



**ENERGY***SOLUTIONS*



# Re-entry to Evacuated Areas

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# Assumptions to Get Started on Re-Occupancy

- Contamination/Dose limits are agreed on
  - Public, housing, vehicles, personal items
  - Dose calculations vs. dosimetry, hot particles
- Long term liability issues
- Support by public utility, law enforcement, fire dept, emergency workers
- Funding, agency roles and authorities



Protective Action Recommendation	PAG (projected dose)	Comments
Relocate the general population	$\geq 2$ rem (20 mSv) First year	Beta dose to skin may be up to 50 times higher
Apply simple dose reduction techniques	$< 2$ rem (20 mSv) First year	Reduce doses to as low as practical levels
Longer term objectives	0.5 rem (5 mSv)	In any single year after the first
	$\leq 5$ rem (50 mSv)	Cumulative dose over 50 years



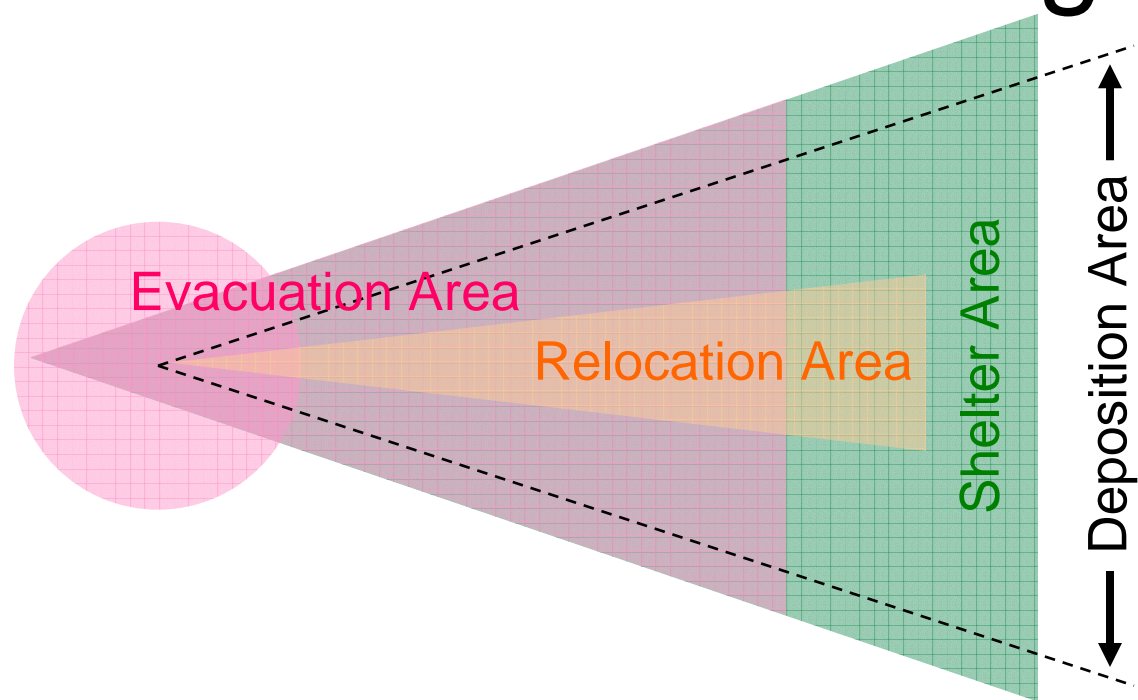


# Process of Re-entry

- Define, establish and maintain boundaries
- Enforce access control, personnel accountability
- Entry and egress protocols for people, equipment and valuables
- Training of public and workers
- Which set of procedures?



# Areas Will Be Irregular Shapes

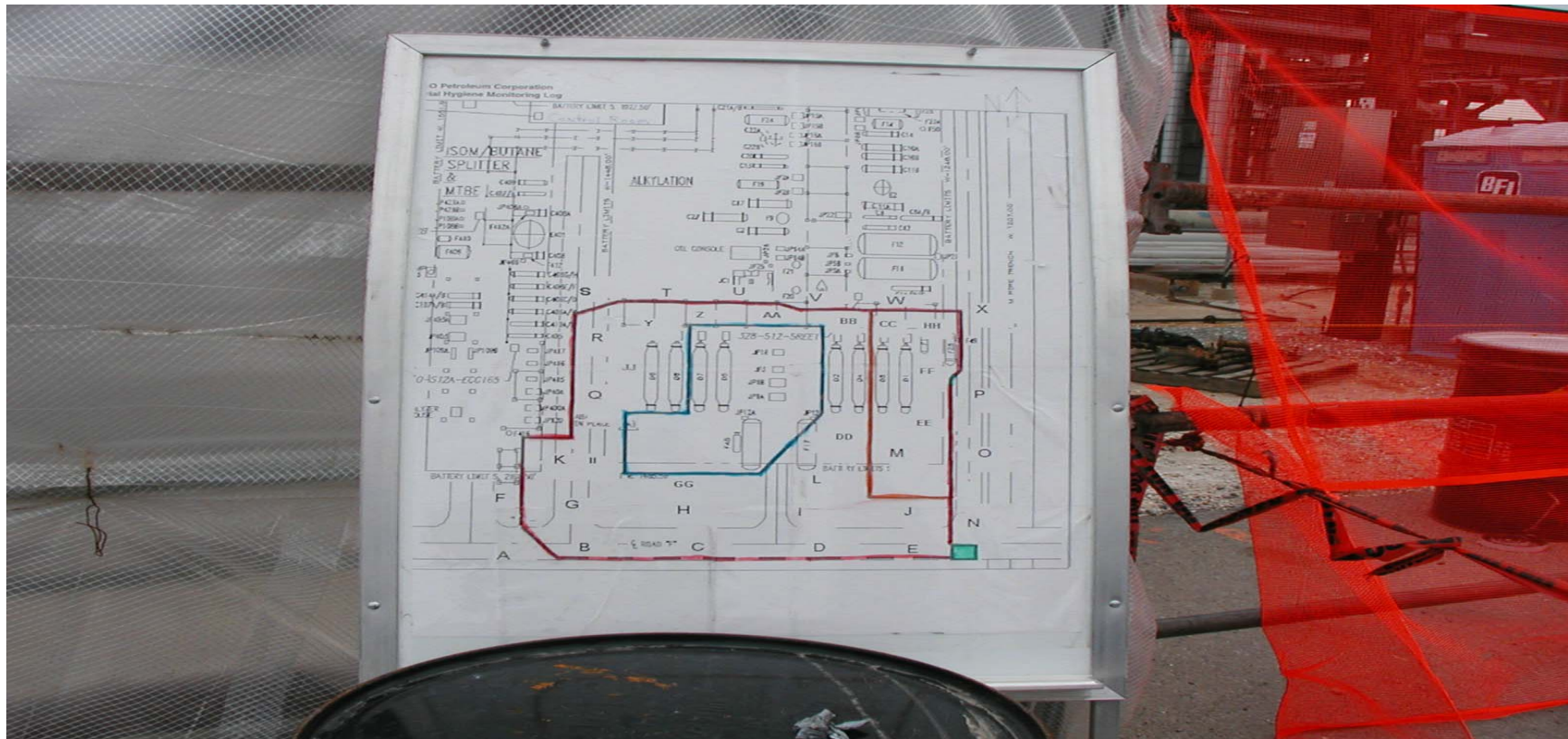


Plume Direction





# Zone Coverage with Layered Boundaries





# Interface-Communication Requirements

- Regulators
- Home office support
- Subcontractors
- Planners
- Logistics Support
- Your own staff
- Public
- Volunteers
- Procurement
- Accounting/Contracts



# Personnel Variations

- Many organizations with unique comfort levels for contamination
- Administrative rules and challenges
- Varying terms of commitment, somewhere from 1 week to completion





# Use of Organizational Resources

- Comprised of personnel from various backgrounds
- Dynamic staffing that will change frequently
- Assigned to “zone coverage” - highest skill on most demanding tasks and areas
- Round the clock with relief staffing



# Equipment Resources

- Instrumentation
- Sampling and monitoring systems
- Local lab systems
- Communications
- Data handling
- PPE storage, distribution, collection
- Waste containers
- Personnel and equipment
- All the “stuff” to keep humans working