

## B. ENVIRONMENTAL AND HEALTH TASK GROUP ISSUES LIST

1. **Environmental Impacts of High Voltage Transmission Lines . . . 217**  
The environmental and safety impacts of high voltage electrical transmission lines are not sufficiently known.
2. **Ground and Surface Water Contamination From Surface Mining . . 218**  
Research on the potential environmental problems from surface mining is inadequate, particularly in terms of impacts on ground and surface water quality.
3. **Energy Consumption and Inadvertent Climate Modification . . . . . 220**  
More needs to be known as to whether long-term environmental impacts of increasing worldwide energy use can lead to detrimental or irreversible climate modification.
4. **Variance on Environmental Standards During Development . . . . 221**  
present environmental regulations with regard to the functioning of environmental control equipment are inappropriate to effective technology development at the pilot plant level.
5. **Energy Modeling and Data Bank Requirements . . . . . 223**  
It is not clear from the ERDA Plan and Program that critical needs in energy modeling procedures and the associated data requirements are fully recognized and accepted by ERDA,
6. **Site and Technology-Specific Nature of Cause-Effect Relationships In Environmental and Health Impacts .\*. \*\*\*\* \*\*\*.\*\* \*\*. e\*\* 225**  
Simple extension of energy systems modeling capabilities to the regional discrimination level with expanded emissions categories will not yield a valid impact profile for energy technology decision-making.
7. **Integration of Environmental, Health, Social, and Institutional Research Into Technology Programs . . . . . 227**  
ERDA's presentation and discussion of environmental, health, social, and institutional research indicates a lack of integration of this research into ERDA's technology program,
8. **Energy Impacts of Air and Water Pollution Control Regulations . 229**  
The interactions between the energy, environmental, and economic effects of Federal, State, and local air and water quality standards are not sufficiently understood.
- 9\* **Competing Demands for Water in Western River Basins . . . . . 231**  
The limited availability of water in areas such as the Colorado and Missouri River basins will force systems evaluation of net benefit from energy and non-energy activities which depend on water,
10. **Need for Social Research in Offshore Energy Programs . . . . . 233**  
Social and institutional research is needed to identify potential constraints on the deployment of offshore energy facilities,
11. **Effect of Public Attitudes on Program Implementation . . . . . 234**  
ERDA's plan for energy research, development and demonstration does not include research on the effect of public attitudes and values on implementation of ERDA's programs.
12. **Program Focus in Fossil Fuel Health Effects Research . . . . . 236**  
The ERDA Program of research on the health effects of fossil fuels covers a broad range of biological responses and pollutant exposures. Some research areas do not appear to be relevant to ERDA's mission,

**13. Inadequate Inventory of Skills and Techniques in Health Effects Research . . . . . 239**

A broad-based research effort is critically required in both university and Federal facilities to develop improved techniques for evaluation of health impacts from coal combustion and conversion.

**14. Atmospheric Sulfates as a Potential Constraint on ERDA's Fossil Fuel program . . . . . 241**

Suspected health hazards of atmospheric sulfates may result in air quality standards which would constrain ERDA's programs based on coal.