



ITRC Guidance Information

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Green and Sustainable Remediation: A Practical Framework

A new document from ITRC benefits the remediation industry with the integration of green and sustainable practices into existing site investigation and remediation programs. This document provides a general framework that is flexible and scalable to each phase of the remedial process. This approach can be implemented as-is or adapted to your specific program and regulatory environment. You can access this new guidance at <http://www.itrcweb.org/Documents/GSR-2.pdf>.



Background

When decision makers consider environmental, social, and economic factors throughout a site remediation, they can lessen negative effects of the cleanup, protect human health and the environment—and still meet regulatory objectives. The consideration of these factors is termed “Green and Sustainable Remediation” (GSR). GSR is defined as the site-specific use of products, processes, technologies, and procedures that mitigate contaminant risk to receptors while balancing community goals, economic impacts, and net environmental effects. GSR has emerged as a beneficial approach that optimizes all phases of site remediation, from site investigation to project closeout.

This technical and regulatory guidance document introduces GSR and defines key terms specific to the GSR concept. The document also describes the process of planning a GSR evaluation and the implementation of GSR concepts during each remediation phase. The GSR planning and implementation framework provided in the document offers both a general approach and specific tools for integrating environmental, social, and economic considerations into site management decisions. This ITRC guidance and the accompanying overview document apply to any remediation program in the United States and can be used by state regulators, federal employees, and the private sector. The GSR framework may be used for a particular project phase or used as a model for development of internal GSR guidance, and it can be applied at small or large sites or projects. ITRC encourages you to tailor the GSR evaluation process to your individual programs using this document as a guide.

How ITRC Guidance Can Help You

The GSR products will help you to develop better remedial decisions that benefit future generations. In addition to the ultimate goal of remediation, these products benefit the GSR practitioner as they:

- ▶ Introduce the GSR concept and background.
- ▶ Describe a planning, evaluation and implementation framework for using GSR concepts during each remediation phase.
- ▶ Support improved engagement of stakeholders at remediation sites throughout the GSR process.
- ▶ Show how the GSR framework creates simplified and reproducible results.
- ▶ Provide strategies for implementation of three simplistic levels of GSR evaluation.
- ▶ Provide information about GSR tools that were designed by and for the remediation industry.
- ▶ Include case studies for ten sites that provide examples and illustrations.



Regulatory Acceptance for New Solutions

Documents, free Internet-based training, contact information: www.itrcweb.org

If you are considering a green and sustainable remediation program, you can achieve the maximum benefit from this guidance by taking the following actions:

- ▶ Share this guidance and FREE Internet-based training with your co-workers, site owners, consultants, and other audiences by providing a link from your website to: <http://www.itrcweb.org/Documents/GSR-2.pdf>.
- ▶ Use ITRC guidance as a tool to develop or update existing guidance.
- ▶ Report to ITRC any successes or concerns related to this guidance, training course, or the application of GSR at: <http://www.itrcweb.org/feedback.asp>.
- ▶ Promote GSR document use when speaking at conferences and meetings, or when developing curricula.
- ▶ If you are a regulator, provide your state's concurrence on the guidance document, which is coordinated by your ITRC State Point of Contact (POC).

Resources

Related ITRC documents and links include the following:

- ▶ ITRC, Green and Sustainable Remediation: A Practical Framework, GSR-2, 2011 (<http://www.itrcweb.org/Documents/GSR-2.pdf>).
- ▶ ITRC, Overview Document, Green and Sustainable Remediation: State of the Science and Practice, GSR-1, 2011 (<http://www.itrcweb.org/Documents/GSR-1.pdf>).
- ▶ For more information and useful links about GSR go to http://www.itrcweb.org/teampublic_GSR.asp.

FREE Internet Training Course

ITRC has developed a FREE Internet-based training course for this product. This training provides background on GSR concepts, a scalable and flexible framework and metrics, tools and resources to conduct GSR evaluations on remedial projects. Beyond basic GSR principles and definitions, participants will learn the potential benefits of incorporating GSR into their projects; when and how to incorporate GSR within a project's life cycle; and how to perform a GSR evaluation using appropriate tools. The training also highlights advantages and limitations of GSR through case studies showing the application and results of GSR. Participants will also be provided with links to additional resources related to GSR. The training course provides a primer both for organizations initiating GSR programs and for those organizations seeking to incorporate GSR considerations into existing regulatory guidance.

Registration opens 4-6 weeks prior to class date at: <http://www.clu-in.org/conf/itrc/GSR/>. You can take the training "live" from the comfort of your own office, or access archives of past classes at your convenience. If you have questions after completing the online registration, call (402) 201-2419, or send an e-mail to training@itrcweb.org.

Green and Sustainable Remediation (GSR) Contacts

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