

ENVIRONMENT *Site Rehabilitation*

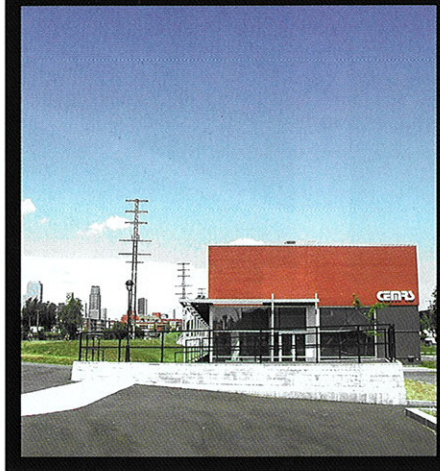
PROFILE OF THE CENTER

MCEBR is a non-profit corporation that brings together representatives of organizations and industry involved in the rehabilitation of contaminated sites. It has positioned itself to provide interface services for major landowners grappling with especially complex contamination problems, their consultants, technology developers and research centres that can devise promising solutions.

With the assistance of its three founding partners—the City of Montréal, the Quebec government and the Federal government—the Centre has supported a number of technology demonstration projects, which have generated significant economic and environmental benefits. It has also built an experimental station with facilities for demonstrating innovative remediation solutions for contaminated sites.

The Centre's mission is to support technology innovation in the site decontamination and remediation field and to help industry develop expertise in these areas.

MONTRÉAL CENTRE
OF EXCELLENCE IN
BROWNFIELDS
REHABILITATION (MCEBR):
YOUR PARTNER FOR
SITE REMEDIATION



THE EXPERIMENTAL STATION

Completed in 2002, the Centre's new multi-purpose building is located near the Lachine Canal, in the heart of Montréal's former industrial district. It houses all of the following:

- An experimental hall with three 175 square metre demonstration areas each in size
- A technology showcase highlighting the Centre's accomplishments
- A fully equipped chemistry and microbiology laboratory
- A geotechnical laboratory
- A variety of equipment for project demonstrations in pilot plants
- A mobile laboratory for sample collection and fieldwork
- Protected outdoor areas designed for contaminated soil storage and experimentation
- A 100 square metre exhibition room and a projection room
- Offices and a conference room.

Rég. Québec Biblio. Env. Canada Library



38 502 649

ENV144



CEMRS
Centre d'excellence de Montréal
en réhabilitation de sites

MCEBR
Montréal Centre of Excellence
in Brownfields Rehabilitation



Québec
• Ministère de l'Environnement
• Ministère des Affaires municipales, du Sport et du Loisir

BRI
Biotechnology
Research
Institute



OUR PARTNERS

Our key partners come from all three levels of government. Partnering arrangements also exist with landowners, technology developers and research centres.

Founding partners of MCEBR:

- City of Montréal
- Quebec government as represented by:
 - ministère de l'Environnement du Québec
 - ministère des Ressources naturelles du Québec
- Federal government as represented by:
 - Biotechnology Research Institute (BRI) - NRC
 - Environment Canada
 - Public Works and Government Services Canada

Funding partners:

- City of Montréal
- ministère des Affaires municipales, du Sport et du Loisir du Québec
- ministère de l'Environnement du Québec
- Canada Economic Development
- Biotechnology Research Institute (BRI) - NRC
- FPGST-E
- Fonds d'action québécois pour le développement durable (Quebec sustainable development action fund)

Project partners

- Alex-Sol
- Canadian National
- Centre d'expertise en analyse environnementale du Québec
- COREM
- Dessau-Soprin
- Dragage Verreault
- Golder Associates
- Hydrogéo Plus
- Hydro-Québec
- Inspec-sol
- Institut de recherche en biologie végétale
- Institut national de la recherche scientifique
- Shell Canada Products
- Sanexen
- Biotechnology Research Institute (BRI) - NRC

OUR SERVICES

Demonstration of rehabilitation technologies and tools

MCEBR provides scientific, technical and financial support, along with specialized facilities, for companies seeking to develop innovative solutions and validate results through pilot-scale demonstrations.

Technology attestation

MCEBR confirms the suitability of the solution that has undergone demonstration and the performance level attained under project conditions by a technical data sheet approved by the ministère de l'Environnement du Québec and Environment Canada as

well as the other partners involved in the project. This attestation is particularly valuable during the commercialization phase.

Technology showcase and promotion

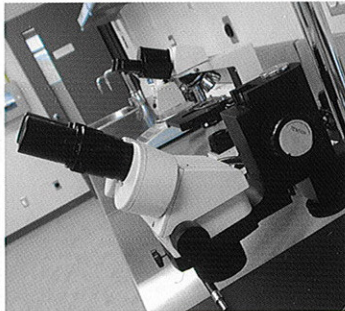
The Centre provides its partners with a platform supporting commercialization efforts. The platform includes a technology showcase at the experimental station and representation at various exhibitions in Canada and abroad. It co-operates with various organizations, such as Réseau environnement and the Canadian Urban Institute, in order to provide these services.

Public awareness

MCEBR strives to increase public understanding of rehabilitation issues and impacts, while also providing concrete support for revitalization projects in southwestern Montreal. The experimental station has a permanent exhibit on issues related to contaminated brownfields.

Information hub

The Centre gives proponents and landowners access to a network of experts who can provide helpful information on complex rehabilitation problems, possible solutions and procedures.



DEMONSTRATION OF SOLUTIONS

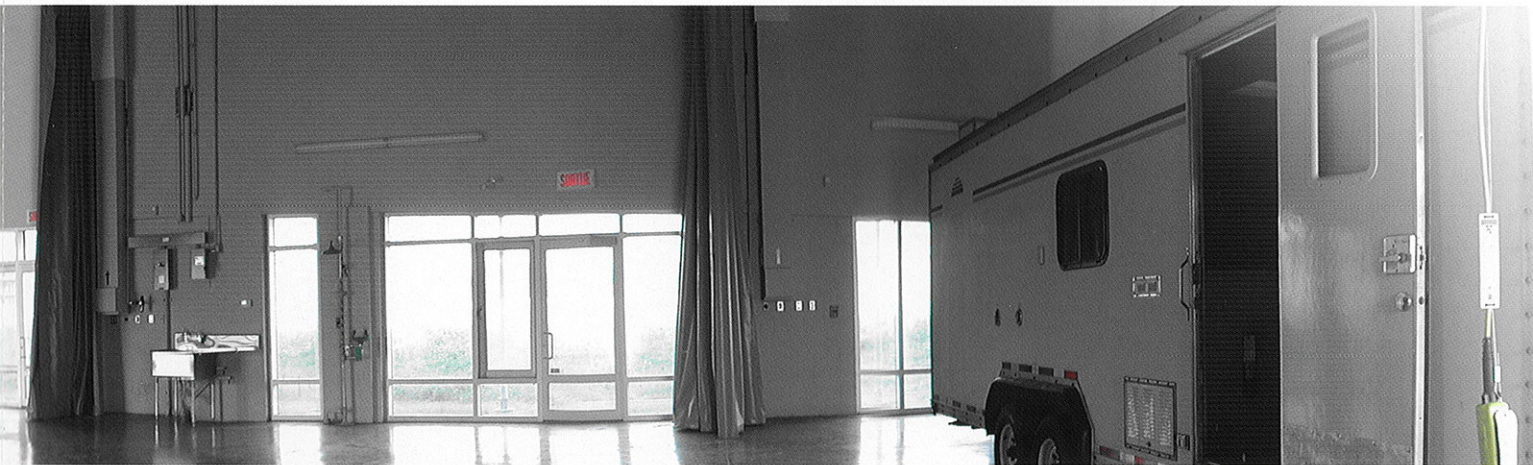
MCEBR, working in co-operation with consultants or industry experts:

- Determines the nature of the contamination and the technological challenges involved in complex rehabilitation situations
- Participates in the process of selecting the best available technology or most suitable management tools for the problem at hand and which will eventually be tested
- Co-ordinates the pilot-scale demonstration project
 - proposes an RD&D team as applicable;
 - assists with funding arrangements;
 - insures that the project proceeds smoothly, on schedule and with in budget.
- Makes facilities and technology demonstration equipment available, as applicable
- Confirms the appropriateness of a demonstrated technology or solution, as well as the performance level for the pilot project by technology attestation
- Advises interested parties on the suitability of techniques and management tools
- Supports promotional and commercialization efforts for the technology or solution through technology showcase activities.

ACHIEVEMENTS

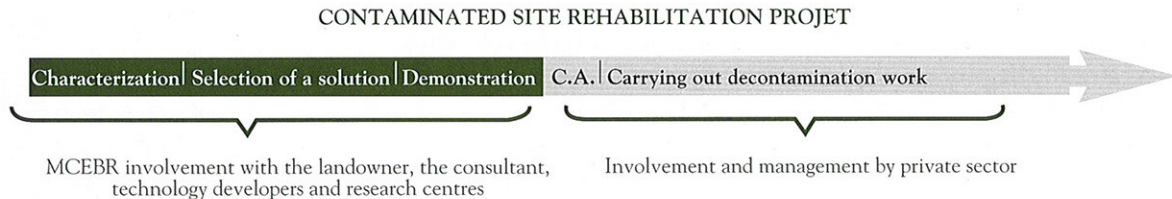
As of January 1, 2004, MCEBR had analysed nearly 50 projects based on its priorities areas. Eight demonstration projects have been completed.

1. Development of the TerraSys software, which is designed for rapid ecotoxicological risk assessments.
Proponent: Sanexen Environmental Services Inc.
2. Demonstration of phytoremediation as a potential technique for contaminated site remediation.
Proponent: Inspec-sol inc.
3. Development of a protocol for characterizing soils contaminated with heterogeneous fill materials.
Proponent: Dessau Soprin inc.
4. Development and fine-tuning of a biofilter for treating aqueous and gaseous effluents containing hydrocarbons.
Proponent: Golder Associates Ltd
5. Development and demonstration of an *in situ* bioslurping extraction system, coupled with a soil heating system to recover hydrocarbons.
Proponent: Golder Associates Ltd
6. Development and demonstration of a soluble metal precipitation process for process waters: a new soil and sediment decontamination technology.
Proponent: Alex Sol inc.
7. Development and demonstration of a new treatment process for sediments heavily contaminated with organic and metallic constituents.
Proponent: Dragage Verreault inc.
8. Construction of a prototype utilizing Ultrasorption with an absorbent bed bioreactor for groundwater treatment.
Proponent: Sanexen Environmental Services Inc.



WHEN SHOULD YOU CALL ON MCEBR FOR ASSISTANCE?

- When you have to address a unique set of problems and you want to make an informed decision about the best solution.
- When you have a potential solution but you want to verify the results through a pilot scale test.
- When you want to develop an innovative solution.
- When you want to achieve greater commercial visibility.



ADVANTAGES OF DOING BUSINESS WITH MCEBR

- Support and advice are provided by a multidisciplinary team of experts from a number of public and private sector organizations.
- An objective opinion is provided on the selection of the best solution.
- A demonstration project may be carried out, providing assurance that the chosen solution will produce the expected results.
- Access to the experimental station's premises, equipment and adjacent land. Projects may also be undertaken at the contaminated site of concern.
- Opportunity to benefit from the Centre's credibility in dealings with grant and funding agencies, allowing projects to be set up quickly with a maximum amount of funding.
- An official attestation of the demonstration project results is obtained owing to endorsement by the ministère de l'Environnement du Québec and Environment Canada.
- Greater commercial visibility for proven technologies.
- MCEBR involvement does not obviate the need to obtain certificates of authorization. However, the Centre assists in developing demonstration protocols which may, if the results are conclusive, facilitate or accelerate the process of obtaining such certificates.
- MCEBR may, as a partner, provide funding for innovative demonstration initiatives.

INFORMATION

For additional information, please contact:
Montréal Centre of Excellence in Brownfields Rehabilitation
Jean-Pierre Naud,
General Director
Or
Henri Bonneilh
Technical Director

3705, St. Patrick Street
Montréal (Quebec)
H4E 1A1
Tel: (514)-872-4323
Fax: (514)-872-0189
e-mail: cemrs@bellnet.ca

ENVIRONMENT Site Rehabilitation

Site rehabilitation data sheets may be obtained from:
Montréal Centre of Excellence in Brownfields Rehabilitation
3705, St. Patrick Street
Montréal, Quebec
H4E 1A1
Tel.: (514) 872-4323
e-mail : cemrs@bellnet.ca

Publications available on the Web site of Environment Canada in the Publications section:
<http://www.qc.ec.gc.ca/dpe>

Production:
Julie Leduc

Writer:
Dominique Forget

English Editor:
Translation Bureau - PWGSC

Graphic Design:
Lacroix O'connor Lacroix

Printer:
Imprimerie VDL

March 2004

Cette fiche est également disponible en français sous le titre : Le Centre d'excellence de Montréal en réhabilitation de sites (CEMRS) : votre partenaire pour la restauration de sites