jobs.
<http://www.michigan.gov/deq/0,1607,7-135-121778--,00.html>

May 2005

5/18/05: DEQ to Discuss Impact of Lead Sampling Effort in Hamtramck.
http://www.michigan.gov/deq/0,1607,7-135-3308_3323-118318--,00.html

April 2005

4/6/05: DEQ to Begin Cleanup of Groundwater Contamination in Tekonsha.
http://www.michigan.gov/deq/0,1607,7-135-3308_3323-114923--,00.html

March 2005

3/31/05: DEQ Asks Court to Order AAR to Comply with Administrative Order.
<http://www.michigan.gov/deq/0,1607,7-135-114421--,00.html>

3/29/05: Granholm Details Plan to Speed Job Creation; Highlights Environmental Cleanup Projects.

47 projects will share \$38 million in funding. Governor Jennifer M. Granholm today identified 47 environmental cleanup projects that will be completed around the state as part of her plan to create tens of thousands of jobs and jumpstart Michigan's economy this year.

<http://www.michigan.gov/som/0,1607,7-192-113978--,00.html>

3/1/05: DEQ Announces Enforcement Actions (Actions result in fines and restitution for cleanup of contaminated sites).

<http://www.michigan.gov/deq/0,1607,7-135-3308-111674--,00.html>

Keeping Up With Events

RBCA Training: October 18-19, 2005, East Lansing, Ingham County: ASTM Risk Based Corrective Action Applied at Petroleum Release Sites. Sponsored by ASTM International. RRD staff will explain the use of RBCA in the LUST program, and discuss newly revised operational memos and guidance documents. Register at [ASTM Standards International](http://www.astm.org).

[MDEQ Calendar on the Web](#)

RRD Field Office Staff, on Call 24/7, Oversee Cleanup of Mercury Spill in Bay City

On May 2, 2005, at 7:20 PM, Saginaw Bay District Office RRD staff were notified of a release of mercury at the Saginaw Valley Marine Terminal and Warehouse in Bay City, near the Cass Avenue Boat Launch parking area. Upon arrival at the scene, a release of suspected PCB-contaminated oil was also discovered. The site was cleaned up under the direction of RRD staff, and was safe by late in the afternoon the following day.

Three boys playing in the area had discovered the presence of mercury that morning and told the father of one of the boys, who notified the Bay City Fire Dept., which in turn notified the Bay City Hazardous Materials Response Chief and RRD District Office staff. The Fire Department and RRD, investigating the site that evening, found a 4 ft. X 6 ft. area covered with hundreds of small and medium-sized droplets of liquid mercury (quicksilver), totaling well over one pound. In front of the spill, they found two separate abandoned and out-of-service electrical units, one a high-frequency converter and the other a large transformer. The converter unit itself contained eight capacitors, with another four capacitors attached to the adjacent transformer. One of the capacitors on the transformer had split open and had released approximately ½ gallon of what was assumed to be PCB oil.



Vacuuming Mercury Drops

Young's Environmental Clean-up, Inc., an environmental response contractor, was immediately notified for response action and arrived on-scene at 9:30 PM. Utilizing "Chlor-in-Oil" field testing kits, Young's personnel confirmed that the spill was indeed positive for PCBs greater than 500 ppm. The remainder of the response action was scheduled for the next day and the site secured. The following day, May 3, Young's Environmental personnel removed the equipment and all the hazardous materials for proper disposal, including the visibly contaminated asphalt. At the time, it was estimated that there were 134 gallons of PCB-contaminated oil at the site (within the transformer & 12 capacitors), with about ½ gallon released to the underlying asphalt, and about 30 pounds of mercury, with five to seven pounds released to the asphalt and spattered throughout the interior of the converter unit. By late in the afternoon, RRD staff determined that the response actions had been completed, with the hazards removed. Robin Oeming, Senior Environmental Quality Analyst with responsibility for this very successful and timely cleanup, said that none of the contamination reached the Saginaw River, which is about 175 feet from the spill location.

In the process of removing the mercury, Young's Environmental staff determined that the equipment contained not 30, but 300 pounds of mercury. The free-phase, recoverable mercury will be recycled and reused. The PCB-contaminated oil within the transformer tested out at 470,000 ppm (arochlor 1260). One of the boys, The Bay City Times reported, was seen at a local hospital emergency room for a possible exposure, but was released. At this time it is not known who is responsible for the abandonment of the electrical equipment containing the hazardous substances, or the events that led to the release of the hazardous substances. To date, area business interests have been cooperative with District staff's investigative efforts. For more information, contact Robin Oeming at 989-686-8025, extension 8301, or by e-mail at oemingr@michigan.gov.

Contact Us

RRD staff are located at MDEQ District Offices around the state. Locations and contact information can be found by clicking anywhere on the map.



The MDEQ Remediation and Redevelopment Division (RRD) administers programs that facilitate the cleanup and redevelopment of contaminated sites statewide, providing for a cleaner, healthier and more productive environment for you!

The purpose of this newsletter is to provide information about our programs, specifically, Part 201 (Environmental Remediation) and Part 213 (Leaking Underground Storage Tanks) and portions of Part 215 (Refined Petroleum Fund - formerly Michigan Underground Storage Tank Financial Assurance [MUSTFA]), of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. In addition, the RRD manages portions of the federal Superfund Program, established under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

For information or assistance, contact MDEQ, RRD, P.O. Box 30426, Lansing, MI 48909; 517-373-9837; fax: 517-373-9657; www.michigan.gov/deqrrd

We are located in Constitution Hall, 525 W. Allegan, Lansing, MI

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Inside the RRD

MDEQ Moves into New Warren Green Office

In March, the Department of Environmental Quality announced the move to its new Southeast Michigan District Office. The new office located at 27700 Donald Court in Warren, is Michigan's first "green" state office building.

The building, located on the old Warren Tank Plant brownfield site, features numerous "green" design benefits that will reduce overall potable water usage by 20%, and reduce energy usage by 35%. The design also uses more natural day lighting, storm water for irrigation rather than potable water, renewable energy on-site, sustainable wood sources, regionally manufactured materials, and low-emitting paints, glues and carpets, to reduce building toxics.

All materials used in the building's construction were generated, manufactured, and shipped from sources less than 500 miles away. This reduced the transportation and air emissions related to the building process and supported area businesses and their economy. The office wall panes were all recycled and refurbished to an "as-new" appearance at an estimated savings of \$717,000 to the state.

"The new Southeast Michigan District Office is a demonstration of the MDEQ's commitment to being a leader in promoting environmentally sound business practices and recovering a brownfield site," said MDEQ Director Steven E. Chester. "I hope that we see many more of these "green" buildings being constructed not only by the state, but by private companies across Michigan."

The new phone number for the Southeast Michigan District Office is (586) 753-3700. More about the new green Warren Southeast Michigan District Office from the [Detroit News](#).

"What's New on the Web?"

In the past year, the DEQ website has undergone significant changes. It is now easier to find information about what the DEQ does. One of the changes is the creation of the division homepages, allowing divisions to consolidate their activities into a one page format. You can access these pages by going to the <http://www.michigan.gov/deq>, clicking on **Inside DEQ** and selecting the desired division.

The direct link for the RRD is: <http://www.michigan.gov/deqrrd>. This page contains links to programmatic information on Part 201, Part 213, Part 215, and Act 381. The page is divided into two columns. The first contains links to the main webpage such as brownfield information, site Lists, state funded cleanups, compliance and enforcement, and information on how to become a contractor for the State of Michigan.

If you scroll down the page you will find a "What's New" which highlights recent changes to the web. The right-hand column contains information on what RRD is about, phone numbers, district offices, links to the actual laws that govern the programs under RRD, and press releases related to RRD projects. If you have any questions or comments about the website please contact Susan Jarrett-Norton at 517-373-2113 or nortons1@michigan.gov.

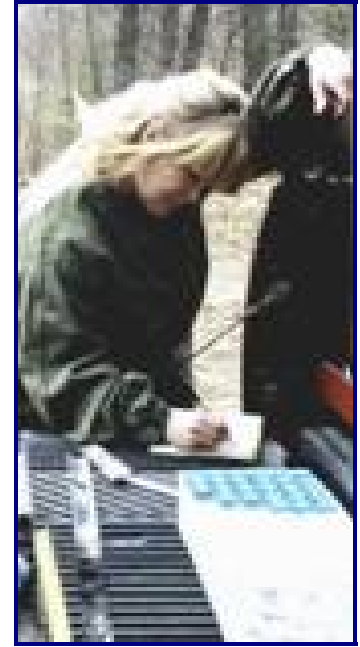
MDEQ and Project Manager Honored by Muskegon County

Lisa Summerfield, a project manager with the Superfund Section, accepted a **Muskegon Area Environmental Excellence Award** on April 19, 2005 given to the MDEQ, USEPA, and the Army Corps of Engineers for their work on the Ott/Story/ Cordova Superfund site. Ms. Summerfield was the project manager for the site. The awards are given annually by the Muskegon County Environmental Coordinating Council (MCECC). Writes the MCECC:

“During the years 1957 through 1968, chemical waste by-products from Ott Chemical Company were placed in unlined lagoons north of the then existing plant, resulting in a plume of contaminants traveling through the groundwater approximately one mile to a tributary of Little Bear Creek in Dalton Township. The plume contaminates affected the groundwater, the tributary, the creek, and several private wells in the area. To remediate the contamination, the U.S. Environmental Protection Agency, Michigan Department of Environmental Quality, and U.S. Army Corps of Engineers joined forces to construct a 1.3 million gallon per day



groundwater treatment plant (**aerial view above**). This treatment facility is unique in its cooperative oversight techniques, acquisition of funding, construction, and its innovative treatment technologies and operations. Groundwater studies, ongoing since start-up in 1996, are proving the system to be an extremely effective treatment system, resulting in the substantial cleanup of the surrounding ground and surface waters.”



Superfund Project Manager, Lisa Summerfield, at work in the field. Ms. Summerfield is featured in the current MDEQ website **Environmental Spotlight**, in [“A Week in the Life of a Superfund Project Manager”](#).

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