



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET SW SUITE 23T85
ATLANTA, GEORGIA 30303-8931

October 6, 2004

Mr. Rory J. O'Kane
Plant Manager
Honeywell International, Inc.
P.O. Box 430
Metropolis, IL 62690

SUBJECT: MEETING SUMMARY- CATEGORY 1 MEETING,
HONEYWELL INTERNATIONAL, INC. - DOCKET NO. 040-3392

Dear Mr. O'Kane:

This letter refers to the public meeting at the Community Center at 516 Superman Square in Metropolis, Illinois on September 30, 2004, during which you discussed Honeywell's long-term performance improvement plan. The intent of the plan is to ensure that your efforts to improve Honeywell's safety performance and emergency preparedness after the December 22, 2003, uranium hexafluoride release event are sustained. The meeting was beneficial and provided the NRC with a better understanding of the current status of the implementation of your interim corrective actions and your plans for sustaining your safety program improvements.

The names of attendees at the meeting and copies of the handouts are enclosed.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosures will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Should you have any questions concerning this meeting, please contact me at either 404-562-4731 or jlh@nrc.gov.

Sincerely,

A handwritten signature in cursive script that reads "Jay L. Henson".

Jay L. Henson, Chief
Fuel Facilities Inspection Branch 2
Division of Nuclear Materials Safety

Docket No. 040-3392
License No. SUB-526

Enclosures: (See page 2)

Honeywell International, Inc.

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Enclosures:

1. List of Participating Attendees
2. Honeywell Meeting Handout
3. NRC Meeting Handout

cc w/encis:
Gary Wright,
State of Illinois
Department of Nuclear Safety
1035 Outer Park Dr., 5th Floor
Springfield, IL 62704

LIST OF PARTICIPATING ATTENDEES

September 30, 2004

U. S. Nuclear Regulatory Commission

Region II

W. Travers, Regional Administrator, Region II (RII)
D. Collins, Director, Division of Nuclear Materials Safety (DNMS), RII
J. Henson, Branch Chief, Fuel Facility Inspection Branch 2, DNMS, RII

Honeywell

R. O'Kane, Plant Manager, Honeywell International, Inc., Metropolis Plant
D. Mays, Manager, Health, Safety & Regulatory Affairs, Honeywell International, Inc.,
Metropolis Plant
Mark McPhee, Human Resources Manager

Enclosure 1

Metropolis Plant

Long Term Performance Improvement Briefing

September 30, 2004

Honeywell

Briefing Overview

Honeywell

- **Current Plant Production Status**
- **Short Term Plant Improvements**
- **Short Term Emergency Response Improvements**
- **Lessons Learned**
- **Long Term Improvements**
- **Concluding Remarks**

Current Plant Production Status

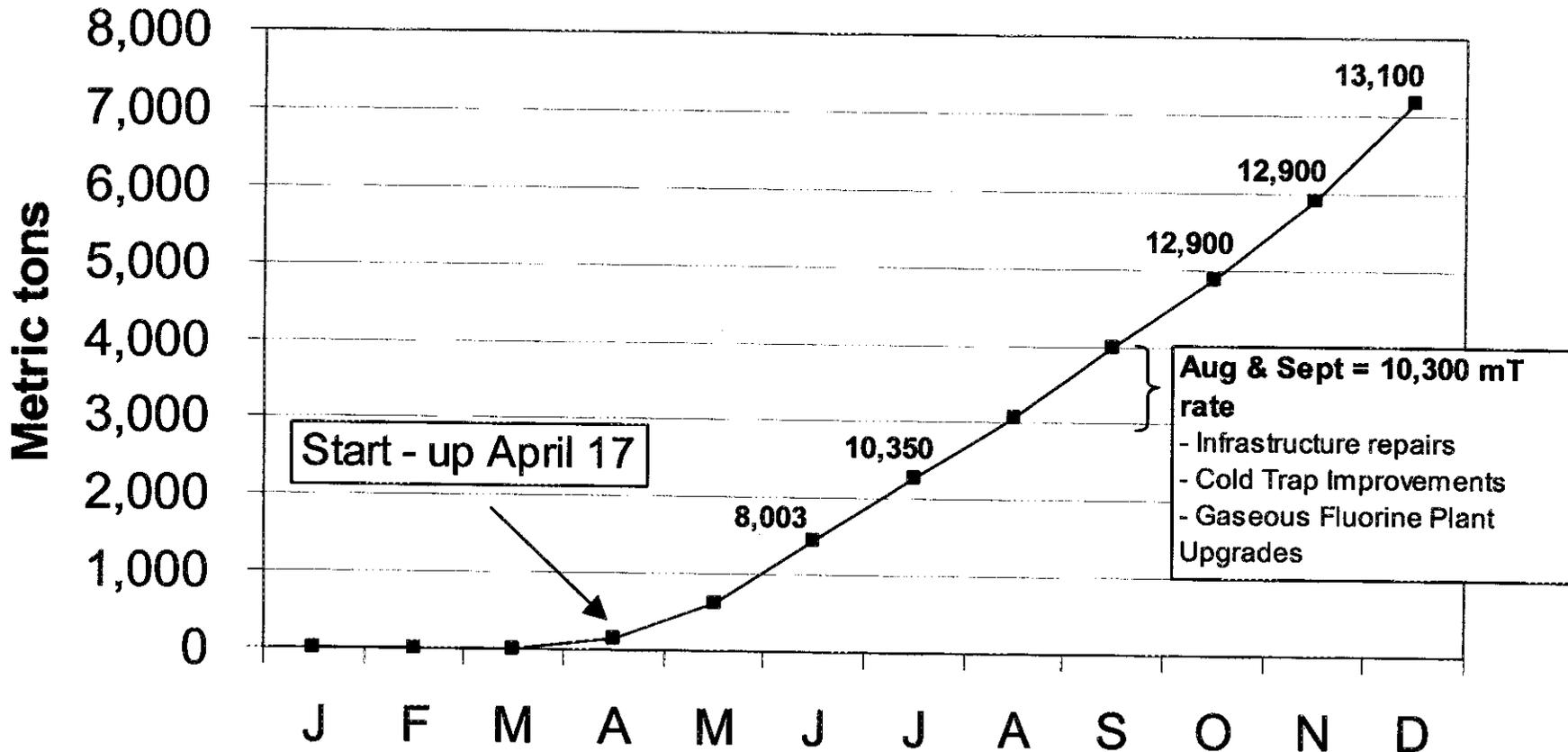
Honeywell

- **Phased Approach To Restart of UF₆ Process**
- **Received NRC Approval for Final Stage of Process on April 17, 2004**
- **Current UF₆ Production Status**

Current UF₆ Production Status

Honeywell

Uranium Hexafluoride Production
Actual & Planned Annualized Rates



13,000 mt rate for last quarter of 2004

2004 Health, Safety & Environment

Honeywell

Safety: September - One Year without a LWDC

- HS&E Council implemented (A-Council, ALARA, E-Council)
- Upgraded A-Council to a more focused group
- Instituted New HS&E Audit Program
- Improved Training & Procedures (SA-1, PPE)

Environmental:

- Chartered New Environmental Council
- Waste Management Process & Manual Upgrade
- Scrubber Efficiency Program,
- RMP Revision/Update

Health Physics:

- Upgraded ALARA Committee to Monthly Activity
- Improved Tracking and Trending of ALARA Data

Zero Tolerance for Injuries and Chemical Releases

Short Term Plant Improvements

Honeywell

- **Short Term Plant Improvements Included**
 - **Procedures and Training**
 - **Material Condition**
 - **Emergency Preparedness**
- **Items Covered in Detail at April 21, 2004 Public Meeting**
- **Prior to Addressing Long Term Performance Improvement**
 - **Brief Summary of Short Term Plant Improvements with Additional Status**
 - **Lessons Learned**

- **Policies and Procedures**

- **Implemented New and Revised Policies on Procedure Use, Work Planning, and Stop Work Authority**
- **Improved Form and Content of Technical Procedures**
- **Defined Clear Expectations for Pre-Job Planning and Pre-Job Briefs with supervisor /worker craft**

- **Training**

- **Formalized Training on Instructional Techniques**
- **Conducted Training on New and Revised Polices and Procedures**

- **Completed Inspections and Tests of Equipment Within UF₆ Process Needed for Restart**
- **Added Equipment to Improve Safety of UF₆ Process**
 - **Pressure Relief Systems**
 - **Valve Interlocks**
 - **Instrumentation**
 - **Alarms**
- **Added Additional Controls and Alarms for Tank and Railcar Unloading Operations**

Short Term ER Improvements

Honeywell

- **Internal Emergency Response Improvements**
 - **Improved Definition of Emergency Action Levels**
 - **Clarified Responsibilities and Response Actions for Response Officers**
 - **Developed Emergency Plan Implementing Procedures**
 - **Trained Emergency Response Personnel on New ERP**
 - **Trained Security Personnel on Emergency Response Plan Responsibilities**
 - **Completed Annual HAZMAT Refresher Training for Site Emergency Responders Using Revised ERP.**

Short Term ER Improvements (Cont)

Honeywell

- **External Coordination**

- **Emergency Plan Provided to NRC, State and Local Authorities**

- **Participated as a member of newly established Local Emergency Planning Committee**

- ◆ First meeting held in August to elect officials per State requirements
 - ◆ Honeywell to host first facility tour in October

- **Provided Off-Site Emergency Responder Training**

- ◆ Provided General Honeywell Facility Overview Training to Local Responders
 - ◆ Provided 24-Hour HAZMAT Training to City/County Fire Departments
 - ◆ Provided 8 Class A Suits to County/City Fire Departments
 - ◆ Provided Class A Suit Testing Equipment for County Fire Department
 - ◆ Provided Traffic Cones to local Police and Sheriff

Lessons Learned / Benefits

Honeywell

- **Preplanning and Pre-Job Briefs**
 - + Resulted in heightened awareness of operators & supervision
 - + Additional hazards were recognized and mitigated
 - + Major factor in achieving one year without a lost time accident

- **Procedural Improvements and Improved Training**
 - + Improved our processes and stable operations across shifts
 - + Reduced over reliance on memory and knowledge of operators

- **Stop Work Authority**
 - + Operators and Supervisors demonstrating questioning attitude

- **Corrective Action Tracking**
 - + All corrective actions are located in one database for tracking
 - + Increased awareness to report deficiencies

Lessons Learned / Benefits (Cont)

Honeywell

- **Extent of Condition (Included in Investigations)**
 - + Broader scope applied to incident investigations

- **Community Involvement in Emergency Planning**
 - + Resulted in improved relationships with local responders
 - + Improved Local Emergency Planning (Table Tops / Drills)
 - + Increased equipment and training for Local Responders
 - + Improved Warning Systems for the community
 - + LEPC initiated through Local Officials

- **Off-Site Support**
 - + Upgraded our Incident Investigation Process
 - + Improved our auditing/assessment abilities
 - + Provided independent overview of plant performance/operations
 - + Upgraded technical operating procedures
 - + Reviewed plant processes and equipment

Long Term Performance Improvement

Honeywell

- **Measures to Build on Short Term Improvements and Lessons Learned**

- **Objective is to Achieve Excellence in Safe Operations**

- **Areas to Be Addressed Include**
 - **Procedures and Training**
 - **Plant Material Condition**
 - **Emergency Preparedness**
 - **Individual Items**

Procedures and Training - Long Term

Honeywell

- **Continuously Improve Processes and Methods in UF₆ Operations**
 - **Procedure Gap Analysis**
 - ♦ Completed for UF₆
 - ♦ Completed procedures necessary for restart
 - ♦ Continual procedural improvement
 - **Standardize Procedure Configuration**
 - ♦ Writer's Guide currently in draft format
 - **Abnormal Conditions/Alarm Response**
 - ♦ Procedures currently in the Validation & Verification Process
 - **Operator Aid Process Improvements**
 - ♦ Operator Aid List generated and is being formalized
 - **Standing Order Process Improvement**
 - ♦ Procedure in draft form
 - ♦ Current Standing Orders placed on DMS & Controlled Copy Book

- **Operator Training Methods**

- **Established Formal Training Group**
- **Upgrading Training Methods and Processes**
- **Developing Systematic Training Process with Training Matrix**
- **Developing Train-the-Trainer Training for Peer Trainers**
- **Considering Human Factors in Training Process**
 - ♦ STAR Techniques in place
 - ♦ TOP System of Safety Incident Review includes Human Factors with recommended corrective actions for improvement
 - ♦ MOC Process requires that training be provided
 - ♦ Corporate Root Cause (Apollo) format utilized for larger incidents

- **Operator Validation Methods**

- **Increased Validation Requirements for Operators with Job Performance Measures**

Procedures and Training - Long Term (Cont)

Honeywell

- **Introduce New Processes and Methods Plant Wide**
 - **Gap Analysis Completed for Fluorine Products Units**
 - **Gap Analysis Underway for Regulatory Affairs/
Quality Lab Areas (11/04)**
 - **Gap Analysis Underway for Maintenance (11/04)**
 - **Continue to Prepare Procedures Identified by Each Analysis**

- **Improve Supervisory & Management Training Programs**
 - **Currently Developing Supervisory Training Program**
 - **Plan to Develop Management Training Program**

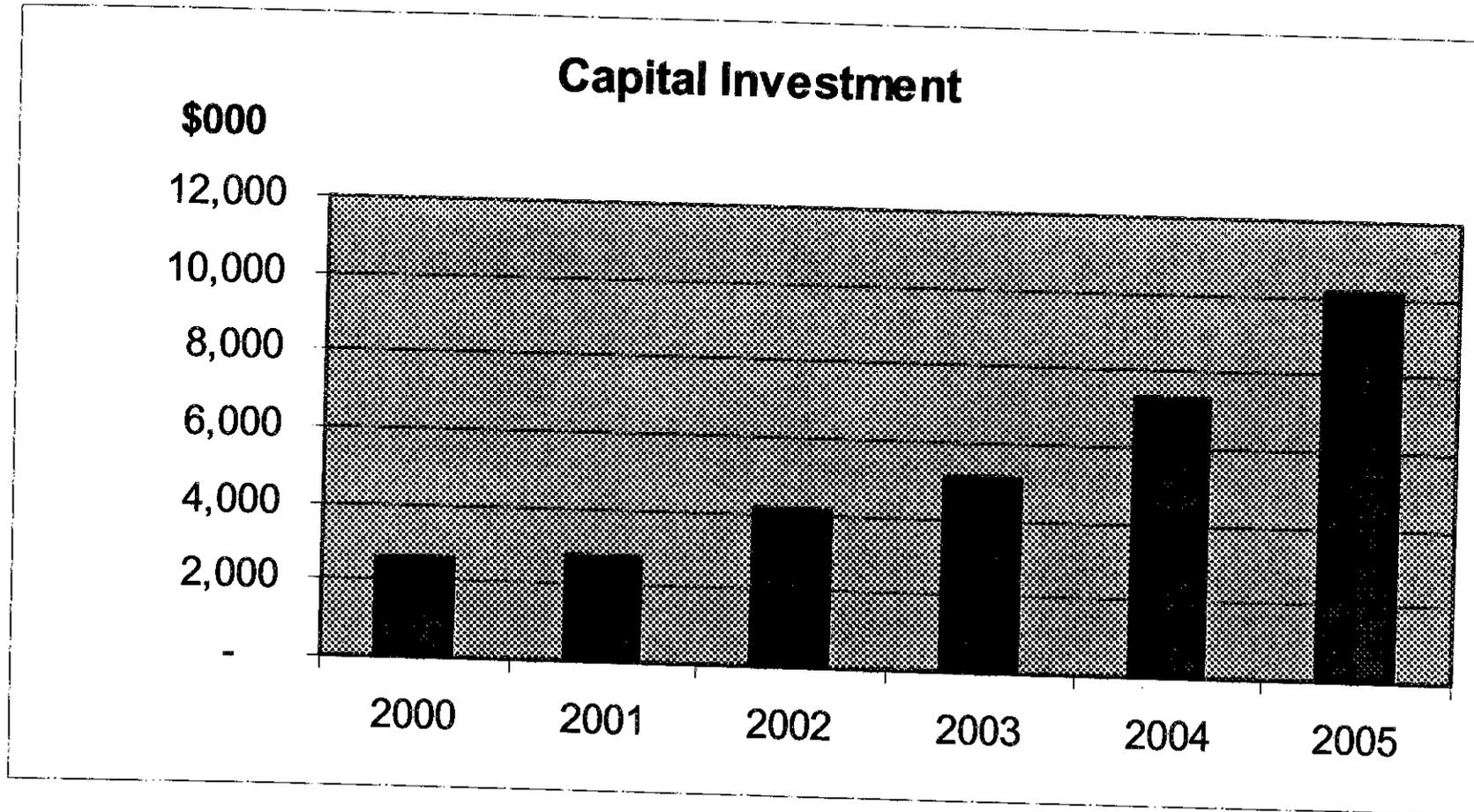
Material Condition - Long Term

Honeywell

- **Implement Honeywell's Maintenance Excellence Program**
 - **Begin Honeywell Program in November**
 - **Implement Long Term Equipment Improvements from Corporate Reviews**
- **Utilize Honeywell's Expertise in Industrial Controls to Add Additional Levels of Protection to Plant Processes**
 - **Installed Distributed Control System (DCS) in South Fluorine Plant**
 - **Currently Installing DCS in North Fluorine Plant**
 - **Plan to Install DCS in UF₆ Control Room in 2005**
- **Continue Implementation of Honeywell's Standardized Control Room Guidelines**
 - **Currently in 2004 Plan to Upgrade UF₆ Control Room**

- **Continue Investment in Plant Equipment and Technology**
 - **ERV Tank Installation**
 - **Reductor Replacements**
 - **Critical Piping Replacements/upgrades**
 - **Fluorinator Replacements**
 - **14 New Cell Bodies in Fluorine Plant**
 - **DCS System Installations**
 - **Repaired Cold Traps**
 - **Improve Critical Equipment Tracking**
 - **Improve Strobe Lighting for FMB floor Radiation Control**
 - **Upgrade Natural Gas Piping System**
 - **Installation of Surface Treatment Facility**

Investment in Honeywell's Metropolis Plant Honeywell



- **Increase Cooperation and Execution of Emergency Planning With Local Emergency Agencies**
 - **Conduct Table Top Exercises to Support Honeywell Requirements as well as Local Agency Requirements**
 - ♦ Continue to conduct Table Top Exercises (~November)
 - **Conduct Full Participation Drill at Least Annually**
 - ♦ Currently scheduled for December 8
- **Consolidate Emergency Response Plan and Radiological Contingency Plan**
 - **In-Process: To be Submitted With License Renewal**
- **Sustain Community Relations**
 - **Continue Community Awareness Committee (CAC) (Quarterly)**
 - **Continue to Participate as a Member of the LEPC (Quarterly)**
 - **Continue Community Bulletin (Quarterly)**

Additional Improvement Items

Honeywell

- **License Renewal Efforts**
 - Currently in Progress
 - Combined ERP/RCP
- **License Commitment Matrix Linked to Procedures**
 - Matrix Currently Being Developed
 - Procedural Linkages Expected by Early 2005
- **NRC License Training for Supervisors & Managers**
 - Training Package Complete, Training In-Process
- **Revised/Updated Risk Management Plan (RMP)**
 - Completed and Sent to Appropriate Agencies
- **Document Management System**
 - Installed DMS on Intranet Site Available Plant Wide
 - Continuing to Add Procedures and Policies to the DMS

Additional Improvement Items (Cont)

Honeywell

- **Corrective Actions & Auditing**
 - **Corrective Action Tracking System (eCATS) Implemented**
 - ◆ Effectiveness of implementation will be audited
 - ◆ Lessons Learned from audit findings will be incorporated

 - **Implemented HS&E Council Inspection & Assessment Program**
 - ◆ Housekeeping & Safety Inspections underway
 - ◆ Focus Team Self-Assessments underway

Long Term Improvement Implementation

Honeywell

- **Long Term Improvement Implementation Will Include the Following:**
 - **Long Term Improvement Items Will Have Designated Owners**
 - **Individual Improvement Items Will be Entered into the Corrective Action Tracking System**
 - **Criteria Will Be Established for Item Completion**
 - **Schedules Will Be Established**
 - **Management Will Monitor Progress**
 - ♦ Monthly review of individual item progress
 - ♦ Biannual Management meetings on overall long term improvement progress
 - **Individual Long Term Improvement Items May Be Modified Based on Lessons Learned in Process**

Concluding Remarks

Honeywell

- **Honeywell is Committed to Providing the Support and Oversight Necessary to Ensure That Plant Personnel, Procedures, Equipment and Emergency Preparedness Support Safe and Reliable Operations.**
- **Honeywell is Committed to Making Improvements to Achieve Excellence in Safe Operations.**
- **Zero Tolerance for Injuries and Chemical Releases**
- **We Plan to Continue to Brief the NRC Staff on Progress on Long-Term Improvements.**

UNITED STATES NUCLEAR REGULATORY COMMISSION



**PUBLIC MEETING WITH HONEYWELL
SPECIALTY CHEMICALS
METROPOLIS, ILLINOIS
SEPTEMBER 30, 2004**



MEETING AGENDA

Opening Remarks and Introductions

William Travers, Regional Administrator, Region II

NRC Synopsis of the December 22, 2003 Event and Follow-up

Jay Henson, Chief, Fuel Facility Inspection Branch 2, RII

Honeywell Presentation on Long-term Actions To Improve Safety
Performance And Emergency Preparedness

Rory O'Kane, Plant Manager

Closing Remarks

William Travers, Deputy Regional Administrator, Region II

This is a category 1 meeting in which the public is invited to observe and will have one or more opportunities to communicate with the NRC after the business portion, but before the meeting is adjourned.



EVENT AND RESPONSE

- On December 22, 2003, UF_6 was released from the Honeywell Plant in Metropolis, IL and went beyond the site boundary
- Honeywell declared a Site Area Emergency
- The NRC established an Augmented Inspection Team (AIT) to inspect and assess the release
- Honeywell developed safety performance improvement plan to support restart



LICENSEE SAFETY PERFORMANCE IMPROVEMENT PLAN

- Seven improvement areas
 - Emergency response
 - Policies and procedures
 - Training
 - Management of change
 - Mechanical integrity
 - Engineering controls
 - Corrective actions and auditing



RESTART PROCESS

- **Phased approach**

Ore Prep, Green Salt, Fluorination/Distillation

- **NRC assessed process, observed implementation, approved restart and inspected restart of each phase**

- **Restart initiated March 26 and completed April 17, 2004**



NRC OVERSIGHT

- Increased oversight of licensed activities after restart of all areas
- Inspections completed on June 10 (Report No. 40-3392/2004-007) and August 13, 2004 (Report No. 40-3392/2004-008)
- Focus of inspections: Plant Operations, Chemical Safety, Emergency Preparedness, Maintenance/Surveillance, Management Organization and Controls, and Operator Training



NRC OVERSIGHT

- No violations identified during June inspection
- Two Severity Level IV violations identified during August inspection (two examples of conducting operations that were not specifically described in written procedures and an inadequate evaluation of radiological conditions associated with storage of bed material and filter fines.)



NRC OVERSIGHT

- Based on outcome of these two inspections, next event focused inspection scheduled within three months
- If outcome of all three inspections acceptable, consider returning to a more routine oversight program
- Continuing NRC oversight of longer-term improvements



SUSTAINING SAFETY PERFORMANCE

- Honeywell successfully established and implemented safety performance improvements to support restart of licensed activities
- NRC wants to ensure that improved safety performance is sustained
- This meeting provides a public forum for Honeywell to inform NRC of its plan to sustain and continue to improve safety performance