



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
REGION II  
245 PEACHTREE CENTER AVENUE NE, SUITE 1200  
ATLANTA, GEORGIA 30303-1257

July 17, 2019

Mr. Jon Price  
Plant Manager  
Honeywell Metropolis Works  
P.O. Box 430  
Metropolis, IL 62960

**SUBJECT: HONEYWELL METROPOLIS WORKS – NUCLEAR REGULATORY COMMISSION  
INTEGRATED INSPECTION REPORT 40-3392/2019-003**

Dear Mr. Price:

This letter refers to the inspections conducted on May 22, 2019, at the Honeywell Metropolis Works facility in Metropolis, IL. The purpose of the inspections was to determine whether activities authorized under the facility's license were conducted safely and in accordance with U.S. Nuclear Regulatory Commission (NRC) requirements. The enclosed inspection report presents the results of the inspections.

The inspections examined activities conducted under your license as they relate to public health and safety, the common defense and security, and to confirm compliance with the Commission's rules and regulations and with the conditions of your license. Within these areas, the inspection consisted of a selected examination of procedures and representative records, observations of activities, and interviews with personnel.

Based on the results of this inspection, the NRC has determined that no violations of more than minor significance were identified.

In accordance with Title 10 of the *Code of Federal Regulations*, Section 2.390 of the NRC's "Rules of Practice and Procedure," a copy of this letter and its enclosure will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

J. Price

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If you have any questions, please contact Tom Vukovinsky of my staff at (404) 997-4622.

Sincerely,

**/RA/**

Eric C. Michel, Chief  
Projects Branch 2  
Division of Fuel Facility Inspection

Docket No. 40-3392  
License No. SUB-526

Enclosure:  
NRC Inspection Report No. 40-3392/2019-003  
w/Attachment: Supplemental Information

cc: (See page 3)

cc:

Adnan Khayyat, Chief  
Illinois Emergency Management Agency  
Division of Nuclear Safety  
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Springfield, IL 62704

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SUBJECT: HONEYWELL METROPOLIS WORKS – NUCLEAR REGULATORY COMMISSION  
INTEGRATED INSPECTION REPORT 40-3392/2019-003

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ADAMS: ACCESSION NUMBER: ML# 19198A013

OFFICE	RII:DFFI	RII:DFFI
NAME	T. Vukovinsky	E. Michel
DATE	5/28/2019	7/15/2019

OFFICIAL RECORD COPY

**U.S. NUCLEAR REGULATORY COMMISSION  
REGION II**

Docket No.: 40-3392

License No.: SUB-526

Report No.: 40-3392/2019-003

Licensee: Honeywell International, Inc.

Facility: Metropolis Works

Location: Metropolis, IL 62960

Inspection Dates: May 22, 2019

Inspectors: T. Vukovinsky, Senior Fuel Facility Inspector (Sections A.1, A.2)

Approved by: E. Michel, Chief  
Projects Branch 2  
Division of Fuel Facility Inspection

Enclosure

## **EXECUTIVE SUMMARY**

Honeywell International, Inc.  
Honeywell Metropolis Works  
Nuclear Regulatory Commission Integrated Inspection Report 40-3392/2019-003  
April 1 through June 30, 2019

The U.S. Nuclear Regulatory Commission (NRC) regional inspectors conducted inspections during normal shifts in the area of Facility Support. The inspectors performed a selective examination of licensee activities that were accomplished by direct observation of safety-significant activities and equipment, tours of the facility, interviews and discussions with licensee personnel, and a review of facility records. No violations of more than minor significance were identified during the inspection.

### **Facility Support**

- In the area of Evaluation of Exercises and Drills, no violations of more than minor significance were identified. (Section A.1).
- In the area of Emergency Preparedness, no violations of more than minor significance were identified. (Section A.2).

### **Attachment**

Key Points of Contact  
List of Items Opened, Closed, and Discussed  
Inspection Procedures Used  
Documents Reviewed

## REPORT DETAILS

### Summary of Plant Status

The Honeywell Metropolis Works (MTW) uranium conversion facility is located on a 1,100 acre site (60 acres within the fence line) near Metropolis, IL. The licensee is authorized to possess 150 million pounds of natural uranium ore and to convert this material into uranium hexafluoride (UF<sub>6</sub>). During this inspection period, all uranium conversion processing remained shut down, referred to as ready-idle status. The only significant NRC licensed uranium operations being conducted included the receipt, sampling, storage, and shipment of uranium ore; and radiological support staff operations.

#### A. Facility Support

##### 1. Evaluation of Exercises and Drills (Inspection Procedure 88051)

###### a. Inspection Scope

The inspectors reviewed the emergency drill scenario and discussed the exercise objectives with licensee personnel the morning of the exercise. The inspectors discussed exercise evaluation criteria and control of simulated exercise activities with the exercise coordinator. The inspectors walked down the plant to assess the effectiveness of the visual aids and simulations used in the drill and verified that the licensee had not pre-staged equipment in anticipation of the exercise.

The inspectors observed and evaluated the licensee's graded biennial exercise conducted on May 22, 2019. The scenario involved a fire originating in the south janitorial closet of BD-69, Nuclear Compliance Trailer. The fire was of a magnitude which required calling for off-site assistance from the county fire department.

At the initiation of the emergency drill, the inspectors verified that the licensee assessed the accident, analyzed the plant condition, and classified the event. The event was classified as an alert in accordance with the Emergency Plan (E-Plan). The inspectors observed the activation of onsite emergency response and verified that all required positions were staffed in accordance with the E-Plan.

The inspectors verified that initial and subsequent off-site notifications were completed within the time specified in the E-Plan. Personnel accountability was conducted in accordance with approved procedures.

The inspectors verified that the Incident Commander (IC) maintained command and control of the event and coordinated overall IC with the fire department. The inspectors verified that the IC maintained effective communications with off-site authorities and Honeywell External Communications personnel during the assessment of the accident scenario.

The inspectors observed members of the licensee's emergency response team (ERT), including the IC assemble at the designated assembly area and the arrival of the off-site emergency responders. The inspectors observed the ERT's assessment of the affected

area and response to additional emerging situations. The IC maintained command and control of the ERT and coordinated action with off-site emergency responders. The inspectors verified that the ERT activities were appropriate for the exercise scenario and were appropriate in meeting the drill objectives.

The inspectors observed the staff critiques of the emergency exercise. The inspectors verified that the critiques were effective at identifying areas of improvement. The inspectors verified that the licensee-initiated documentation of items discussed after the emergency exercise in the corrective actions program (CAP).

b. Conclusion

No violations of more than minor significance were identified.

2. Emergency Preparedness (Inspection Procedure 88050)

a. Inspection Scope

The inspectors interviewed staff and reviewed records to verify the changes made to the Honeywell Metropolis Works Emergency Response Plan (ERP), Emergency Plan Implementing Procedures (EPIPs), and the facility as part of transitioning to a 'ready-idle' state, had been reviewed by the EP organization. This included inspections to verify the licensee properly reviewed changes and identified when prior NRC approval was required for proposed changes to the program. The inspectors reviewed the changes made to the emergency preparedness program and facility to verify the changes met ERP and license requirements and specifically did not decrease the overall effectiveness of the emergency preparedness program without prior NRC approval. In addition, the inspectors determined the source term and analysis (MTW-CALC-GEN-0030), used by the licensee as the basis for the ERP, reflected the current state of the facility. The inspectors reviewed Mutual Assistance Agreements and interviewed licensee staff and members of offsite response agencies to verify that changes to the emergency preparedness program were coordinated with offsite support groups and agencies.

The inspectors reviewed a sample of the revised EPIPs (listed in Section 4.0 of the Attachment) and interviewed staff to determine whether current copies of the implementing procedures were readily available to members of the emergency management and response organizations. The inspectors reviewed the content of the procedures to determine whether the revised procedures provide for the detection and proper classification of accidents, assessments of releases, protective actions recommendations, personnel accountability, notification and coordination, and authority for initiating site evacuation as required by the ERP.

The inspectors interviewed licensee staff, including incident commanders and security staff, regarding emergency preparedness, and reviewed training records (e.g., ERP & EPIP IC Training Attendance Records). The inspectors conducted this review to verify the licensee provided training for their personnel on emergency equipment (e.g., radios, medical equipment) as required by the ERP and the individuals responsible for utilizing the equipment were trained and familiar with emergency procedures they would use and implement during an actual emergency. The inspectors interviewed staff to verify the licensee provided training for expected emergency situations consistent with the ERP.

Offsite personnel were also interviewed to verify their training included routine orientation tours of the facility and refresher training required by the Section 7.2.3 of the ERP.

The inspectors reviewed the written Mutual Assistance Agreements between Honeywell and the City of Metropolis, Illinois, Fire Department; the Massac County Fire Department; and the Metropolis Office of Emergency Management to verify the licensee had current agreements with these organizations. The inspectors also interviewed the Fire Chief, Massac County Fire Department, and the Director of the Metropolis Office of Emergency Management, and reviewed records of the most recent emergency exercise to verify they maintained an adequate understanding of the written agreements, and that the licensee invited these and other off-site emergency response organizations for training and drill participation as required by Section 7.2.3 of the ERP.

The inspectors reviewed the package from the most recent emergency drill and interviewed licensee personnel to verify the licensee conducted emergency exercises in accordance with their emergency response plan and that the drill was a challenging credible scenario and tested key components of the emergency response plan. The inspectors also reviewed drill response records to verify the licensee adequately critiqued their response effort and captured and addressed the critiques in the CAP.

The inspectors reviewed corrective actions in the area of emergency preparedness to verify the findings and recommendations were adequately addressed in the licensee's CAP.

b. Conclusion

No violations of more than minor significance were identified.

C. Exit Meeting

The inspection scope and results were presented to members of the licensee's staff at various meetings throughout the inspection period and were summarized on May 22, 2019, to Mr. S. Patterson and other staff members. Proprietary information was discussed but not included in the report.

## SUPPLEMENTAL INFORMATION

### 1. KEY POINTS OF CONTACT

<u>Name</u>	<u>Title</u>
S. Patterson	Regulatory Affairs and ESH Manager

### 2. LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

None

### 3. INSPECTION PROCEDURES USED

88050	Emergency Preparedness
88051	Evaluation of Exercises and Drills

### 4. DOCUMENTS REVIEWED

#### Procedures

MTW-ADM-EPIP-0001, Identification and Reporting of Emergency Conditions, Rev. 5, dated January 19, 2018

MTW-ADM-EPIP-0002, Emergency Classification and Notification, Rev. 17, dated January 19, 2018

MTW-ADM-EPIP-0003, Incident Command Staff Responsibilities, Rev. 2, dated January 18, 2018

MTW-ADM-EPIP-0006, Personnel Evacuation and Accountability, Rev. 15, dated March 20, 2018

MTW-ADM-EPIP-0008, Maintaining Emergency Preparedness, Rev. 11, dated January 19, 2018

Honeywell Metropolis Works Emergency Response Plan, Rev. 10, dated January 18, 2018

MTW-CALC-GEN-0030, Consequences of Hydrogen Fluoride Release to the Atmosphere Resulting from a Breach of a UF6 Cylinder With Solidified Contents Within MTW Cylinder Yard, Rev. 0, dated January 19, 2018