

WATER ASSET MANAGEMENT SEMINAR

Tampa, Florida

July 29, 2002

BREAKOUT SESSION II:

WATER SYSTEM SECURITY



PANEL MEMBERS

**Dan Ryan – EH&S Director; USFilter
Operating Services**

**Pat Lehman – Executive Director;
Peace River**

**Timothy LeTourneau – Project
Director; Earth Tech**



Recognizing the Threat

A successful or unsuccessful terrorist attack on a water/wastewater facility can meet the terrorists goals and objectives

To Create :

- Chaos
- Confusion
- Fear

How will Utility Owner/Operators handle SECURITY?

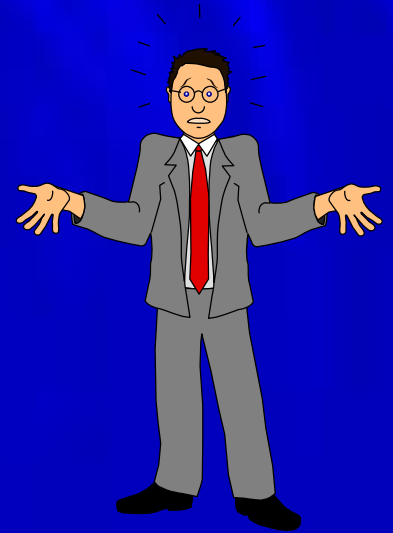
Through.....

Experience

Engineering Controls

Administrative Controls

Education and Awareness



Engineering Controls

System Security begins at the design stage.

What was once thought of as “optional” security features must now be considered as “standard”.

Proven technologies, industry standards, and best management practices must be “designed-in”.



Engineering Controls

Conduct Process Safety Reviews (PSR) and a Process Hazard Analysis (PHA) at strategic points during the Design Stage.

PSR & PHA are organized efforts to identify and correct weaknesses associated with the design or operation of a process or treatment system that could lead to undesirable consequences (e.g., bodily injury, non-compliance and/or catastrophic equipment damage).

Administrative Controls

Establish proper work practices, maintenance procedures and housekeeping measures to ensure system integrity.

Site-specific Policies & Procedures, Standard Operating Procedures, and Contingency Plans should be developed, implemented, and enforced.

**STANDARD
OPERATING
PROCEDURES**

**START-UP /
SHUT-DOWN**

Administrative Controls

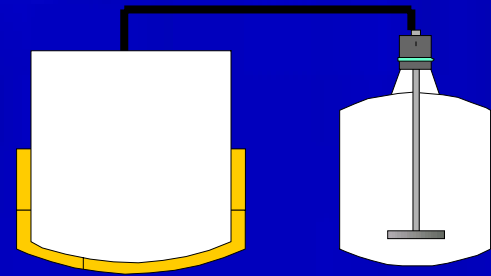
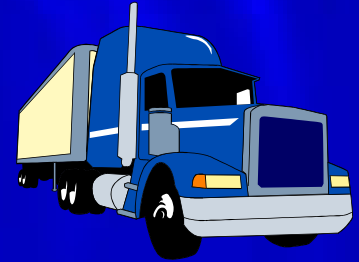
Example Policies & Procedures:

Employee Accountability

Facility Security

Bulk Chemical Receiving/Off-Loading

Sub-Contractor Qualification



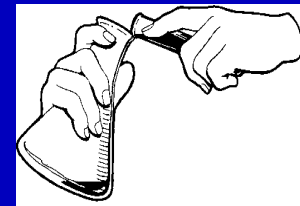
Administrative Controls

Example Standard Operating Procedures:

Conducting Plant Tours

Chemical Handling

Process Control Plans

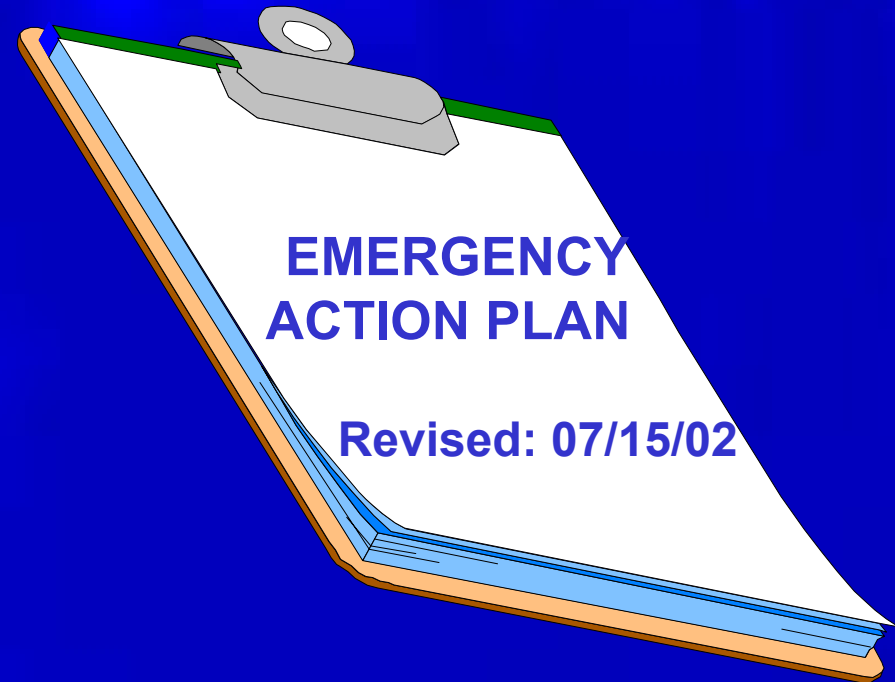


Administrative Controls

Other Site-Specific Programs:

**Emergency Action
Plan**

**Crisis Communication
Plan**



Administrative Controls

Security System(s) Inspection Programs:

Monthly Inspection Program

Annual Auditing Program

Preventive/Predictive Maintenance
(Asset Management) Program



YES NO N/A



Education & Awareness

Suggested Activities:

Form an Internal Security Task Force

Retain a Security Consultant for additional subject matter expertise.

Work with Local Law Enforcement, Emergency Response Agencies and Neighborhood Watch Groups.

Education & Awareness

Other Suggested Activities:

Provide Domestic Terrorism Awareness training for all employees.

Seek formalized training regarding Utility Vulnerability Assessments:

- ❑ **Utility Security Workshop – AWWA**
- ❑ **Utility Vulnerability Assessments – AwwaRF, USEPA, and Sandia National Laboratory**
- ❑ **Utility Vulnerability Assessments - WEF**