



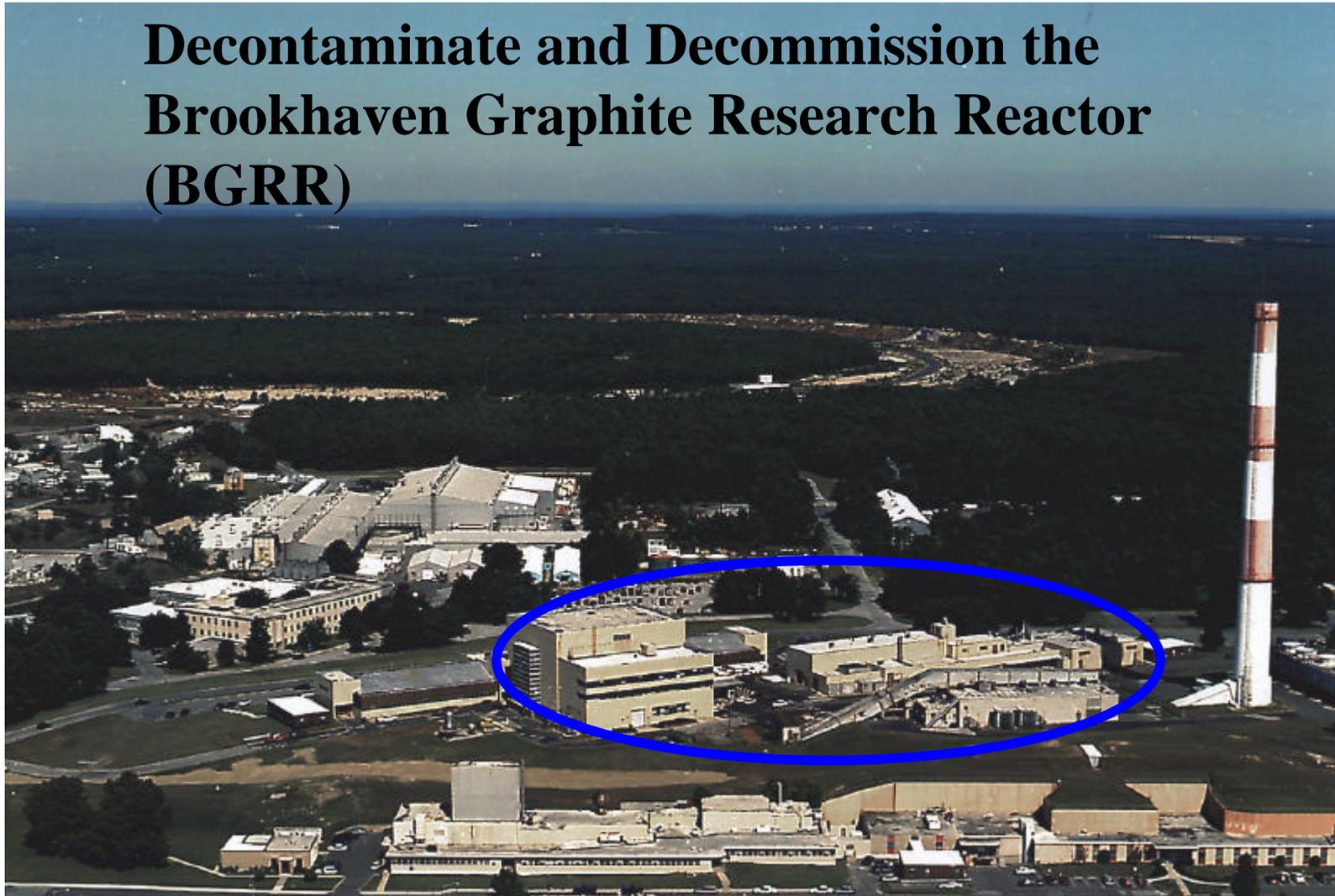
Brookhaven Graphite Research Reactor (BGRR) FY 2001 Year End Review

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Project Description

Decontaminate and Decommission the Brookhaven Graphite Research Reactor (BGRR)





BGRR FY01 Year End Accomplishments

- ◆ **New Reactor Projects Manager On Board**
- ◆ **Above Grade Ducts**
 - Removal completed, 11 of 49 sections shipped
- ◆ **Canal and Associated Facilities**
 - Above Grade portion removed
 - Below Grade portion EE/CA completed
 - Below Grade work started
- ◆ **Below Grade Ducts & “Smart 3D” Project**
 - Held DQO Work Shop with regulators
 - Completed Tracer Gas Study
 - Other new technologies deployed
 - Sampling & Analysis Plan issued and in progress



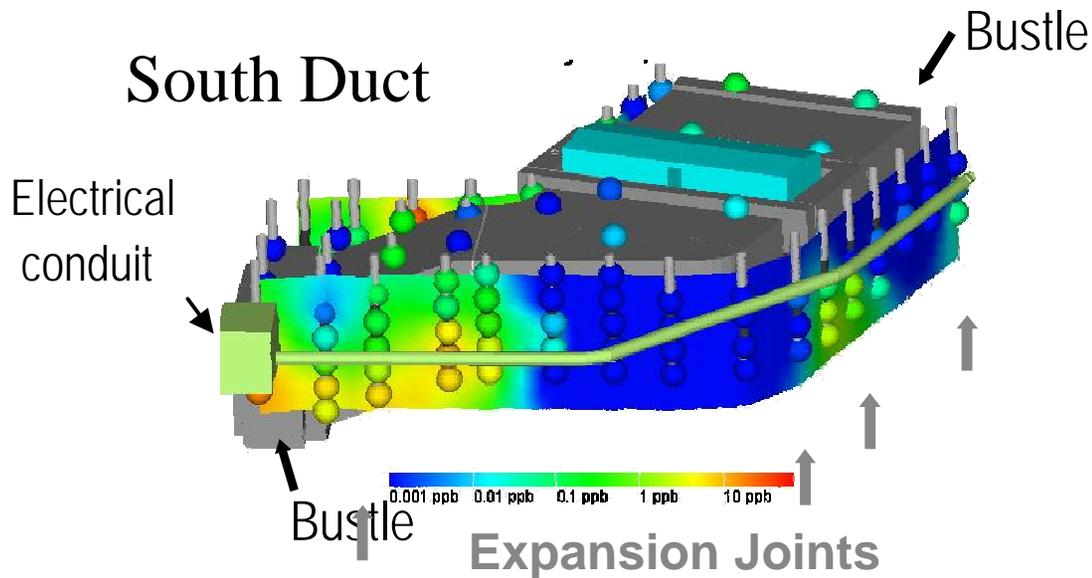
Small Footprint Geoprobe



- Installed PFT monitoring ports and obtained soil samples.
- Enables access to space constrained areas. Allowed sampling closer to buildings and structures.
- Quick, easy to use. More maneuverable than truck mounted unit.

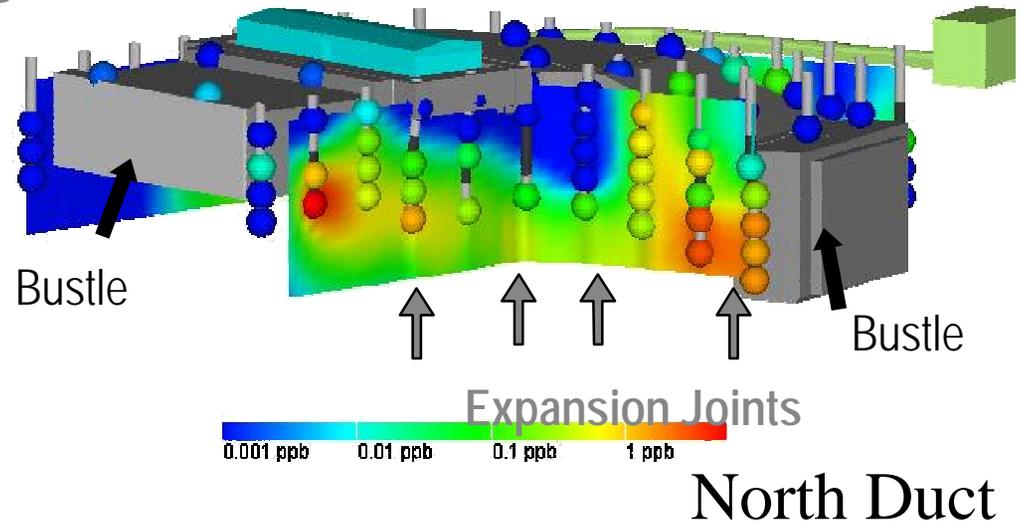


Tracer Gas and 3-D Environmental Visualization System



- PFT tracer gas study has identified areas of high, medium, and low probability of leakage
- North Duct leaking at higher rate than the South Duct and primarily at the expansion joints

- Large areas with no leakage were identified on the South Duct
- This will make our Sampling and Analysis Plan much more focused and efficient





BGRR Above Ground Ducts





BGRR Above Ground Ducts





Canal/Water Treatment House

- **Removed the Water Treatment House foundation and slab**
- **Removed the East Yard Sump – 8 1/2 ton, single lift**
- **Isolated and removed the Canal discharge line 12 feet below grade at the east boundary trench**



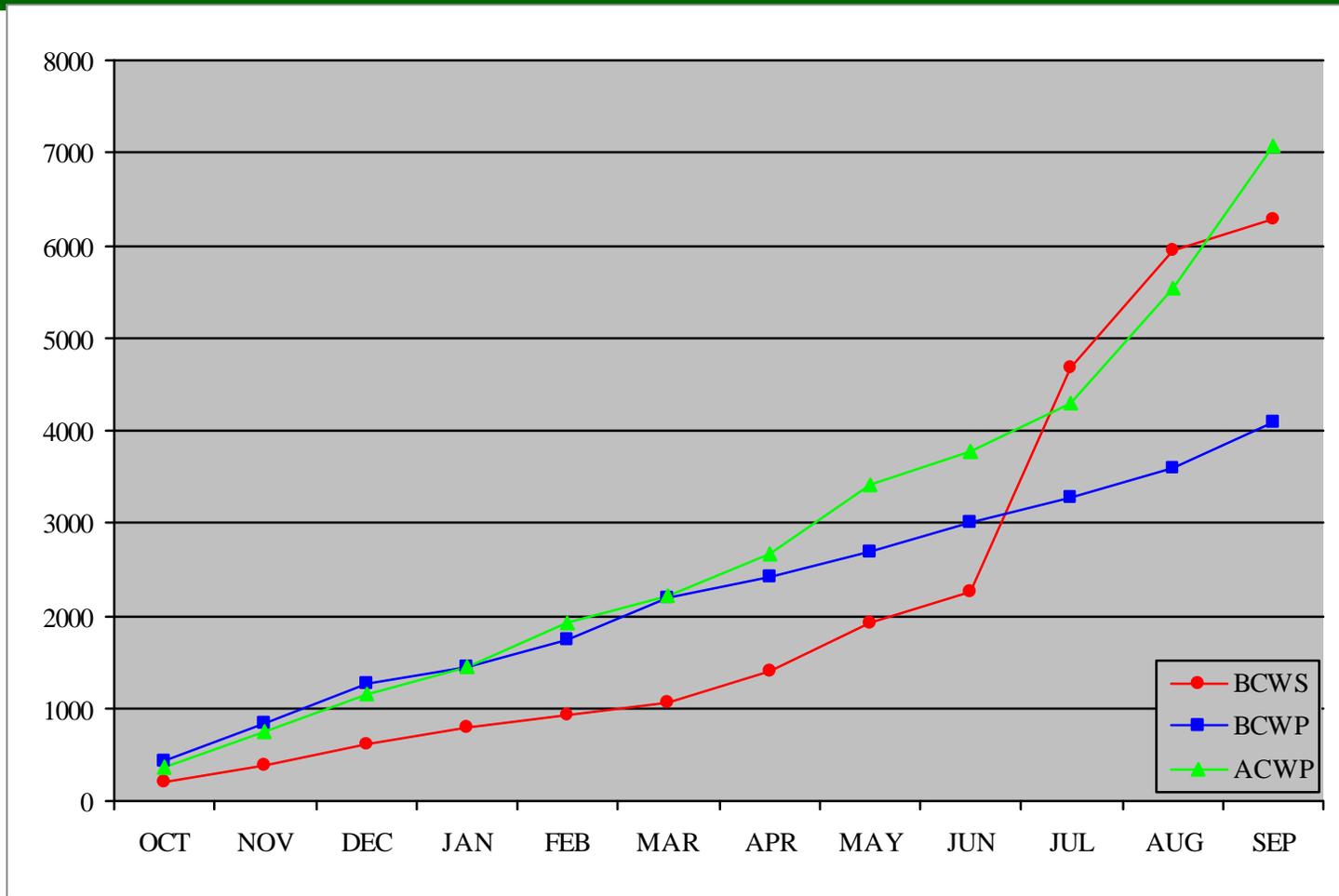


Removal of Above Grade Canal House





BGRR FY01 Performance (\$000)



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
BCWS	193	377	617	798	918	1068	1401	1910	2264	4668	5941	6276
BCWP	424	834	1268	1439	1729	2185	2416	2681	2999	3286	3599	4083
ACWP	358	745	1155	1452	1921	2224	2665	3413	3770	4298	5528	7080

SC Actuals



BGRR Cost Variance Analysis

BCWP \$4,083.3K ACWP \$7,080.2K CV -\$2,996.9K

Variance Explanation:

- Work Related – various issues
 - AGD – Operational Surveys, Analytical Charges, duct handling, duct S&M, (-909)
 - BGD – Sampling Costs (BCP in progress), (-438)
 - Canal – Radwaste & Soil handling increases, subcontracts for FSS; Radiological Engineers; off site lab costs higher than expected, (-1290)
 - Admin – FSS > \$100k over budget, Bio Shield Removal > \$120k over budget, Bioassay costs, (-282)
- Planning – many problems due to inadequate planning
 - Ambitious schedule
 - No Level 3 schedules generated prior and including the last rebaselining effort
 - Lack of resources
 - Unknown structures/conditions



BGRR Schedule Variance Analysis

BCWP \$4,083.3K BCWS \$6,274.4K SV -\$2,191.1K

Variance Explanation:

• **AGD (-1023)**

- Shipping delays (characterization & safety issues)
- heat stress
- mobilization of contract labor
- Envirocare disposal
- Shipping moratorium

• **BGD (-257)**

- SAP review process extended
- heat stress
- Geoprobe damage
- sewer line rerouting
- construction of weather shield

• **Canal (-921)**

- drywell remediation
- soil removal near/below 703
- Super Sacks for potentially contaminated soil



BGRR FY 2002 Look Ahead

- ◆ Continue Above Ground Duct Shipments (22 of 49 sections shipped)
- ◆ Below Grade Ducts
 - Remove Coolers & Filters
 - Complete environmental sampling
 - Complete EE/CA
- ◆ Issue Below Grade Canal
 - Issue Action Memo
 - Complete Work
- ◆ Complete ASTD Project work – issue report in April 2001.



BGRR FY 2002 Issues

- ◆ Duct Shipping Problems
 - Water found in ‘sealed’ duct
 - Loss of strong tight seal integrity
 - Overweight shipment
- ◆ Agreement with EPA and State on the extent of BGRR Cleanup & End State
 - Suffolk County and New York State prefer alternative 3 for Lower Canal
 - Pile
 - Current approach on Canal, Below Grade Ducts may require work sequence reevaluation



BGRR FY 2002 Issues

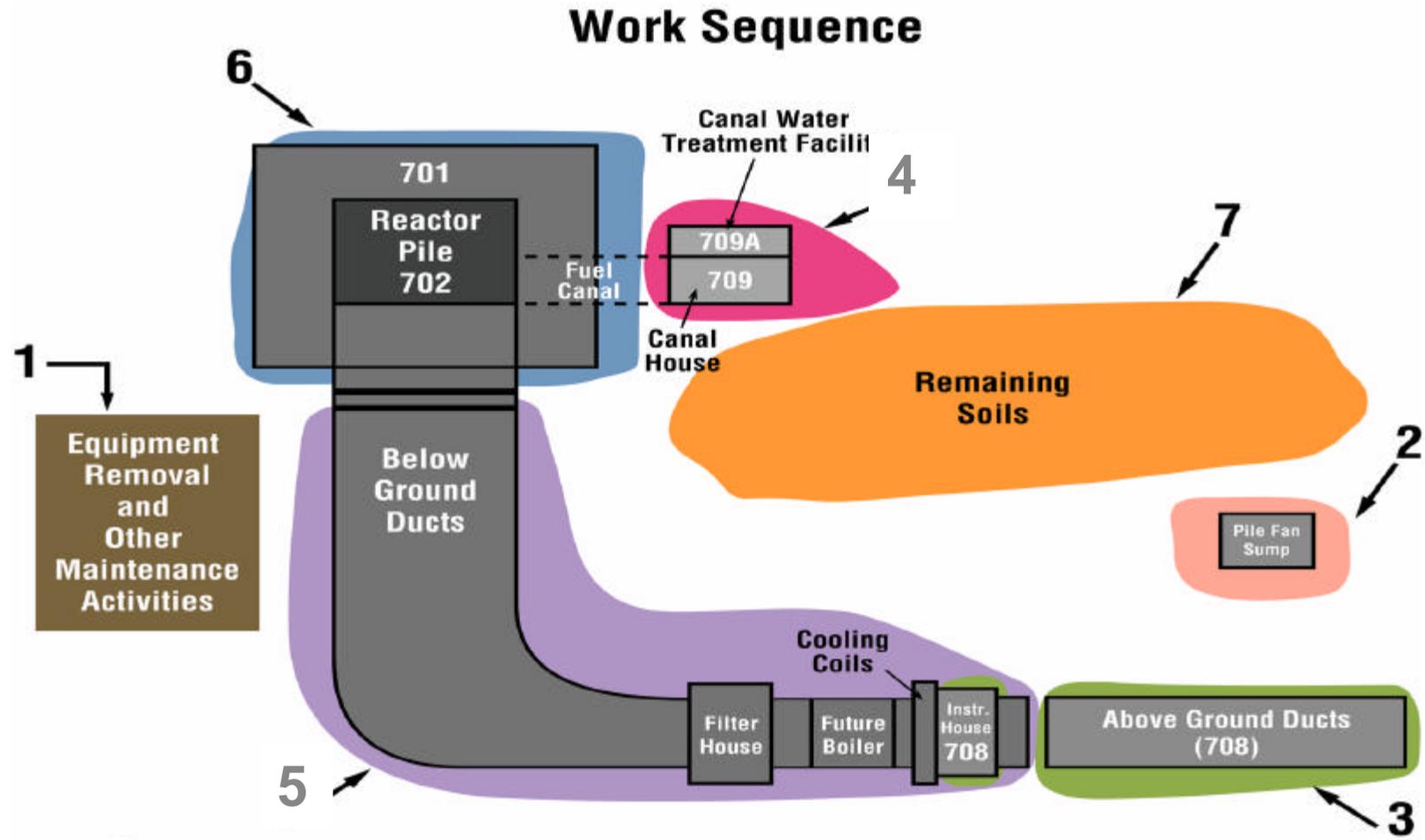
- ◆ Resolution of URS claim
- ◆ FY 2003 funding proposed in President's Budget
 - Does not support BGRR D&D



Backup Slides



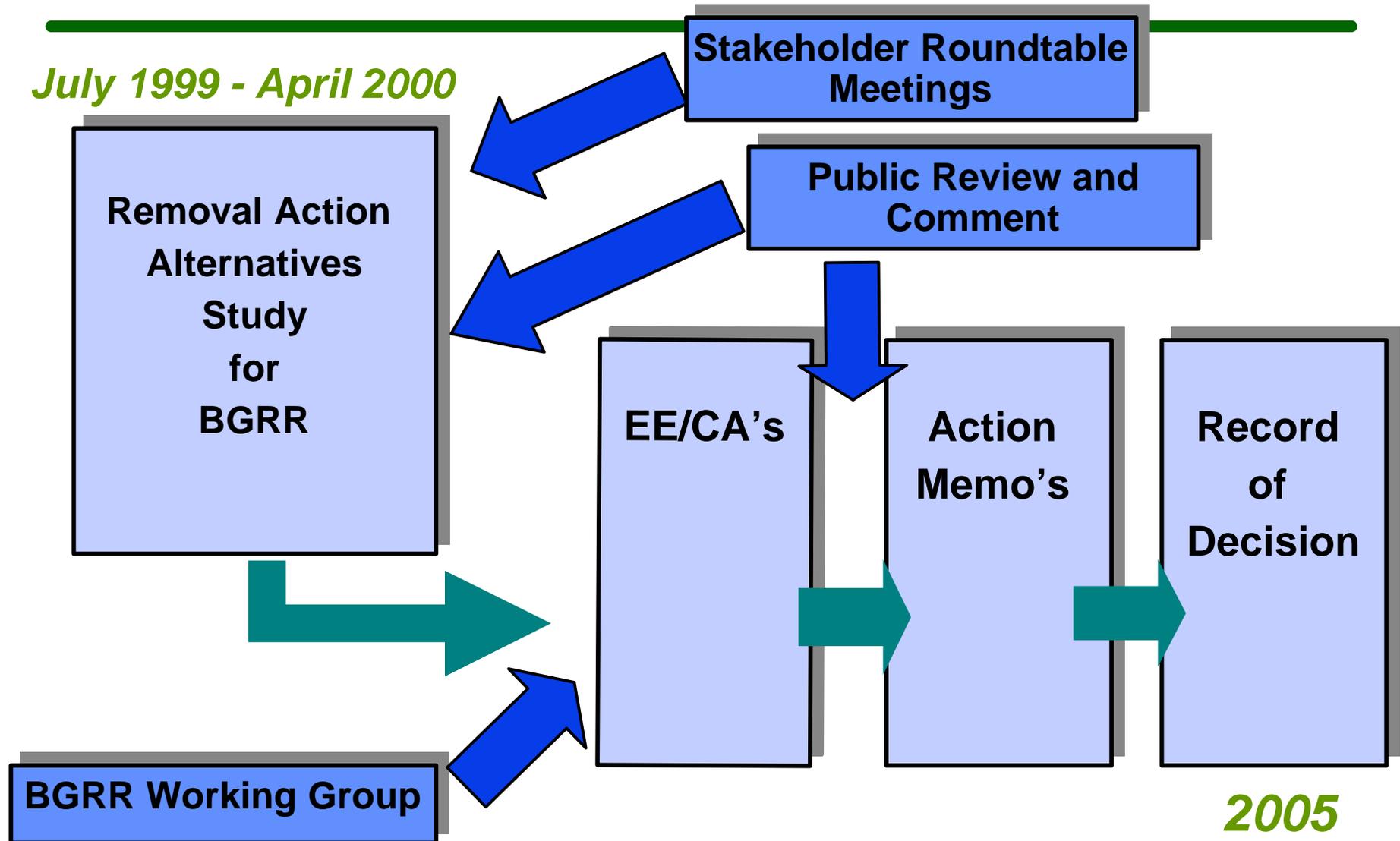
BGRR Work Sequence





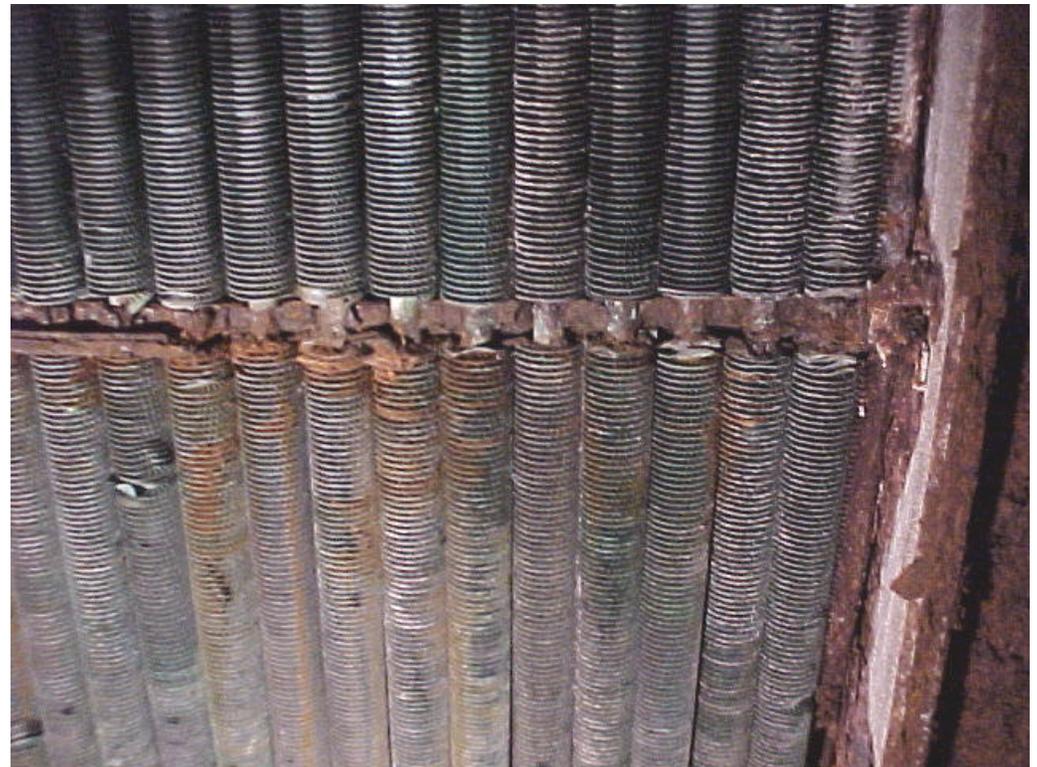
BGRR CERCLA Process Overview

July 1999 - April 2000





BGRR BGD Cooler Coils





Strong Tight Damage





Overweight Truck Shipment

