Infrastructure Review

Presented to
Citizens Advisory Board
Waste Management Committee

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Infrastructure Review

- Overview
- Liquid Waste Operations
- Management Process
- Budget Overview
- Summary
• Plant infrastructure
  – Requires investment due to age of facilities
  – Relies on mature process planning and risk management to avoid program impacts
  – Reduced through “closure projects”
LW System Planning Process

**Long Range**
- DOE & Site Strategic Plans
- Project Execution Plan

**Mid Range**
- Risk Management Plan (RMP)
- Key Assumptions
- Project Risk Assessments

**Short Range**
- Identified Risks
- Risk Handling Strategies

**Life-Cycle Liquid Waste Disposition System Plan (LLWD)**
- (End-of-Program)

**Disposition Processing Plan (DPP)**
- (5-7 years)

**Risk Handling Strategies**
- Identified Risks

**Facility Execution**
- Weekly Evaporator Operating Plans
- Facility Schedules

**Compliance**
- EM Environment Management
  - Safety, Performance, Cleanup, Closure
Approach to Risk Management

• Risk Planning – Disciplined approach
• Assessment – Major risk categories include:
  – Tank Space
  – Equipment Failures
  – Technology
  – Process Performance
  – Project Integration
  – External Coordination
  – Capture emergent risks into Risk Register
• Integration with Planning
• Dealing with Residual Risk
Typical Risk Assessment

Event: Tank Farm Equipment Failure

Handling Actions
- Establish and monitor system health
- Implement requirements of system health reviews
- Identify & procure critical spares
Funding Perspective

• 1996 – 2002
  • Facility operations stable
  • 3H evaporator startup
  • Tank Farm Services (FTF / HTF west)

• 2003 – 2008
  • Active waste removal / transfers
  • Infrastructure investments minimal (risk driven)
  • Operational projects focus (ISDP)

• 2008 – 2012
  • Closure project focus (project addresses infrastructure)
  • Active waste removal / transfers / treatment
  • Infrastructure focus to support SWPF integration
  • Life Extension program focuses long range planning
Facility / Project Funding

Facility budgets support ISDP

LWO Funding Level
Infrastructure Investment

Infrastructure Budget

Aging equipment = infrastructure investment

Trend Line

Facility

Budget ($ Million)

HTF
FTF
ETP
DWPF
SS

FY07
FY08
FY09
Major FY 09 Infrastructure Activities

- **HTF**
  - Slurry Pumps (40)
  - East Hill Steam / Air permanent modification
  - 2H Evaporator Controller Replacements

- **DWPF**
  - Transfer pumps
  - Ventilation / Building repairs
  - PLC availability

- **Saltstone**
  - Admix / Power permanent modifications
  - Plant air drier
  - Hopper cameras / flushing improvements

- **ETF**
  - Basin reline
  - H12 Outfall
  - Fire system upgrade

- **FTF**
  - 2F Evaporator steam / condensate
  - Cooling Tower Nalco system permanent modification
  - Annulus Preheaters
  - Process water supply (F Area)
Summary

• Prevent program impacts through continued use of mature
  – Process Planning
  – Risk Management

• Utilize system health monitoring (including “Life Extension” teams) to systematically approach long range investment (expect investments to trend up)

• Continue “closure projects” to reduce infrastructure maintenance
Acronyms

- HTF – H Tank Farm
- FTF – F Tank Farm
- ETF – Effluent Treatment Facility
- DWPF – Defense Waste Processing Facility
- HLW – High Level Waste
- LLW – Low Level Waste
- ISDP – Interim Salt Disposition Project
- SWPF – Salt Waste Processing Facility
- GWSB – Glass Waste Storage Building
- SFF – Saltstone Feed Facility
- SDF – Saltstone Disposal Facility