



# **GREEN AND SUSTAINABLE REMEDiation**

**CT ALL GRANTEE MEETING**

**JULY 2012**

---

# GREEN AND SUSTAINABLE REMEDIATION



*New Hot Topic at EPA –*

- ✘ Green and Sustainable Remediation (GSR) –  
the site-specific employment of:  
products, processes, technologies, and procedures  
that **mitigate contaminant risk** to receptors  
**while** making decisions that are cognizant of **balancing:**  
**community goals,**  
**economic impacts, and**  
**net environmental effects.**



# GREEN AND SUSTAINABLE REMEDIATION

## ✘ EPA Region 1 - Clean and Greener Policy (*handout*)

+ Shows EPA's commitment to GSR

+ Core Elements

- ✘ Minimize total energy use and maximize renewable energy
- ✘ Minimize air emissions and greenhouse gas generation
- ✘ Minimize water use and impacts to natural resources
- ✘ Reduce, reuse, and recycle materials and wastes
- ✘ Protect and minimize adverse impacts to land and ecosystems



# GREEN AND SUSTAINABLE REMEDIATION

- ✘ Brownfields –

Grantees to incorporate GSR into their projects

- + Practical, inexpensive ways to make your project greener!

- ✘ GSR Guidance Document (*handout*)

- + *Suggestions/Ideas for Green Remediation Incorporation into Brownfields Assessments and Cleanups – EPA Region 1*



# GREEN AND SUSTAINABLE REMEDIATION

- ✘ Maine Leathers Tannery, Dover-Foxcroft, ME (cleanup grant recipient)
  - + Wood recovered during tree clearing work:
    - ✘ 13,000 feet hardwood for flooring and furniture
    - ✘ 20,000 feet pine sawlogs for finish pine trim
    - ✘ 23 cords of pulp for paper production
    - ✘ 200 cords hardwood for home heating
    - ✘ 300 tons biomass for energy production
  - + During site prep, 12.5 tons scrap metal collected, segregated, and recycled off-site
  - + Advanced emission controls used on heavy equipment
  - + Avoided on-site wetland areas to minimize impacts/ damage during site prep, tree clearing and while constructing lay down, staging, and storage areas



# GREEN AND SUSTAINABLE REMEDIATION

- ✘ Where does GSR fit in the Brownfields process?
  1. Workplan – cleanup and RLF (new) only
  2. Request for Proposals – cleanup and RLF only
  3. Quarterly Reports – cleanup and RLF only
  4. Analysis of Brownfields Cleanup Alternatives (ABCA) – **assessment, cleanup, and RLF (ALL grantees)**



# GREEN AND SUSTAINABLE REMEDIATION

- ✘ Workplan --- **only for new Cleanup and RLF grants**
- + Show commitment to incorporating GSR into your project

<b>Task 3 – Site-Specific Activities Subtasks (Commitments)</b>	<b>Anticipated Outputs (projected activities, deliverables, reports) and Anticipated Outcomes (projected results, effects, improvements)</b>	<b>Anticipated Accomplishment Date(s) (Month/Year)</b>	<b>Actual Accomplishment Date(s)</b>
<b>Green and Sustainable Remediation (GSR)</b> <ul style="list-style-type: none"> <li>• Incorporate green and sustainable remediation principles/techniques into your project.</li> </ul>	<b>Outputs:</b> <ul style="list-style-type: none"> <li>• GSR language in ABCA and RFP</li> <li>• Track and report GSR in quarterly reports</li> </ul> <b>Outcomes:</b> <ul style="list-style-type: none"> <li>• Greener and more sustainable cleanup</li> </ul>	<b>Before, during, and after remedial activities</b>	

# GREEN AND SUSTAINABLE REMEDIATION

- ✘ Request for Proposals --- **only for Cleanup and RLF grants**
  - + Suggested language to be put into your RFP (for either environmental consultant, cleanup contractor or both).  
“Contractors that propose to use green remediation techniques (e.g., no idle policy, use of biodiesel fuel, recycling of building materials) will be considered more favorably.”
  - + Also see GSR Guidance document regarding incorporating GSR into the contracting process



# GREEN AND SUSTAINABLE REMEDIATION

- ✘ Quarterly Reports -- **only for Cleanup and RLF grants**

## 1.1.1 Green Remediation Efforts (if any)

Describe briefly any green remediation efforts that have been implemented on any projects funded by this grant. Green remediation efforts should be consistent with the goals of EPA Region 1's Clean and Greener Policy for Contaminated Sites, found at:

<http://www.epa.gov/region1/brownfields/pdfs/CleanGreenPolicy.pdf>.

# GREEN AND SUSTAINABLE REMEDIATION

- ✘ Analysis of Brownfields Cleanup Alternatives (ABCA) – for ALL grants (if you do cleanup planning under assessment)
  - + Have your consultant compare cleanup alternatives as they normally would:
    - ✘ Effectiveness, implementability, and cost
  - + After the recommended alternative is selected, discuss ways to make it greener (more sustainable).

# GREEN AND SUSTAINABLE REMEDIATION

## ✘ Take Away (GSR in Brownfields)



Practical, inexpensive ways to  
make your project greener!

## QUESTIONS



Brownfields  
Green Remediation Lead:  
Laurie O'Connor  
617-918-1605  
[oconnor.laurie@epa.gov](mailto:oconnor.laurie@epa.gov)

Brownfields  
Sustainability Lead:  
Jessica Dominguez  
617-918-1627  
[dominguez.jessica@epa.gov](mailto:dominguez.jessica@epa.gov)