



# **PGDP Property Acquisition Study**

**PGDP Citizens Advisory Board  
June 15, 2006**

Presented by Lindell Ormsbee,  
Director; Kentucky Research Consortium for Energy and  
Environment (KRCEE)



# Congressional Directive to DOE

*“Within the funds provided the Department shall undertake a study of the potential purchase of property or options to purchase property that is located above the plume of contaminated groundwater near the facility site. The study shall evaluate the adequate protection of human health and environment from exposure to contaminated groundwater and consider whether such purchase, when taking into account the cost of remediation, long-term surveillance, and maintenance, is in the best interest of taxpayers.”*

*Energy and Water Development Appropriation Bill, 2006 (Senate Report 109-084)*



# Objective

Evaluate the risk reduction and cost benefits of DOE potentially purchasing property located above the groundwater plumes in comparison to other cleanup alternatives.

Information developed will be used in decision documents in a manner consistent with applicable requirements and procedures.



# Project Tasks/Responsibilities

- **Task #1: Identification of properties**
  - Identification of property overlying and adjacent to contaminated groundwater plumes and potential surface water contaminant pathways
  - Performed by KRCEE, UK Ag Economics, UK Ag Engineering, and UK Civil Engineering
- **Task #2: Delineation of property acquisition options**
  - Delineation of approaches for property purchase, or obtaining options to purchase properties identified in Task 1.
  - Performed by UK College of Law
- **Task #3: Development of cost estimates**
  - Development of cost estimates to acquire interests in property based upon the approaches delineated in Task #2
  - Performed by KRCEE, UK Ag Economics



# Project Tasks/Responsibilities

- **Task #4: Completion of GW sensitivity analyses**
  - Determination of groundwater flow paths that might result upon cessation of enrichment operations
  - Identification of zones of potentially impacted properties
  - Performed by KRCEE and UK Civil Engineering
- **Task #5: Identification of remedial action assumptions**
  - Identification of current remedial action assumptions for sources contributing contamination to groundwater and surface water
  - Identification of changes to current remedial action assumptions that could result from implementation of sustainable restrictions to human exposure
  - Performed by KRCEE
- **Task #6: Identification of cost-effective property acquisition conditions**
  - Identification of conditions that make property acquisition cost-effective while still ensuring protection for human health and the environment
  - Performed by KRCEE



# Project Tasks/Responsibilities

- **Task #7: Completion of an economic analysis of the potential purchase options**
  - Integration of information from Tasks 1 – 6 to identify the overall cost of property/options purchase.
  - Performed by KRCEE, UK Ag Economics
- **Task #8: Public interaction support**
  - Preparation of presentations for describing methods and results of the Property Acquisition Study
    - Three presentations for CAB (May, July, September)
    - Two presentations for public (June and October)
    - Additional public interaction may occur as needed
  - Performed by KRCEE
- **Task #9: Reporting**
  - Preparation of progress reports and draft/final project reports
    - Draft report due September 15, 2006
    - Final report due October 31, 2006
  - Performed by KRCEE



# Property Acquisition Study Schedule

ID	Task Name	Start	End	Duration	Mar 2006		Apr 2006			May 2006			Jun 2006			Jul 2006			Aug 2006			Sep 2006			Oct 2006							
					3/19	3/26	4/2	4/9	4/16	4/23	4/30	5/7	5/14	5/21	5/28	6/4	6/11	6/18	6/25	7/2	7/9	7/16	7/23	7/30	8/6	8/13	8/20	8/27	9/3	9/10	9/17	9/24
1	Project Scoping	3/15/2006	5/19/2006	9.60w	↔ KRCEE																											
2	Project Kickoff	5/19/2006	5/19/2006	0.04w	↓ PROJECT TEAM & DOE																											
3	Task #1 Identification of properties	5/19/2006	7/12/2006	7.80w	↔ UK Ag Engr, KRCEE																											
4	Task #2 Delineation of property of acquisition options	5/19/2006	7/27/2006	10w	↔ UK Law																											
5	Task #3 Development of cost estimates	5/19/2006	7/13/2006	8w	↔ UK BE & UK Ag Ext																											
6	Task #4 Completion of groundwater sensitivity analyses	5/19/2006	7/6/2006	7w	↔ UKCE																											
7	Task #5 Identification of remedial action assumptions	5/19/2006	6/8/2006	3w	↔ KRCEE																											
8	Task #6 Identification of cost-effective property acquisition conditions	6/20/2006	7/17/2006	4w	↔																											
9	Task #7 Completion of economic analysis of potential purchase options	7/17/2006	8/11/2006	4w	↔																											
10	Task #8 Public interaction support	4/20/2006	9/21/2006	22.20w	↔ KRCEE & DOE PPPO																											
11	Task #9 Reporting	5/19/2006	10/31/2006	23.60w	↔																											
12																																
13	Brown = UK Ag Engineering	3/15/2006	3/15/2006	0w	◆																											
14	Gray = UK Ag Econ	3/15/2006	3/15/2006	0w	◆																											
15	Cyan = KRCEE	9/5/2005	9/5/2005	0w																												
16	red = Project Team	9/5/2005	9/5/2005	0w																												
17	green = UK Law	9/5/2005	9/5/2005	0w																												
18	yellow = UK Civil Engineering	9/5/2005	9/5/2005	0w																												
19	Blue = DOE PPPO	9/5/2005	9/5/2005	0w																												