

Allied
Chemical

Region III

P.O. Box 430
Metropolis, Illinois 62957
(618) 524-2111

040-03392

64

July 23, 1982



Mr. F. D. Fisher
Environmental Radiation and
Emergency Support Section
Uranium Fuel Licensing Branch
Division of Fuel Cycle and
Material Safety, NMSS
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Mr. Fisher:

Subject: 40-3392, SUB-526, Amendment No. 6

We are herewith enclosing six (6) sets of revised pages for insertion in our "Radiological Contingency Plan". Pages 3-4, 3-5, and A-1 through A-20 should be deleted from the existing plan and replaced with the new pages.

This change is necessary because we have increased the effectiveness of our plan by reducing the two-part "UF₆ Release Procedure" (Appendix A) into a single procedure with accounting for all plant employees during a UF₆ release.

This change was agreed to by your Mr. T. R. Decker, and Mr. R. W. Yates of my staff on July 8, 1982.

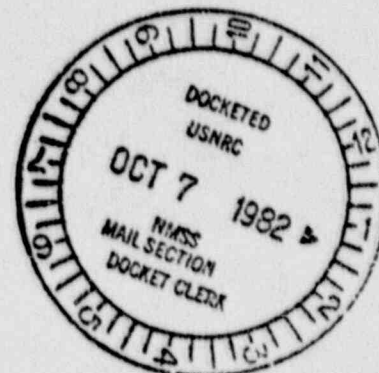
Yours very truly,

A. J. Cipolla
A. J. Cipolla
Plant Manager

AJC:mt

Enclosure

Certified Mail P25 6229587



c/45

An **ALLIED** Company

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PDR FOIA
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TABLE 1.2-2

METROPOLIS WORKS

RADIOLOGICAL CONTINGENCY PLAN

"ALERT"

<u>Description Of Events Included In Class</u>	<u>Primary Action</u>	<u>Secondary Action</u>	<u>Follow-up Action</u>	<u>Notification Required</u>
Leaks or spills of gaseous or liquid UF ₆ which is visible on one or more floors of the Feed Materials Building, and the spill is "under control"	<ol style="list-style-type: none"> 1. Stop or contain the source of the spill. 2. Initiate the UF₆ Release Control Procedure. 	<ol style="list-style-type: none"> 1. Announce "All Clear" as per the UF₆ Release Control Procedure when visibility returns to normal. 2. Initiate decontamination of affected area. 3. Initiate additional Health Physics air sampling. 4. Determine which (if any) employees could have been internally exposed. 	<ol style="list-style-type: none"> 1. Remove Respirator requirements and turn off warning lights when air sampling indicates air activity is below administrative control point. 2. Complete Foreman's "Incident Report" and forward to Health Physics Department. 3. Initiate bioassay sampling for affected employees as appropriate. 	<ol style="list-style-type: none"> 1. Shift Supervisor 2. Decontamination Foreman 3. Health Physics Department

TABLE 3.2-3

METROPOLIS WORKS

RADIOLOGICAL CONTINGENCY PLAN

"SITE AREA EMERGENCY"

<u>Description Of Events Included In Class</u>	<u>Primary Action</u>	<u>Secondary Action</u>	<u>Follow-up Action</u>	<u>Notificatio Required</u>
A spill of gaseous or liquid UF ₆ which is not contained or "under control". UF ₆ is visible exiting the Feed Materials Building ventilation system and is visible at the downwind fence line.	<ol style="list-style-type: none"> 1. Activate the UF₆ building evacuation siren and plant disaster siren. 2. Initiate the UF₆ Release Control Procedure. 3. Determine wind direction, establish portable air sampling stations at the downwind fence line if UF₆ vapors are visible there. 	<ol style="list-style-type: none"> 1. If wind is toward NW, N, or NE and UF₆ vapors are visible passing over the restricted area fence, establish additional air samplers at the site boundary to determine potential public exposure, and escalate to "<u>General Emergency</u>" class. 2. For winds toward other directions, establish air sampling stations at the point where UF₆ vapors are last visible. 	<ol style="list-style-type: none"> 1. Discontinue environmental air sampling after UF₆ cloud has passed. 2. Initiate analytical procedures to determine concentrations. 3. Conduct meeting of UF₆ Release Control Officers to determine effectiveness of control procedure. 4. Document investigation and revise procedures to prevent recurrence. 	<ol style="list-style-type: none"> 1. US NRC, State and Local agencies (hour notification) 2. Allied Chemical Headquarters 3. US NRC 20.403 limit exceeded

Imminent natural disasters such as a tornado or earthquake which could produce a major UF₆ release.

Civil disturbances such as a bomb threat which could theoretically produce a major UF₆ release.

Alert Radiological
Contingency Plan
Personnel

APPENDIX "A"

RADIOLOGICAL CONTINGENCY PLAN

UF₆ RELEASE CONTROL PROCEDURE

The chemical and radiological toxicity of UF₆ make it imperative that any release be contained as soon as possible. The purpose of this procedure is to provide for prompt and safe evacuation of the UF₆ building and subsequent accounting of plant personnel. Control is most easily accomplished when each employee knows what is expected of him prior to an emergency.

Many minor spills of UF₆ are readily contained using a vacuum hose and would not provide a significant exposure potential to employees working in other parts of the building. Employees involved in a minor release should notify the Feeds Material Foreman or Shift Supervisor immediately. The Foreman will evaluate the condition, if visibility is impaired on the floor, or the release could worsen, this procedure should be implemented. The primary objective is to control the release. If the UF₆ "smoke" is not contained, this procedure provides for the evacuation and warning, of plant personnel that a UF₆ release emergency exists.

The procedure defines responsibilities of plant personnel under three conditions: (1) weekdays, when a full complement of supervisory and hourly personnel are present, (2) off-shifts, when fewer people and only a few supervisors are immediately available, and (3) responsibility for visitors and contractor employees working in the Feeds Material Building

During nights and weekends, on-duty supervisors must serve dual functions until relieved by the called-in emergency officers. It is imperative that called-in officers respond as promptly as possible. Special attention is required during these off-shifts especially by the Maintenance and Production Foreman to assure that personnel working overtime are accounted for during the emergency.

WEEKDAYS

RELEASE NOTIFICATION

The person observing the release should notify the Feeds Material Foreman, Shift Supervisor or control room. If visibility is impaired on the floor, this procedure should be implemented immediately. If visibility is not impaired, the Foreman should evaluate the condition and implement the procedure when needed. Plant employees are to be notified of the release by sounding the building evacuation alarm, the disaster siren, turning on the flashing red light system, and dialing 164 to announce the release three (3) consecutive times on the plant PA system as follows:

"EVACUATE THE FEEDS MATERIAL BUILDING

THERE HAS BEEN A UFG RELEASE."

The Green Salt Operator "A" will repeat the announcement after a three (3) minute interval by dialing 164.

BUILDING EVACUATION AND PERSONNEL ACCOUNTING

1. When the alarm is sounded, put on your respirator and use the stairways to either leave the building or get to the control room, depending on where you are to go.
DO NOT USE THE PASSENGER ELEVATOR OR MANLIFT.
2. All mechanics and their Foremen, not directly involved with the UFG release, will report to the following areas in the maintenance shop:
 - (a) Personnel assigned to the Maintenance Shop Foreman are to assemble at the west vehicle door.

- (b) Personnel assigned to the Feeds Material Building are to assemble at the south vehicle door.
- (c) Personnel assigned to the GF₂ Plant Foreman are to assemble near the tool crib door.
- (d) Personnel assigned to the Electrical and Instrument Foremen are to assemble in the Instrument Shop.
- (e) Personnel assigned to the Fluorine Products Day Maintenance Foreman are to assemble near the shop band saw.
- (f) Personnel assigned to the Construction Day Foreman are to assemble in the Fabrication area, east wall of new shop building.
- (g) Personnel assigned to the Sampling Plant should call F. Cuff (ext 325) to report in and be advised of any further action to be taken.
- (h) All Maintenance Foremen, the Supervisor of Reliability Engineering and Supervisor of Plant Engineering will report their census to F. Cuff or L. Moller as quickly as possible.

All personnel should remain in the locations specified until released by their Foreman, Supervisor, or alternate. The total Maintenance Engineering census will be reported to the Chief Control Officer (phone 383) by F. Cuff or L. Moller.

3. Production Personnel will report as follows:

- (a) UF_6 production shift operating personnel not directly involved in the UF_6 release, will report to the Feeds Material Building Control Room, either by stairways or from the outside emergency entrance/exit if necessary.
- (b) The following Production personnel not directly assigned to the Feeds Material building will report to the "blower room", just outside the South Gaseous Fluorine Control Room for census purposes and await further instructions:

Yard	Cyl. Wash
Decon.	Waste Handlers
NaR	Janitors
U-Recovery	Safety
KOH Recovery	Laundry

- (c) Fluorine Products personnel will report to the SF_6 control room. The SF_6 operator will call the census to South Gaseous Fluorine Control Room (phone 333).
- (d) The weigh-in operator at the Sampling Plant will report the Sampling Department census to the South Gaseous Fluorine Control Room (phone 333).
- (e) The EPF- CaF_2 operator and Powerhouse operator each will call their personnel census to the South GF_2 Control Room (phone 333).
- (f) The Production Department census will be reported to the Chief Control Officer (phone 383) by the Fluorine Products Foreman or Fluorine Products General Foreman. The Fluorine

Products Foreman should (when directed by the Chief Control Officer) be prepared to move additional air paks and acid suits to the south distillation door. This additional equipment is stored as follows: yellow neoprene suits in the laundry, and MSA air paks: (1) S. GF₂ control room, (1) N. GF₂ control room, (1) N. GF₂ maintenance area, (2) S. GF₂ maintenance area, (1) SF₆ building, (2) powerhouse foreman's office, (5) safety shack, (2) plant laboratory.

4. Laboratory personnel except the Basement Lab Analyst, will report to the Laboratory Supervisor. The Basement Lab Analyst will report to the South GF₂ control room and call the Fluorination Operator (Ph 341) for further instructions. Other technical personnel (Process Technology and Health Physics) will report their census to the Laboratory Supervisor (phone 329) who will report his census to the Chief Control Officer (phone 383).
5. Administration Personnel will assemble in the Administration building lunch room. The census will be called to the Chief Control Officer (phone 383).
6. Storehouse personnel will assemble in the Stores office. The census will be called to the Chief Control Officer (phone 383).
7. Plant Security personnel will report by phone to the Chief Control Officer (phone 383).
8. The Shift Supervisor will determine that all non-Works employees have exited the building and report his findings to the Chief Control Officer (phone 383).
9. All visitors and non-Metropolis Works people will report to the guard's desk area.

RELEASE CONTROL

1. The Chief Control Officer will set up a control point at the phone booth near the South Distillation door (phone 383). All building re-entries will be at his discretion and through that point. After he has been informed that the guards are posted, he will direct the Control Room Officer to turn off the evacuation and disaster sirens in order to facilitate in-plant communication. A UF₆ protective equipment cabinet is maintained near the control point to assure each person entering the building is properly attired prior to entry. The cabinet contains: (4) MSA air paks, (4) spare MSA bottles, (2) acid suits of each size, (6) MSA gas masks, (6) spare MSA cannisters, (2) emergency lights, (2) Graylite Accordion chemical suits.
2. The Control Room Officer (phone 267), the Operating Officer, and the Maintenance Officer, or their alternates will report to the Control Room to take charge and effect the necessary actions to assure control. Two (2) UF₆ emergency repair kits are maintained in the control room. The list of contents for each cabinet is attached to this procedure. The Maintenance Officer will open each cabinet and prepare to distribute repair materials as required.
3. The Control Room Officer will assign personnel to close distillation doors and shut down building fans.
4. Technical Supervisors and Process Engineers, not directly involved, will report to the Technical Offices. The supervisor in charge, Larry Bruce or Matt Kosmider, will instruct five (5) people to take cannister gas masks and act as guards at the following

locations (he may ask the GF₂ Foreman to assign hourly personnel if they are required). He will advise the Chief Control Officer when complete.

1. North Distillation door.
2. Ore Prep door, North
3. Ore Prep door, Northwest
4. Green Salt door, South
5. Green Salt door, West

These guards will allow no one to enter the building unless they have specific instructions to do so from the Chief Control Officer.

5. UF₆ Production Foremen not directly involved, will report to the Control Room Officer.
6. The Powerhouse Foreman will proceed to the powerhouse to supervise the functions of the service facilities, steam, water, air. Telephone contact at 321.
7. All remaining Production Foremen and Technical Supervisors will report to the Chief Control Officer at the South Distillation door after they have been accounted for as part of the departmental census.

NIGHTS AND WEEKENDS

RELEASE NOTIFICATION

1. The person observing the release should notify the Feeds Material Foreman, Shift Supervisor, or Control Room. If visibility is impaired on the floor, this procedure should be implemented immediately. If visibility is not impaired, the Foreman should evaluate the condition and implement the procedure when needed. Plant employees are to be notified of the release by sounding the building evacuation alarm, the disaster siren, turning on the flashing red light system, and dialing 164 to announce the release three (3) consecutive times on the plant PA system as follows:

"EVACUATE THE FEEDS MATERIAL BUILDING

THERE HAS BEEN A UF₆ RELEASE."

The Green Salt Operator "A" will repeat the announcement after a three (3) minute interval by dialing 164.

2. The Ore Prep Operator "A", upon hearing this announcement, should immediately start phoning supervisory personnel to inform them of the release. A current call-in list is posted in the UF₆ control room Foreman's office.

BUILDING EVACUATION AND PERSONNEL ACCOUNTING

1. When the alarm is sounded, put on your respirator and use the stairway, to either leave the building or get to the Control Room, depending on where you are to go.

DO NOT USE THE PASSENGER ELEVATOR OR MANLIFT

2. All Maintenance personnel, not directly involved in the UF₆ release, will report to the South GF₂ "blower room". The shift Maintenance Foreman will report to the UF₆ Control Room to act as Maintenance Officer until relieved by that officer (R. K. Hahn or P. T. Story). The Maintenance Foreman will advise the GF₂ Foreman of maintenance employees working at the release site so the Fluorine Products Foremen can promptly account for all maintenance personnel.
3. All other on-duty personnel will report in the same manner as prescribed for weekdays, except the census count will be called to the Fluorine Products Foreman, Phone 333. The Production Yard Foreman will assist in taking and reporting the census from the South GF₂ plant.
4. The UF₆ Shift Supervisor will act as Operating Officer until relieved by that Officer (C. R. McNair or D. L. Kinser).

RELEASE CONTROL

1. The UF₆ Shift Supervisor and Maintenance Shift Foreman will report to the UF₆ Control Room to act as Operating Officer and Maintenance Officer respectively. They will ascertain the safety of personnel and then act to control the release until such time as they are relieved by the designated officers, at which time they will return to their normal function in the procedure. The Feeds Material Foreman will act as Control Room Officer.

2. The Fluorine Products Foreman will act as Chief Control Officer from the South UF_6 Control Room. He will be responsible for coordinating all activities outside the Feeds Material Building.

SUPERVISORY RESPONSIBILITIES

Upon notification of a UF_6 release, supervisory personnel will act in the positions and function as follows:

CHIEF CONTROL OFFICER: D. M. Phillips; V. D. Donahue as alternate, to have the overall responsibility of coordinating the efforts to control the release. For most situations, the Chief Control Officer will be located at the South Distillation door telephone booth. The Chief Control Officer will appoint census takers, timekeepers, so that people entering the building are properly attired, etc., to effectively keep control of the flow of people into and out of the building. The Chief Control Officer will advise the Chief Officer (Plant Manager) of release control conditions. He will recommend escalation to a General Emergency, if in his estimation, the release cannot be contained before UF_6 vapors could expose members of the public.

CONTROL ROOM OFFICER: M. D. Kosmider with C. R. McNair as first alternate to have the responsibility of STAYING IN THE CONTROL ROOM to control and advise people, record data, and relay information to the Chief Control Officer from that point. All personnel involved in investigating or stopping the release must do so through this officer.

OPERATING OFFICER: C. R. McNair with D. L. Kinser as first alternate to investigate the source of the release, make recommendations on how to stop the leak and to direct any operational changes at the scene. It is imperative that the Control Room Officer be notified of all operational changes.

MAINTENANCE OFFICER: R. K. Hahn with P. T. Story as first alternate to investigate the leak, suggest ways to stop the release, and supervise all maintenance procedures during the emergency. He will notify the Control Room Officer of all work performed and personnel at the scene of the release.

RADIATION OFFICER: R. W. Yates with H. C. Roberts as first alternate is to determine the visibility and direction of UF_6 vapors exiting the building. He will establish temporary monitoring stations at appropriate locations. He will determine contamination levels of injured personnel who may require offsite medical treatment, and determine the need for bioassay sampling of potentially exposed employees.

FIRE AND RESCUE OFFICER: J. M. Ogle with R. M. DeBernardi as first alternate, will coordinate the movement of injured employees. He will direct the activities of fire fighting teams to control the dispersion of UF_6 vapors from a major product cylinder leak.

GENERAL INSTRUCTIONS

All other Metropolis Works personnel will prepare and make themselves available to assist as directed by the Chief Control Officer. Help can be most effectively given if all areas and personnel are prepared. The following items will help point out how to prepare:

1. All personnel entering the building to help control the release will be properly attired in proper safety gear as prescribed by the Chief Control Officer. This attire will include chemical suits and fresh air packs as a minimum.
2. People entering the release area must do so as a team.
3. Safety equipment at all locations should be made ready to be moved to the Feed Material Building. Do not move equipment into the area until directed to do so.
4. Stretchers, oxygen, and first-aid supplies should be ready for use should the occasion arise. Laboratory First-Aid personnel should report to the dispensary to standby for possible action.
5. CO₂ fire extinguishers should be readied for movement into the area as necessary.
6. All employees should refrain from using phones except for emergency communications during the period of the release. No report of any sort should be released to any outside agency, particularly the news media, unless it has been specifically cleared through the Chief Officer (Plant Manager).

POST RELEASE INVESTIGATION

After the release has been contained, and the area safely secured, it will be the duty of the Chief Control Officer to appoint an investigation team to determine why the release occurred, how people responded and equipment functioned during the emergency, and how to avoid similar releases in the future. A written report on the incident will be filed for future reference.

VISITORS AND NON-WORKS EMPLOYEES

In order to assure the safety of non-Works employees* required to enter the Feeds Material Building, the following procedure must be followed:

1. All visitors and non-Works employees required to enter the Feeds Material Building will be instructed in radiation safety and evacuation procedures by the Health Physics department before they enter the building.
2. Notification must be made to the Shift Supervisor of the visitor's name, time of entry, and time of exit from the building. See attached form.
3. In the event of a UF_6 release or test drill, each non-plant employee in the building will exit as rapidly as possible, and then proceed directly to the Guard's desk area.
4. The Foreman of contractor crews working in the building will be responsible for complying with #2 and #3 above.
5. The Metropolis Works supervisor responsible for the visitor's presence in the plant, will be responsible for the execution of this procedure.

* Includes: vendors, repairmen, contractors, visitors, Morristown personnel, etc.

RADIOLOGICAL CONTINGENCY PLAN
OFFSITE
EMERGENCY TELEPHONE LIST

Hospital

Massac Memorial 9-524-2176

Ambulance

Massac Memorial Hospital 9-524-2176
or
9-524-2177

Plant Physician

Dr. E. T. Yap Office - 9-524-2148
Home - 9-524-9087

Fire Department

Metropolis 9-524-2121
or
9-524-5313

Police Departments

City 9-524-2310
County (Sheriff's Office) 9-524-2912
State (Headquarters-DuQuoin) 9-542-2171

Neighboring Plants

Union Carbide Nuclear, (Paducah, DOE Plant) 7-444-6311
Electric Energy, Inc. 9-543-7531
Missouri Portland Cement 9-543-7541

Civil Defense

Director, Mr. W. G. Edwards 9-524-2002

Radiological Assistance

Illinois Emergency Services and Disaster
Agency

9-1-(217)-782-7860

Office of Radiological Assistance - U.S.
Department of Energy

9-1-(312)-972-4800

TOOLS AND MATERIAL FOR
EMERGENCY UP. RELEASE C LY
(LEFT CABINET)

Flanges (300#)

1/2", 1", 1 1/2", 2", 3", 4", (2 each)

Blanks/Teflon Gaskets Both Sides (300#)

1/2", 1", 1 1/2", 2", 3", 4", (2 each)

Pancake Blanks - 11 Ga. Steel

TFE Gaskets - 1/16" Thick

Bolts and Nuts

1/2 X 2 (8) for 1/2" flange

5/8 X 2 1/2 (8) for 1" flange

3/4 X 2 3/4 (8) for 1 1/2" flange

5/8 X 2 3/4 (16) for 2" flange

3/4 X 3 1/2 (16) for 3" flange

3/4 X 4 (16) for 4" flange

(1) Valve Spreaders (1 pair)

(2) Valve Wrench

(3) Combination Wrenches (9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16,
1, 1 1/16, 1 1/8,) (1 1/4 2 required)

(4) Pry Bar

(5) Screw Driver

(6) Hammers (2 1/2 Lb.) and (1 Lb.)

(7) File

TOOLS AND MATERIAL FOR
EMERGENCY UF₆ RELEASE ONLY
(RIGHT CABINET)

Flanges (150#)

1/2", 1", 1 1/2", 2", 3", 4", (2 each)

Blanks/Teflon Gaskets Both Sides (150#)

1/2", 1", 1 1/2", 2", 3", 4", (2 each)

Pancake Gaskets - 11 Ga. Steel

TFE Gaskets - 1/16" Thick

Bolts and Nuts

1/2 X 2" (16) for 1/2" and 1" flange

1/2 X 2 1/2" (3) for 1 1/2" flange

5/8 X 2 1/2" (8) for 2" flange

5/8 X 3" (24) for 3 and 4" flange

- (1) Combination wrenches (9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1 1/16, 1 1/8,) (1 1/4 - 2 required)
- (2) Valve wrench
- (3) Flange spreaders (1 pair)
- (4) Hammer (2 1/2 LB.) and (1 LB.)
- (5) File
- (6) Pry bar
- (7) Screw driver

UFA BUILDING ENTRY LOG FOR NON-NORSS EMPLOYEES

[illegible]