Project XL Meeting Notes

Conference Room
590 Main Street
Friday, January 22, 1999
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I. Life Under RCRA

A. EPA's recent enforcement activities
B. UVM's Enforcement Experience
C. Trying to live with RCRA

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2. Vermont DEC and UVM

a) 1988 inspection - $10,000 SEP and ESF permit required for storing 80 drums more than 90 days

b) 1992 (?) inspection - $3000 fine (negotiated from $40,000) for storing incompatible chemicals next to each other in the Given Bunker

c) 1995 inspection - Only the ESF visited, minor violations noted, immediately corrected

d) August, 1997 visit

1) ESF portion - minor violations

2) Campus portion

a) Training question

b) Our response

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B. What would be the issues if they visited UVM today?

1. Waste determination (when is something a hazardous waste?)

a) Inspectors have made waste determinations in labs at other institutions

b) If inspectors think it is a waste, then they cite all non-conformances (container closing, compatibility storage, training, labeling)

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II. The Mechanics of XL Participation

A. Planning and rule development began about two years ago

1. National stakeholders: American Chemical Society, CSHEMA National Safety Council), NIH, Lab-XL e-mail list, LCEE meetings
2. Local stakeholders: Burlington NPA's, UVM Environmental Council, Vermont DEC

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B. Federal Register Notice to be published in February, 1999

C. Publication followed by 60 day comment period

D. "Significant" comments responded to by EPA

E. Pilot schools sign FPA after comment period

F. Pilots have 6 months to develop EMP

G. EPA has 30 days to approve EMP before new regulation takes effect

H. Annual inspections and progress reports to Region I will occur over the life of the project (4 years)

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1. The Environmental Management Plan (aka the ESF's role)

A. The EMP will be written by Environmental Safety Facility staff

B. The EMP will be a management document that will outline campus and ESF procedures and responsibilities for handling waste

C. Plans are required to have pollution prevention goals

D. EMP requires upper management review annually

E. EMP will include the ESF storage survey program

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2, The Minimum Performance Criteria (aka the laboratories' role)

A. 8 "inspectable items", 7 under the lab's control

B. Many of these criteria overlap OSHA's requirements for the Chemical Hygiene Plan

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3. The Laboratory Environmental Standard (aka the EPA's role)

A. Coverage - 3 pilot schools for 4 years

Other schools or institutions can join after the first year

B. Enforcement

1. EMP review
2. Inspections
3. Definition of "substantial non-compliance"

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4. The Environmental Performance Indicators (aka the scorecard)

A. Pollution Prevention

1. Amount of waste shipped
2. Number of pollution prevention initiatives undertaken (e.g. Chemsource or Mercury thermometer swap)

B. Compliance Improvement in Labs

1. ESF Storage Survey results
2. Number of unknowns

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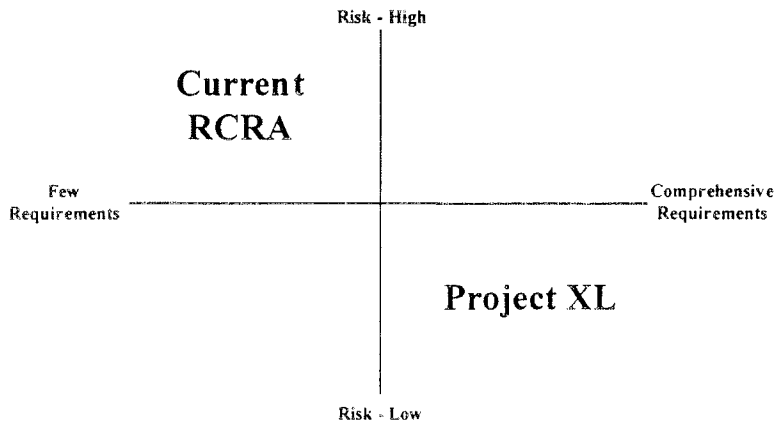
Here's What We Gain



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V. Proposed Implementation Roles

A. CBS committee oversees EMP development by ESF staff on a monthly basis

B. Environmental Council coordinates the stakeholder process

C. ESF staff conducts laboratory survey and training program

D. Vice Provost monitors survey results and XL progress reports

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1. Recent Region I Enforcement Activity

a) Yale Inspection and Results

1) Inspection occurred May 3 and 4, 1994
2) February, 1995 request for information from EPA about waste containers in Room 171A (for example), including MSDS's, chemical constituents and EPA hazardous waste codes
3) Also asked for names, job descriptions, and training record of all people who handle hazardous waste
4) Final settlement: $300,000 in microscaling, worker training and lead education center

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b) University of Connecticut

1) Given 10 days to correct violations, including labelling, storage, contingency planning
2) Given 30 days to train hazardous waste generators
3) $300,000, including:
   a) Microscaling
   b) Worker Training Program
   C) Compliance audit contractors

c) U New Hampshire, U Rhode Island, BU, Coast Guard Academy have had similar adventures

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2. Labeling concerns
   a) Complete RCRA labels, for example requiring the specific words "Hazardous Waste"
   b) EPA Waste codes
3. Container Management Issues
   a) Storage of incompatibles
   b) Security of containers
4. Storage times in labs
   a) Three days for full waste containers to be removed

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C. What it would take to solve RCRA problems at UVM?

1. MIT Experience
   a) EPA's Charles River enforcement initiative gave MIT Safety Office 6 months to prepare for inspection
2. Results of ESF storage surveys so far
   a) Cook and Marsh have been inspected
   b) Some major problems in Cook have been worked out
   c) Still some problems and they recur quickly

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III. The XL Project Itself

Four primary components:

- The Campus Environmental Management Plan
- The Laboratory Minimum Performance Criteria
- Enforcement Provisions
- The Environmental Performance Indicators

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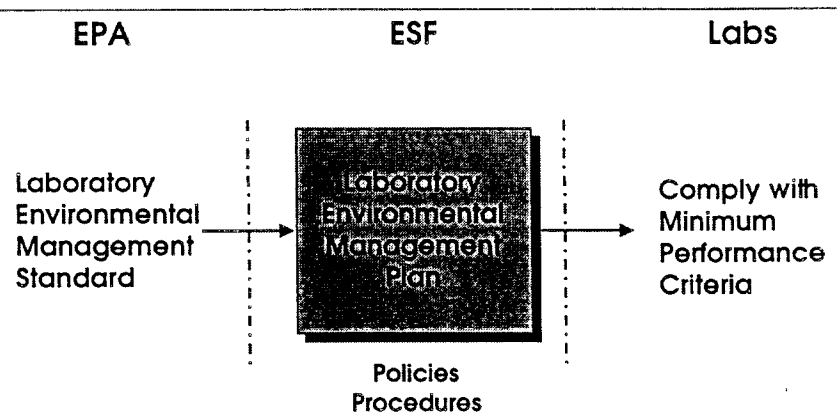
How the XL Model Works



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C. The Criteria

1. Labeling with the chemical name and general hazard family.
2. Dated when ready to be removed
3. Accumulation limits of 55 gallons of laboratory waste or one quart of extremely toxic laboratory waste; must be removed within 30 days
4. Containers shall be:
    1. inspected regularly;
    2. compatible with their contents; and
    3. in good condition
    4. Closed as specified in EMP.

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5. Laboratory waste management shall not result in the release of hazardous constituents into the land, air and water which are prohibited.
6. Emergency notification information and evacuation procedures shall be posted or readily available. Spill response equipment or procedures for emergency response shall be appropriate to the hazards in the laboratory.
7. Hazardous chemical spills shall be investigated, documented, and actions shall be taken to correct and prevent future incidents.
8. Laboratory wastes shall be transported to a designated hazardous waste accumulation area in accordance with DOT regulations

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C. Environmental Awareness

1. Training Programs Held
2. Stakeholder process
3. Attitude Surveys of lab workers

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IV. Pros and Cons

A. Clarifies regulatory expectations for laboratories
B. Makes inspections more predictable
C. In line with national trends in pollution prevention efforts, particularly for health care and academia
D. Opportunity for UVM to expand environmental awareness
E. Increased protection from fines and penalties
F. Establishes UVM as a pro-active leader in EHS issues

A. Significant paperwork commitment for ESF staff (writing the EMP and CHP)
B. More frequent laboratory inspections from Region 1 and Vermont DEC
C. Implementation of Environmental Performance Indicators will require funding and effort
D. Puts UVM in the regulatory and stakeholder spotlight

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