
URANIUM MINING IN VIRGINIA

STUDY OBJECTIVES: TO ASSESS THE SCIENTIFIC AND TECHNICAL ASPECTS OF URANIUM MINING, MILLING AND PROCESSING IN VIRGINIA AND ASSOCIATED ENVIRONMENTAL, HUMAN HEALTH, SAFETY AND REGULATORY ISSUES

THE STUDY WILL REVIEW:

1. URANIUM SUPPLY/DEMAND TRENDS AND PROJECTIONS

- a. GLOBAL, NATIONAL AND STATE
- b. SHORT-TERM AND LONG-TERM TRENDS
- c. COSTS, PRICES AND MARKETS

2. WORLDWIDE URANIUM DEPOSITS AND OPERATIONS

- a. DEPOSIT CHARACTERISTICS AND LOCATIONS (GEOLOGY, CLIMATE, ETC.)
- b. OPERATION CHARACTERISTICS
- c. COSTS AND MARKETS
- d. BEST PRACTICES
- e. CURRENT ISSUES AND CONCERNS

3. URANIUM DEPOSITS IN VIRGINIA

- a. OCCURRENCE
- b. GEOLOGIC, ENVIRONMENTAL, CULTURAL, CLIMATIC, AND GEOGRAPHIC SETTINGS
- c. PHYSICAL AND CHEMICAL CHARACTERISTICS
- d. STATUS OF CURRENT EXPLORATION
- e. AVAILABLE BASELINE DATA
- f. ECONOMIC FEASIBILITY
- g. COMPARISON OF POTENTIAL URANIUM OPERATIONS IN VIRGINIA WITH GLOBAL DEPOSITS AND PRACTICES

4. URANIUM MINING, MILLING AND PROCESSING TECHNOLOGIES

- a. REVIEW OF CURRENT TECHNOLOGIES AND POTENTIAL NEW TECHNOLOGIES
- b. APPLICATION OF TECHNOLOGIES/PRACTICES TO VIRGINIA DEPOSITS
- c. PROBLEMS AND ISSUES
- d. AVAILABLE INFORMATION
- e. KNOWLEDGE GAPS AND AREAS FOR RESEARCH

THE STUDY WILL ASSESS:

5. OCCUPATIONAL AND PUBLIC HEALTH AND SAFETY

- a. RADIOLOGICAL HAZARDS AND RISKS
- b. OCCUPATIONAL HEALTH AND SAFETY CONCERNS
- c. CONSIDERATIONS FOR LOCAL COMMUNITIES
- d. SHORT- AND LONG-TERM CONSIDERATIONS

6. SECURITY STANDARDS AND PROCEDURES

- a. HAZARDOUS MATERIALS MANAGEMENT
- b. PERSONNEL SECURITY
- c. MATERIAL CONTROL AND ACCOUNTABILITY
- d. TRANSPORTATION SECURITY
- e. INFORMATION SECURITY
- f. SITE SECURITY

7. ENVIRONMENTAL CONSIDERATIONS

- a. POTENTIAL IMPACTS ON AIR AND LAND
- b. GROUND- AND SURFACE-WATER IMPACTS AND PROTECTION
- c. WATER MANAGEMENT INCLUDING NET CONSUMPTION/RECYCLING
- d. WASTE MANAGEMENT INCLUDING OVERBURDEN, WASTE ROCK AND TAILINGS
- e. ECOSYSTEM EFFECTS
- f. OTHER ENVIRONMENTAL HEALTH ISSUES
- g. RISK MODELING AND IMPACTS OF SEVERE WEATHER EFFECTS OR OTHER STOCHASTIC EVENTS
- h. NOISE, AESTHETICS, TRAFFIC AND OTHER LOCAL CONSIDERATIONS

8. CLOSURE AND POST-MINING LAND USE AND MONITORING

- a. MINESITE MONITORING
- b. MONITORING OF TAILINGS AND OTHER WASTES
- c. MONITORING OF LOCAL GROUNDWATER AND SURFACE WATERS
- d. SITE RECLAMATION
- e. LONG-TERM LAND USE IMPACTS AND RESTRICTIONS
- f. OFFSITE ECOLOGICAL MONITORING
- g. POST-CLOSURE FINANCIAL RESPONSIBILITY AND LIABILITIES

9. REGULATORY CONSIDERATIONS AND PUBLIC OUTREACH IN VIRGINIA

- a. HEALTH AND SAFETY REGULATIONS
- b. ENVIRONMENTAL AND MINING LAWS AND REGULATIONS
- c. INSPECTION AND ENFORCEMENT
- d. COMMUNITY RIGHT-TO-KNOW AND EMERGENCY PLANNING
- a. EDUCATION AND OUTREACH

10. FINDINGS AND RECOMMENDATIONS