Hematite Decommissioning Project

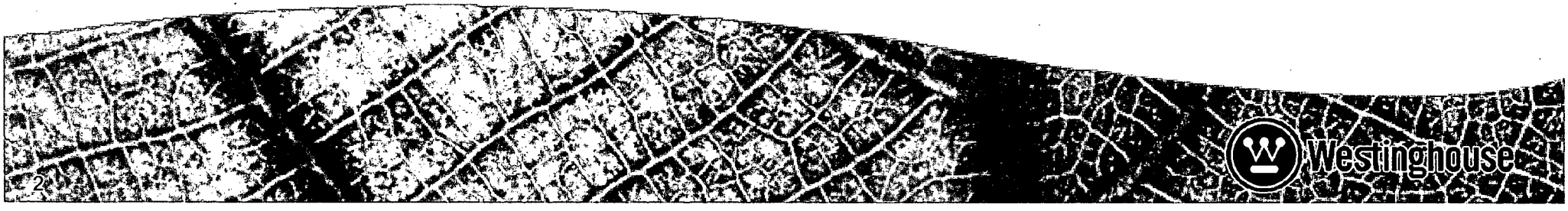
NRC/Westinghouse Management Meeting

October 15, 2009

Westinghouse

Agenda

- Introductory Remarks
- Management Meeting (1 hr)
  - Project Update
  - Facility Modifications
  - Process Building Characterization
  - US Ecology Exemption
  - Regulatory Approvals to Begin Decommissioning
  - Decommissioning Plan
  - Hematite Licensing Actions/NRC Support
- Decommissioning Plan Overview (2 hrs)



U.S.NRC
United States Nuclear Regulatory Commission
Protecting People and the Environment

Keys to Successful Interaction

- Keep communication
  - Open
  - Early
  - Frequent
- Define success early
- Have realistic expectations and schedules
- Ensure adequate resources
- Be open to modifying positions
  - Listen to understand
- Reach closure and move on

Hematite has adopted William Borchardt "Keys to Successful Interaction" as presented at 2009 ANS Utility Working Conference

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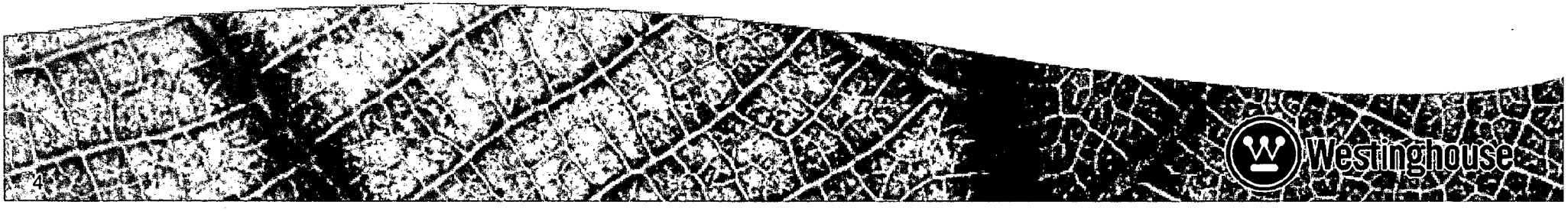
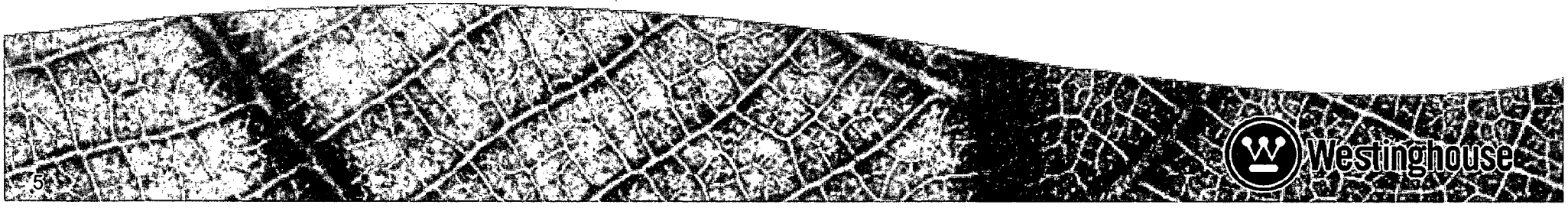
Hematite Mission Statement

To complete the clean-up, decommissioning, and license retirement of the Hematite Decommissioning Project in a safe, socially responsible, and environmentally sound manner

Successful Project for all Parties

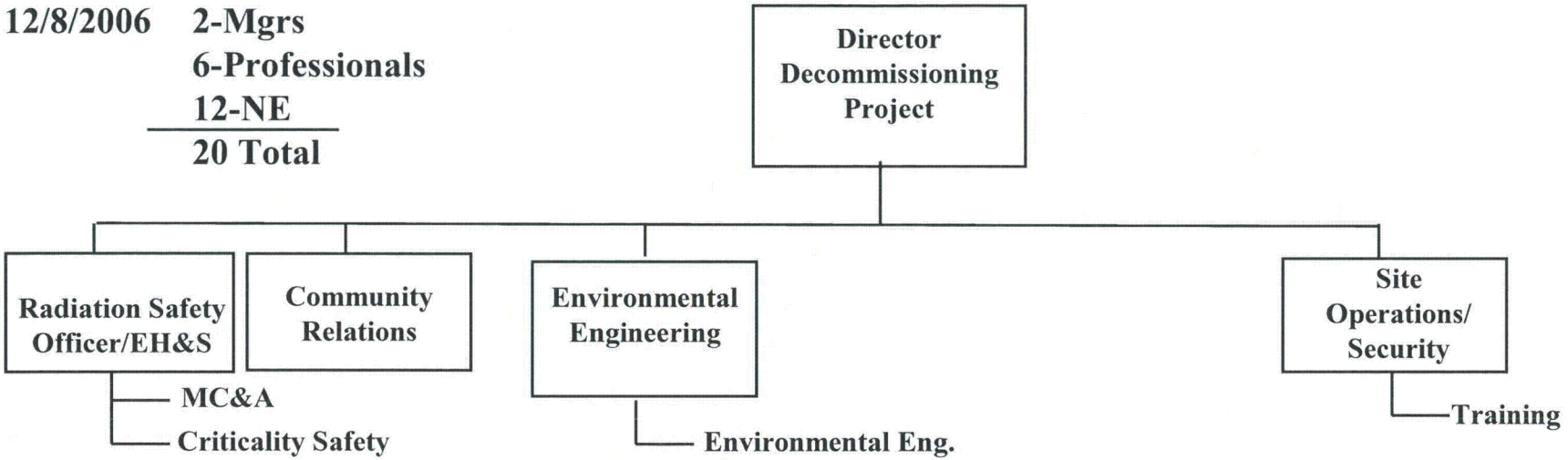


PROJECT UPDATE

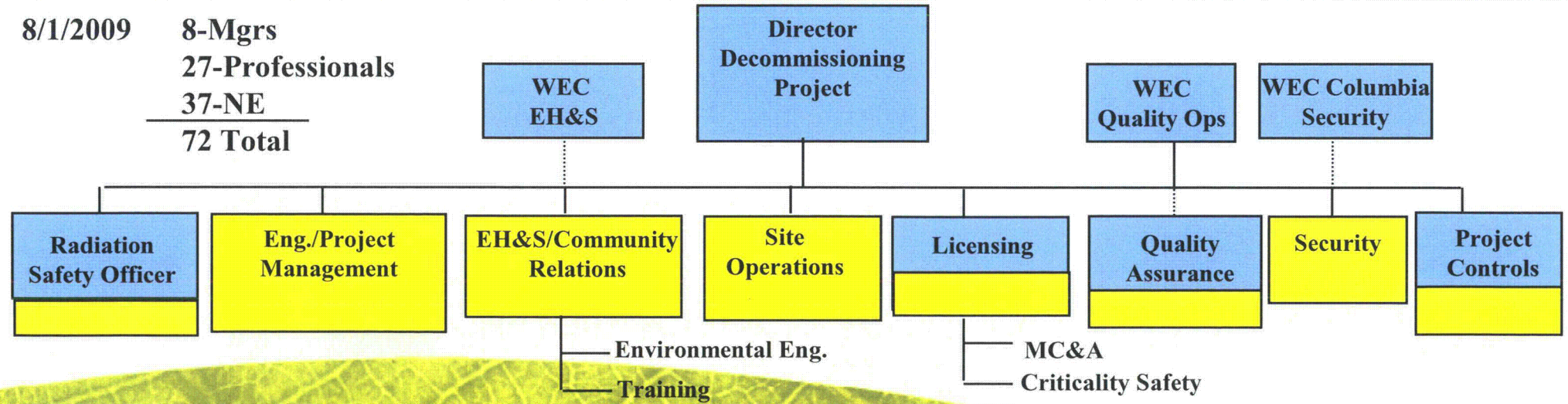


Project Organization

12/8/2006 2-Mgrs
6-Professionals
12-NE
20 Total



8/1/2009 8-Mgrs
27-Professionals
37-NE
72 Total



Blue = Westinghouse

Yellow = Change

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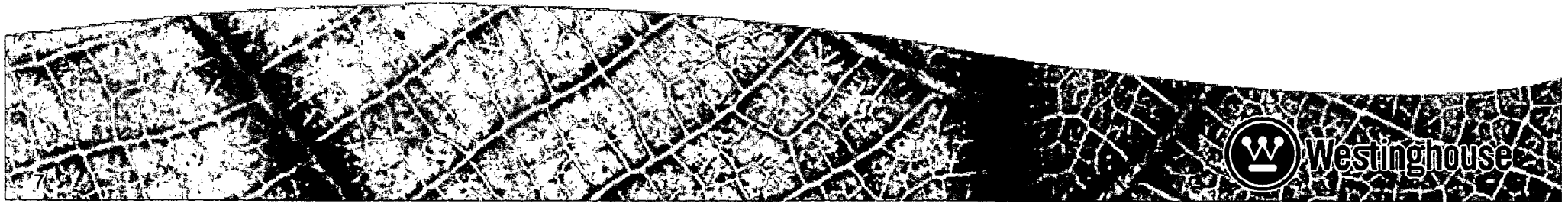
Project Personnel

- Re-staffed project, added experienced and critical skill personnel (RSO, Licensing, Criticality, EH&S, Security, Operations, QA, etc.)
- Hired or contracted with experienced groundwater, buried waste/soil and NRC decommissioning experts (Fort St. Vrain, WEC Waltz Mill, Big Rock Point, Maine Yankee, Connecticut Yankee, FUSRAP, former NRC employees)
- Qualified, bid and selected remediation contractors

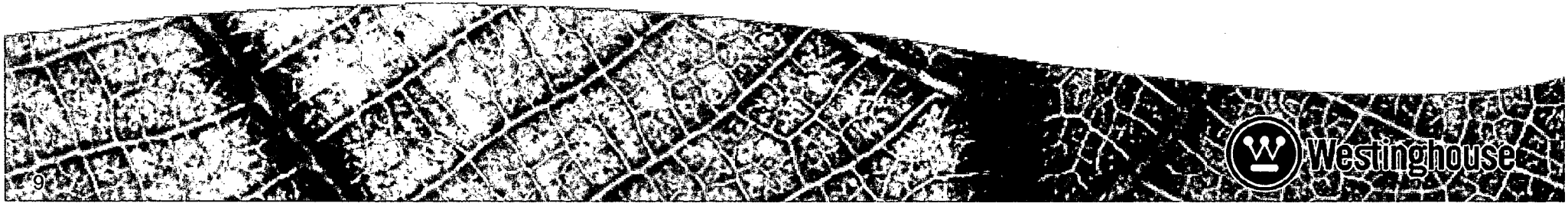


Health of Hematite Fundamental Programs

PROGRAMS	● — Upgraded ○ — Sufficient ⊘ — Insufficient					
	STAFFING		PROCEDURES		TRAINING	
	Status	Comments	Status	Comments	Status	Comments
1. Project Engineering	○	Add Eng. Proj. Mngr.	○	3 upgraded. 3 to be revised. 2 new ones to be processed.	○	Need Qualification Cards.
2. Training	●		○	5 revised to be workable, but new staff identified upgrades. 1 new one to be processed.	●	Subject Matter Experts give training. New Training Lead has 25 years experience.
3. Operations	●		●	All 3 upgraded.	○	Qualification Cards for workers require development.
4. Radiation Protection	●		○	6 upgraded. 10 revised; upgrade planned. 4 to be revised. 7 new to be processed.	●	Qualification Cards established and trained to.
5. Nuclear Criticality Safety	●		●	3 upgraded. 1 to be revised.	○	Qualification Cards for workers require development.
6. Health & Safety	●		●	14 upgraded. 6 to be revised. 3 new ones to be processed.	●	Workers trained to upgraded H&S procedures.
7. Material Control & Accounting	●		○	Policy upgraded. 7 to be revised. 2 new ones to be processed.	○	Qualification Cards for workers require development.
8. Waste Management & Transportation	●		○	2 upgraded. 4 to be revised. 17 new ones to be processed.	○	Qualification Cards for workers require development.
9. Quality Assurance	●		○	4 upgraded. 9 to be revised. 3 new ones to be processed.	●	Corporate training completed for QA staff.
10 Environ-mental Monitoring	●		●	11 upgraded. 4 to be revised. 1 new ones to be processed.	○	Qualification Cards for workers require development.
11. Security	●		○	10 upgraded. 3 to be revised. 9 new ones to be processed.	●	Security training, including Qualification Cards, by end of October.
12. Licensing	●		●	2 upgraded. 1 to be revised.	●	Staff trained to upgraded Licensing procedures.
13. Emergency Response	●		●	All 5 Upgraded.	○	Leaders trained. Field responders training based on Qualification Cards.

Project Highlights

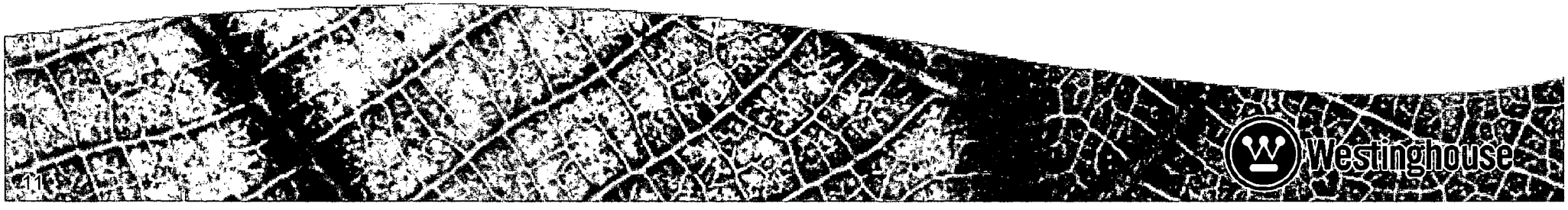
- Continuing 4 year site safety record
- No significant radiological contamination in groundwater
- Two recent favorable NRC Inspection in August and October
- Improved Performance of Corrective Action Program



Hematite CAPs Health Metrics

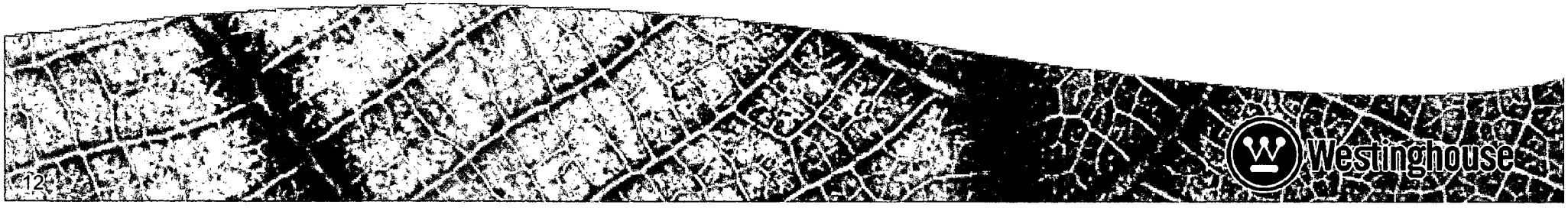
CATEGORY	"GREEN" TARGET	JUNE 2008	FY08 FINAL	SEPT 2009
Overall CAP Health	2.00/2.5	1.57/5R RED	2.14/2R YELLOW	2.71/1R GREEN
% Self Identified	90%	100% GREEN	90.8% GREEN	97.4% GREEN
% Issue Reports Screened in less than 7 days	90%	78% RED	87.5% YELLOW	100% GREEN
% RCAs Completed less than 75 days	50%	0% RED	0% RED	0% RED
% ACAs Completed in 30 Day Goal	60%	0% RED	33.3% RED	100% GREEN
% Open Commitments with <2 Due Date Extensions	90%	84.9% RED	87.2% YELLOW	96.6% GREEN
% Commitments On Time	93%	82.6% RED	95.5% GREEN	96.9% GREEN

FACILITY MODIFICATIONS

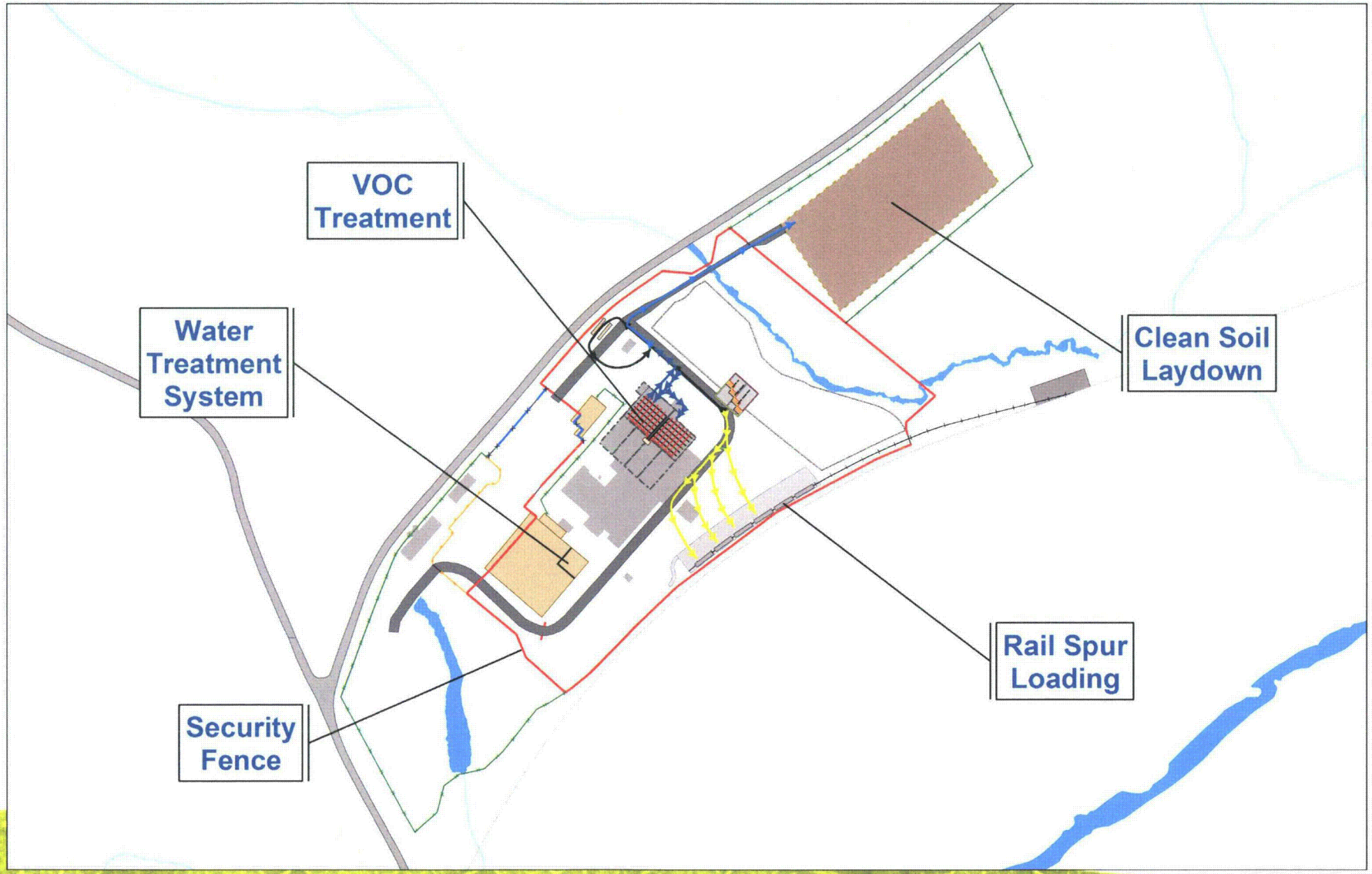


Facility Modifications (Pre-Decommissioning)

- Installed new groundwater monitoring wells
- Installation of an On-Site Rail Spur (For transporting contaminated materials to disposal).
- Clearing areas for a clean soil stockpile area
- Installation of haul roads
- Expanding site fence to enclose the rail spur, clean soil stockpile area, and remediation work areas
- Removal of the Process Buildings
- Build the Water Treatment System



Facility Modifications



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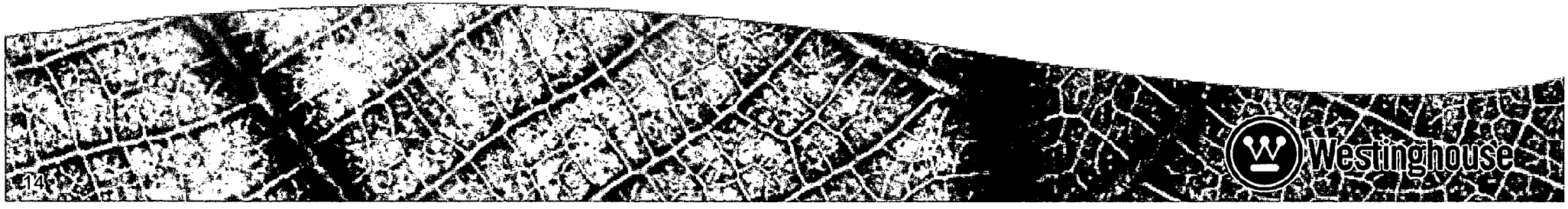
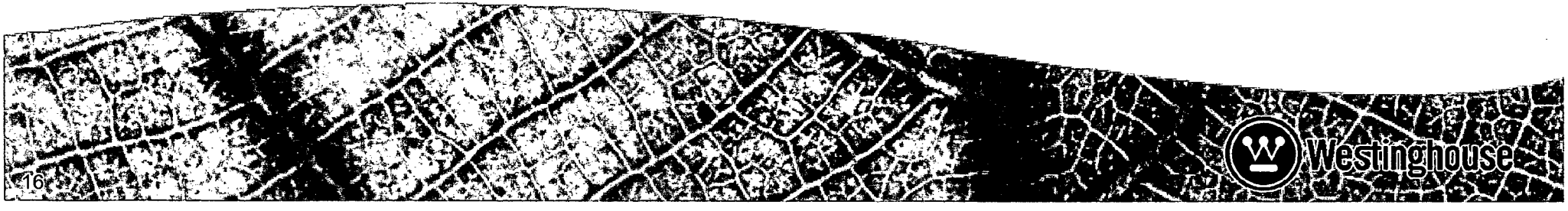
PROCESS BUILDING CHARACTERIZATION



Process Building Characterization

- 8/08 - Began Process Building Investigation to baseline conditions and develop pre-demolition work scope
- Identified items in the buildings that still contained Uranium
- These conditions are different than NRC understanding that authorized the 2006 Building Demolition License Amendment
- 11/08 – Notified NRC and stopped building investigation
- NRC approved our approach to complete the investigation and restarted in July 2008
- Completed radiological (rad) surveys and finalizing U-235 mass estimates
- Building characterization report to be submitted by10/23/09
- Additional actions to address the Uranium will be agreed upon with NRC, prior to Building Demolition and closure of the CAL

US ECOLOGY EXEMPTION



NRC US Ecology Idaho (USEI) Exemption

- 5/21/09 – Requested NRC approval to disposal of low activity waste at USEI, containing Special Nuclear Material (SNM)
- WEC believes Hematite waste meets NRC evaluation criteria: rad exposure (few mR/yr), security, criticality, environmental impact
- USEI is permitted to accept waste if NRC and IDEQ concur
- Since 1998, USEI has disposed of >2 million tons of low activity radioactive material
- An Idaho Lobbyist Group has requested a hearing and W will respond to the request
- NRC approval forecasted for April 2010.
- If approved, Hematite may pursue another exemption to dispose of Process Building

If approved, this is a safe and cost effective disposal method which supports national interest for alternative waste disposal options

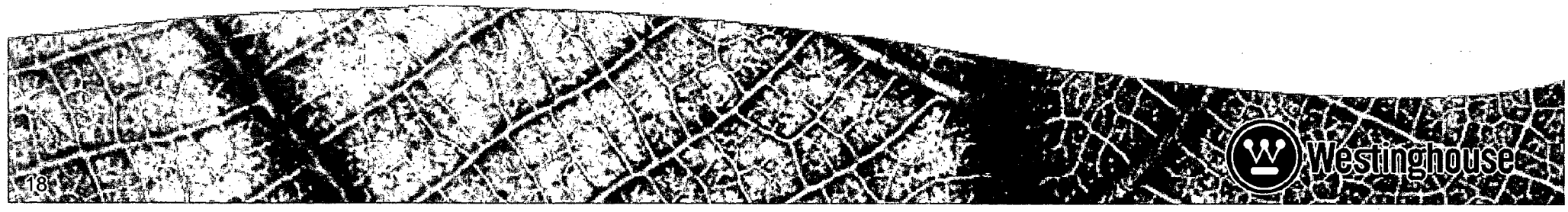
Regulatory Approvals For Decommissioning

Record of Decision (ROD)

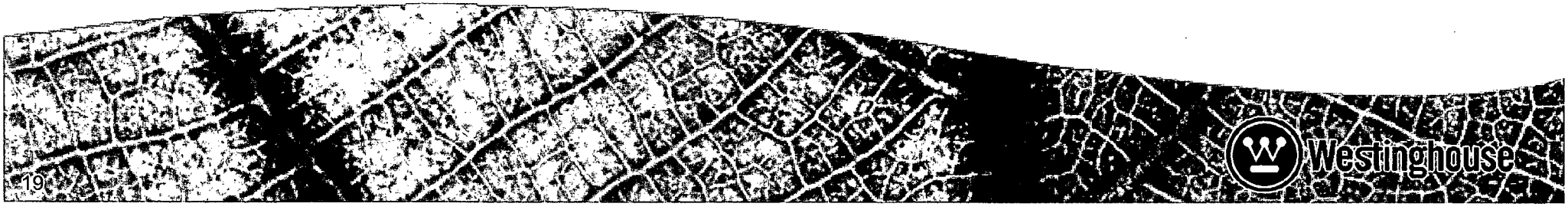
- The ROD describes the remediation work scope and end state criteria, for the removal of buried waste and contaminated soil/sediment
- Missouri Department of Natural Resources (MDNR) approved the ROD Jul 2009.
- The ROD is based on NRC's approved methods and cleanup criteria

Decommissioning Plan (DP)

- DP submitted to NRC on 8/12/09
- The DP details the methods and controls to safely implement the ROD remediation work scope



DECOMMISSIONING PLAN



Hematite Decommissioning Plan

NRC Approval Process

- Jun 2006 – Submitted a Decommissioning Plan (DP)
- Sep 2006 – NRC accepted DP, but Technical Review on hold pending additional information
- Aug 2009 – Resubmitted the DP, started NRC 90 day Acceptance Review

Forecast Dates

- Nov 2009 – Upon acceptance, start of NRC 12 month Technical Review
- 2009/2010 - NRC Public Meeting & Comment Period
- Nov 2010 – NRC Approved DP
- 2010 – 2012 – Site Remediation Activities
- 2012 – Complete Remediation and NRC submittal of Final Status Survey (FSS)
- 2013 – NRC Approval of FSS and License Termination

Decommissioning Plan Submittal

Incorporated NRC Feedback (2005 to Present):

- Selected decommissioning contractors and detailed how the work will be performed.
- Additional characterization is needed.
- Developed security, criticality and material control & accounting programs to support the work.
- Addressed NRC concerns raised in previous RAIs.

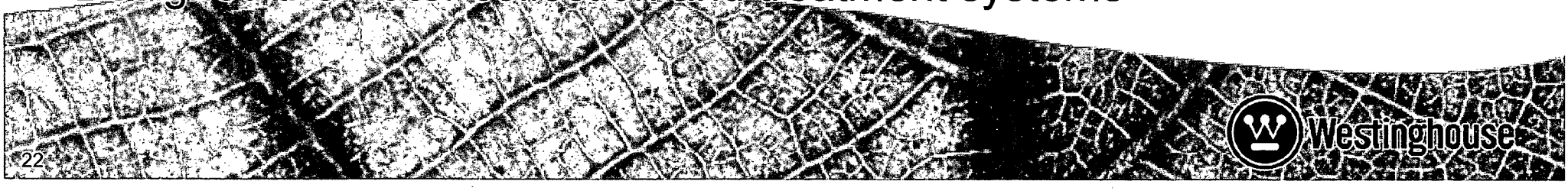
Enhancements Since 2006 DP Submittal

Data Collection

- Performed 3 sampling/characterization campaigns of waste, soil and buildings to meet NRC requirements
- Consolidated all previous characterization data into 1 report
- Found low levels of Radium in 2 Pits

Project Planning

- Defined the remediation work scope methodologies, process and controls
- Work methods are based on comprehensive nuclear criticality, radiological, and industrial safety controls
- Defined process for material handling, segregation and treatment
- Incorporated radiological surveys and monitoring to ensure personnel safety
- Defined new site security and radiation boundaries to address an "unlikely scenario"
- Designed the water collection and treatment systems



Enhancements Since 2006 DP Submittal (Cont)

Technical Basis Documentation

- Used a more appropriate NRC Model (Residential Farmer) for soil cleanup limits. Developed soil DCGLs and supporting technical basis documents
- Some buildings will now be decontaminated , surveyed and will remain. Developed soil DCGLs and supporting technical basis documents
- Recent groundwater studies show no significant radiological contamination in groundwater
- Performed Hazards Analysis and develop nuclear criticality safety analysis (NCSA) as the basis for a robust control scheme to support decommissioning/removal methodologies

Enhancements Since 2006 DP Submittal (Cont)

Programs/Procedures

- New Health & Safety and Project Quality Plan
- Upgraded the Radiation Protection and Emergency Response procedures
- Developed the Final Status Survey (FSS) Program, Water Management Plan and Waste Management Plan

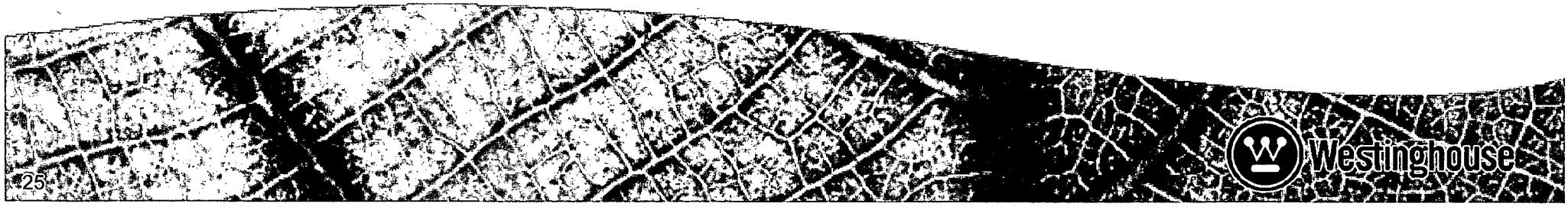
Regulatory

- Increasing SNM Possession Limits for higher enriched Uranium (with contingency plans) to address excavation of government waste and provide margin for an "unlikely scenario"

Enhancements Since 2006 DP Submittal (Cont)

Financial Assurance

- Developed cost estimates, manpower loading and schedules based on detailed plans/negotiated pricing



DP Submittal / Supporting Documents

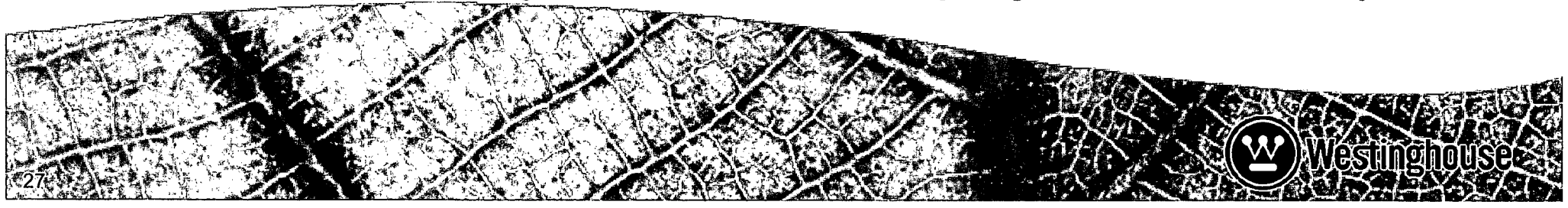
NRC Submittal

- Decommissioning Plan (15 Chapters)
- 4 Supporting Technical Documents (Historic Site Assessment, Radiological Characterization, Surrogate Rpt, Environmental Rpt)
- Enhanced Fundamental Nuclear Material Control Program (FNMCP, MC&A), Physical Security Plan with security procedures to support decommissioning activities
- Decommissioning Funding Plan/Cost Estimate with revised Financial Assurance
- Provided responses to 77 previous NRC RAIs/comments

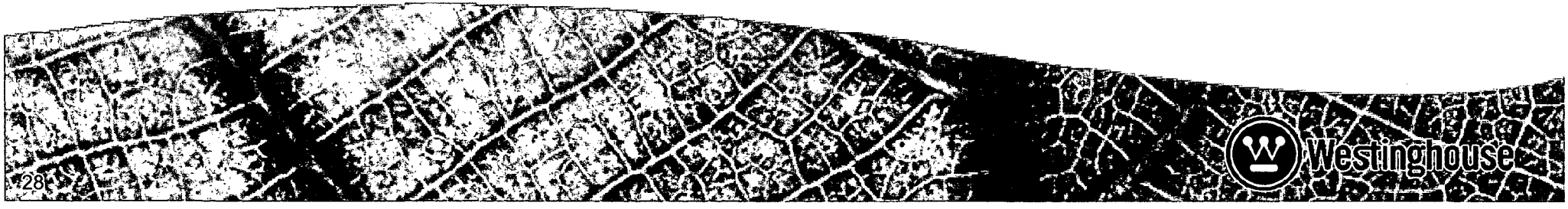
> 40 DP Supporting Documents available for NRC inspection (technical basis, analysis, Nuclear Criticality Safety Assessments (NCSAs), programs/procedures, Final Status Survey (FSS), etc.)

DP Submittal / Supporting Documents

- Performed extensive data collection, work planning, developed safe and proven work methods and controls, supported by technical basis/ programs/ procedures
- The DP is based on robust criticality controls to address handling of Highly Enriched Uranium
- Submitted a complete, well thought-out and high quality DP
- Already completed extensive program/procedure upgrades
- Plan, programs, personnel and funding in place to execute the decommissioning
- Community is very anxious for the project to be completed



HEMATITE LICENSING ACTIONS / NRC SUPPORT



HDP License Documents in Review/Approval

Document Type	Priority	Date Submitted	Desired Date	Action
Physical Security Plan Rev 8	High - 1	3/10/2009	9/25/2009	**Complete - NRC approved 10/7/09.**
Physical Security Plan Rev 9	High - 1	7/15/2009	9/25/2009	**Complete - NRC approved 10/7/09.**
Fundamental Nuclear Material Control Plan	Low	3/10/2009	10/30/2009	
USEI Alternate Disposal and Exemption Request	High - 3	5/21/2009	4/1/2010	Acceptance Review completed 6/19/09, Public Meetings completed 6/28/09, CCI requested hearing 9/30/09, Public Comment closed 10/5/09, WEC will respond
License Application Revision	High - 2	5/22/2009	12/19/2009	NRC Acceptance Review completed 6/19/2009
Decommissioning Plan Related				
Decommissioning Funding Plan	Low	7/10/2009	AR - 10/12/09	NRC Acceptance Review
Physical Security Plan and Contingency Procedures	High - 1	8/5/2009	AR - 10/5/09	NRC Acceptance Review
Fundamental Nuclear Material Control Plan	High - 1	8/5/2009	AR - 10/5/09	NRC Acceptance Review
Decommissioning Plan and Revision to License Application	High - 1	8/12/2009	AR - 10/12/09	NRC Acceptance Review. **W desires to improve the NRC standard of 15 months**
Miscellaneous				
W letter to Withdrawal Proprietary Information (RCA)	Medium - 1	4/17/2009	10/17/2009	
Setup Phone Conference to clarify issues with ORISE/W Lab Discussion	Medium	N/A	Oct-2009	
Schedule Technical Meetings on DP topics	High	N/A	Nov and Dec	Will be scheduled to follow the DP Acceptance Review and Public Meeting

W Expectations

- Keep communication
  - Open
  - Early
  - Frequent
- Define success early
- Have realistic expectations and schedules
- Ensure adequate resources
- Be open to modifying positions
  - Listen to understand
- Reach closure and move on