Honeywell

Honeywell Metropolis Plant NRC Status Briefing

March 18, 2004

Enclosure 2

- December 22, 2003 Event Overview
- Plant Improvements
- Emergency Response Improvements
- Restart Readiness Assessment Process
- Phased Restart Approach

- On December 22, 2003 the Plant was preparing to start up a second fluorination train in the Feeds Materials Building
- There was an offsite release of a small amount of uranium hexafluoride (UF_6)
- No adverse impact to human health or the environment

Initial efforts after the release included:

- Plant Investigation
- Honeywell Corporate Investigation
- NRC Investigation
- January 6, 2004 Public Meeting

- Over-reliance on the memory and knowledge of the operator to perform the evolution caused an error in reconfiguring the valves.
- There was insufficient planning and procedures for the performance of this particular evolution to anticipate and control hazards and abnormal conditions.
- The Plant's Corrective Action Process was not effective to identify and correct deficiencies, and to sustain certain prior corrective actions.

Improvements Prior to Restart:

- Policies, Procedures, and Training
- Management of Change
- Mechanical Integrity
- Engineering Controls
- Corrective Actions and Auditing
- Emergency Planning and Community Outreach

Honeywell Is Investing Close to $3 Million in Plant and Community Improvements

Policies

- Procedure use and adherence
- Work planning
- Stop work authority

Administrative and Technical Procedures

- Performed procedure gap analysis
- Revise and write, as necessary, procedures critical to restart
- Improving form and content of technical procedures
- Procedure for situations where procedures may not exist
- Define clear expectations for pre-job planning

Training

- Formalized training on instructional techniques for operations trainers
- Conducted training on new and revised policies and procedures

Process Changes

- Require that the Management of Change procedure be applied for process changes

- Revise process change form to clarify responsibilities

Prior to restart, the following mechanical integrity actions will be completed:

- Ensure inspections and tests of equipment needed for restart in green salt, fluorination and distillation units are current
- Repair or replace critical equipment not passing inspection or test criteria

Prior to restart, we will complete engineering studies and implement solutions to ensure:

- Green salt, fluorination and distillation units have appropriate safety systems in place:
    - Pressure relief systems
    - Valve interlocks
    - Instrumentation
    - Alarms
- Tank farm and railcar unloading operations have appropriate controls and alarms

Corrective Action Program

- Evaluate and Improve the Corrective Action Program
- Implement web-based corrective action tracking system

Auditing Process

- Establish On-Shift Auditors
- Establish procedures for on-shift auditing

Emergency Response Plan

- Improve definition of emergency action levels
- Clarify responsibilities and response actions
- Establish "shelter-in-place" protocols
- Coordinate Emergency Response Plan ("ERP") and Radiological Contingency Plan ("RCP") with state and local emergency plans
- Provide local Emergency Coordinator updated copies of ERP/RCP

Emergency Response Notification

- Selected Public Notification Systems (Sirens, CAN Phone System)
- Establish method to provide public updates and recovery status
- Establish method for continuous communication with external responders

Goal is ZERO Releases:
But, in the event of an emergency, the Plant is well-prepared

- Shelter-in-place Overview
  - Go indoors immediately
  - Close windows and doors
  - Shut off heating/cooling systems and fans
  - Close fire place dampers
  - Tune to radio station for further instructions
  - After the "all cleat' message, exit and air out buildings

- Provides substantial protection
  - Experience with chemical releases has shown shelter-in-place is often the most effective protective measure

- Detailed Instructions (pocket cards) to be provided to the public

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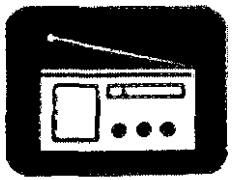
- **Sirens**
  - Outside Notification System

- **Community Alert Network ("CAN")**
  - Phone Call System
  - Selected based on input from outside organizations



- **Radio Stations**
  - Prerecorded messages

- **Dedicated Plant Phone for Communication with Outside Emergency Respsnders**

- **Honeywell Telephone Hotline**

Additional Community Outreach

- Maintain Community Awareness Committee
- Publish Community Bulletin
- Provide Shelter-in-Place Information to the Community
- Providing 24 hour HAZMAT training for at least four responders
- Provide Class-A Suits for HAZMAT-trained responders
- Provide annual 8 hour HAZMAT refresher training at the Plant
- Provide general overview training for all responders

Verification of Emergency Plan

- Conducted table-top drill on March 11, 2004

Participants/Observers

- Honeywell Plant Personnel
- Massac County Sheriffs Office
- Massac County Fire Department
- Metropolis Police
- 911 Services
- Metropolis-Massac County Emergency Services and Disaster Agency ("ESDA")
- Massac Memorial Hospital
- Nuclear Regulatory Commission ("NRC")
- U.S. Environmental Protection Agency ("U.S. EPA")

Goals

- Test and Evaluate Revised Emergency Response Plan
- Review Coordination of Emergency Response Agencies
- Test Communication Abilities

Achievements

- Verified Effectiveness of Emergency Response Plan
- Identified Areas for Improvement

- Team Leaders Certify Completion of All Restart Actions
- Quality Assurance Audit of Completed Restart Actions
- Project Manager Review of Audit Findings
- Plant Manager Approve Restart Readiness
- Corporate Restart Approval
- NRC Approval

- Start up of the UF_6 process in order of material flows:
  - Ore Preparation
  - Green Salt
  - Fluorination-Distillation

- Applicable restart items have been identified and discussed with the NRC
- Ongoing inspections by NRC
- Final Honeywell Corporate and NRC approval prior to restart

Honeywell is committed to providing the support and oversight needed to ensure that plant personnel, procedures, equipment and emergency preparedness will support safe restart and reliable operations.

We will continue to work closely with NRC as we prepare to restart the UF_6 operations.

Honeywell Is Committed To Safe Restart and Safe Operations