



SQUIBB

E. R. Squibb & Sons, Inc.

Georges Road  
New Brunswick, N.J. 08903  
201-545-1300

'83 MAY 31 AIO:58

May 27, 1983

Mr. Vandy L. Miller, Chief  
Material Licensing Branch  
Division of Fuel Cycle and  
Material Safety, NMSS  
U.S. Nuclear Regulatory Comm.  
Washington, D.C. 20555

Dear Mr. Miller:

This is to update Squibb's Radiological  
Contingency Plan. Enclosed please find six copies  
of the changes which were added to the Plan. Kindly  
amend Squibb's License Number 29-00139-02 to reflect  
these changes.

Very truly yours,

*John P. Gresh*  
John P. Gresh  
Radiation Safety Officer

/rk  
Attachments (16)

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REQ1 LIC30  
~~29-00139-02~~ PDR

Information in this record was deleted in  
accordance with the Freedom of Information Act.  
Exemption 6  
FOIA# 201-0063

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Date Issued: 5/27/83

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## 1.0 GENERAL DESCRIPTION OF PLANT/LICENSED ACTIVITY

### 1.1 Licensed Activity Description

E. R. Squibb and Sons, Inc. of New Brunswick, New Jersey is the holder of Materials License No. 29-00139-02 issued by the Nuclear Regulatory Commission for its radiopharmaceutical operations. The license includes authorization for the possession and use of byproduct materials of any form, with atomic numbers 3-83, inclusive. The maximum total quantity of radionuclides in this atomic number range is 50 curies except: 5 curies of hydrogen-3, 150 curies of iodine-131, 5 curies of iodine-125, 10 curies of phosphorus-32, 2 curies of chromium-51, 50 millicuries of cobalt-60, 5 curies of selenium-75 and 2000 curies of molybdenum-99/technetium-99m. The license authorizes the use of the materials in research and development, and processing for distribution to authorized recipients. With the exception of a few research activities utilizing small quantities of radioactive materials, manufacturing operations are performed in the Medotopes Building (Bldg. 124.) (See Addendum I for license)

### 1.2 General Description of the Plant/Licensed Activity

E. R. Squibb & Sons, Inc. owns and operates a pharmaceutical manufacturing and research facility in Middlesex County, New Jersey. Physically, the site occupies about 80.9 acres in the township of North Brunswick.

Geographically, the site can be represented at 40°28'25"N and 74°26'40"W.

The topography of the site is relatively flat; elevations close to 120 feet above sea level are found near the center of the site; elevations near either end of the site are approximately 105 feet above sea level.

There are approximately 40 individual structures, ranging in height from 10 feet to 75 feet above grade. Site coverage for each ranges between 5,000 and 150,000 square feet. Uses include warehousing of raw materials and finished products, animal study facilities, analytical and pilot plant laboratories, utilities and maintenance services, bulk chemical processing finished product processing and packaging, and administrative offices.

Parking facilities cover about 17% of the entire site.

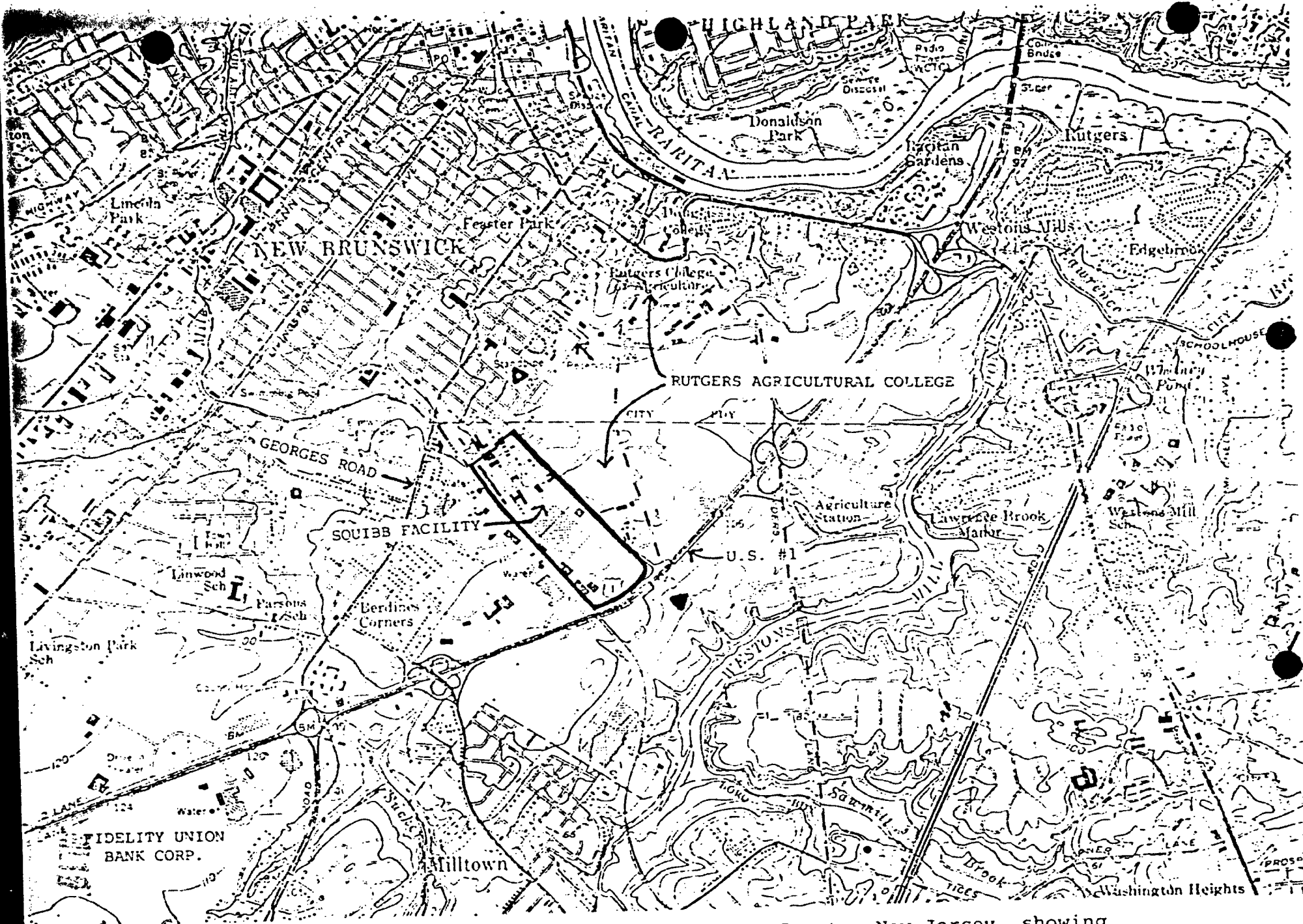


FIGURE 1. Portion of Middlesex County, New Jersey, showing location of the E. R. Squibb and Sons facility.

The direct line phone between the Georges Road Gate House, Control Center and the North Brunswick Police Headquarters will also be used.

#### 4.2.2.11 Fire Department

##### A. Fire Chief

The Fire Chief is responsible for the training of fire fighting personnel, the purchase and maintenance of fire fighting equipment in the plant and pre-plan of emergencies which might occur at the facility. His responsibilities include:

- . A complete knowledge of the over-all plant layout, including construction, location of personnel hazardous areas, location of entrances and exits, and plant conditions requiring special fire fighting techniques.
- . The organization and training of the fire brigade.
- . The maintenance of fire fighting equipment.
- . The direction of all fire fighting activities.
- . An over-all knowledge of primary and secondary fire protection water systems in and immediately adjacent to the plant.
- . Liaison with municipal, county and state fire fighting organizations.
- . A knowledge of the duties of the other elements which make up the Disaster Organization to permit the maximum coordination in an emergency.

##### B. Fire Department Functions

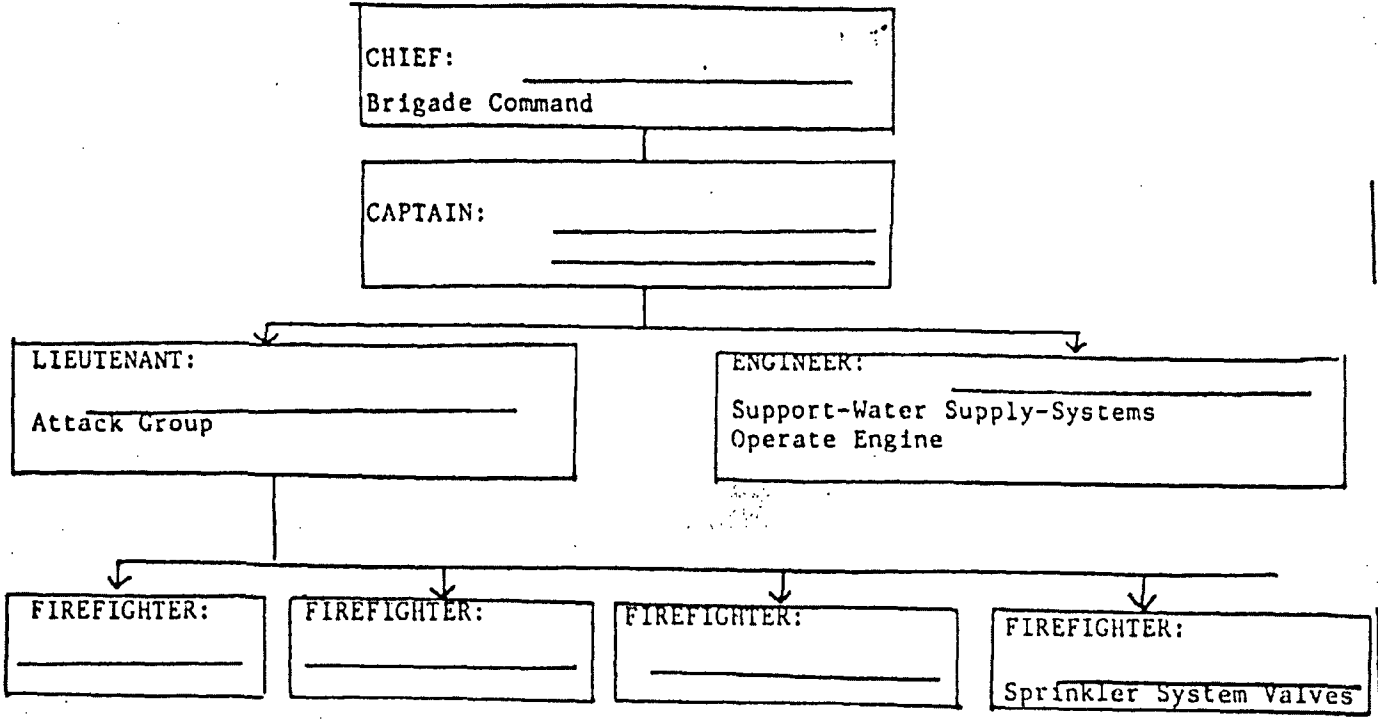
In the event of fire, explosion, or existence of other emergency, a call is placed to the Georges Road Security Gate House by dialing Ext. 3011. Upon report of the emergency, the guard sounds the proper building evacuation signal. The personnel in the building (Radiopharmaceutical Bldg. 124) are evacuated by an interior fire alarm system (continuous sounding of bells or sirens). The emergency radio paging alert is broadcast and the plant air whistle for zone 4, designates the area of emergency within the site.

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SOP-PB-02  
Effective 3/22/83  
PLANT FIRE BRIGADE ORGANIZATION

Authorization:  
\_\_\_\_\_



Chain of Command:  
Chief  
Captain  
Lieutenant  
Firefighter

The plant fire brigade members respond to Bldg. 63 (fire house) and confirm the location of the alarm from the guard by direct phone from the gate house. The brigade responds with the engine and squad vehicle to the alarm location. The Zone Engineers on duty for the pump houses will report to and attend the sprinkler systems fire pumps. In event a building sprinkler head is discharging water on the fire, a fire pump will automatically start sending a signal to the guard house who notifies the fire brigade and the zone engineer. Water flow from sprinkler heads, initiates the building's local sprinkler water motor gong. The senior fire officer on duty will assume immediate command of all fire fighting activities. Should he decide that a site emergency exists, he immediately initiates the Industrial Disaster Plan.

The officer in charge will keep the management informed of all activities in the field. Where assistance is needed for fire fighting or during off-shift periods, the plant guard will alert the North Brunswick Fire Department by direct land line from the Building 31 Gate House. If additional help is needed beyond local Mutual Aid capacity, Middlesex County Fire Coordinator will be alerted by the North Brunswick Fire Department.

When a disaster exists, all Production Personnel will begin shut-down and evacuation procedures as directed by Plant Management. Areas remote from the disaster area may continue to discontinue operations as directed by Plant Management.

#### 4.2.2.12 First Aid Squad

The Squibb First Aid Squad is a member of the New Jersey State First Aid Council and conforms to the 5 point statewide minimum training and proficiency standards. The squad manning of 30 people covers all shifts and are alerted by paging radios initiated through the main security post, where all medical emergencies are reported by dedicated extension 3033.

Certain First Aid personnel are assigned to respond to all calls with the squad's fully equipped ambulance. The site is divided into four zones with first aid personnel assigned within those zones responding directly to the scene of medical emergencies within their zone. First aid kits and certain other equipment such as a containment stretcher for radiopharmaceutical use are located throughout the plant site. Squad members receive training monthly during regular two hour drill sessions.

#### 4.2.2.13 Fire Brigade

The plant maintains an organized Fire Brigade consisting of 6 volunteers and 2 full-time fire protection people.

The six man engine assignment and two man squad complement respond to regular shift fire alarms which are transmitted by radio page, and air horn from the main security post where fire system alarm and dedicated fire reporting phone (ext. 3011) calls are received. The Fire Brigade members are equipped with personal protective equipment conforming to O.S.H.A. 1910 subpart L. They receive training at the N.J. State Fire College and during regular four house monthly training drills. During off-shift periods, the North Brunswick Volunteer Fire Department are first due for site fire emergencies.

#### 4.2.2.14 Radiation Emergency Plan-Security Department

##### A. Purpose

The purpose of this section is to provide guidance to plant security personnel concerning their responsibilities during a plant radiation emergency.

##### B. Scope

The Security Department shall endeavor to safeguard the health and safety of company employees/visitors and take all necessary action in accordance with instructions received from the Radiopharmaceutical Department Emergency Director or his designee.

##### C. Procedure

- . Establish radio communications between the security office and the Plant Emergency Director's Control Room.
- . Sound the necessary building evacuation alarms and direct employees to areas of safety.
- . Alert the North Brunswick Police and Fire Departments and the New Brunswick Police Department to initiate their respective pre-arranged plans.
- . Notify the Director of Engineering and Maintenance, the Personnel Manager and Industrial Hygiene and Safety Manager.
- . Recall all available uniformed security personnel.
- . Prohibit all vehicular and pedestrian egress and ingress to plant.



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The Health Physics Department Head shall notify:

Extension

- |                              |                    |  |
|------------------------------|--------------------|--|
| 1. Squibb Medical            | 3033               |  |
| Squibb Fire                  | 3011               |  |
| Squibb Police                | 2111               |  |
| Middlesex General Hospital - | 828-3000, ext. 286 |  |
|                              | (if required)      |  |

2. Radiopharmaceutical Department Head

Office

Home

G. Thompson	3061	(b)(6)
or designee,		
J. Frankowski	3063	

3. Director of Quality Control Services

Office

Home

P. A. Rava	2644	(b)(6)
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4. Nuclear Regulatory Commission - 215-337-5000

5. N.J. State Department of Environmental Protection -

609-882-4200

609-882-2000

609-292-5586, 7, 8

609-292-7372

- b. The emergency assistance team or alternate shall proceed to the immediate area of emergency with special monitoring equipment and determine the extent of the emergency.
- c. The affected area shall be isolated with a barricade and warning signs shall be placed on all entrances leading to the emergency area.
- d. All personnel not immediately involved with the emergency shall report to an area designated by the emergency team or alternate.

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5.2.2 Alert

- a. Persons discovering the emergency condition shall notify the Health Physics Office by the most expeditious means available (Telephone 2168; Intercom 69 or 63.)
- b. Health Physics personnel or shift supervisors sound the appropriate alarm within the plant and notify the Health Physics Department Head or his designee:

Health Physics Department Head	Office	Home
J. P. Gresh	2451	(b)(6)
or designee,		
D. K. Balkunow	3158	

- c. The Health Physics Department Head shall notify:

1. Medical                      Ext. 3033
2. Fire                              Ext. 3011
3. Police                              Ext. 2111
4. Middlesex General Hospital - 828-3000, ext. 286
5. New Brunswick Police - 201-745-5400
6. North Brunswick Police - 201-545-3200
7. Radiopharmaceutical Department Head or designee:

	Office	Home
G. Thompson	3061	(b)(6)
or designee,		
J. Frankowski	3063	
8. Director of Quality Control Services		
P. A. Rava	2644	(b)(6)
9. Nuclear Regulatory Commission - 215-337-5000		
10. N.J. State Department of Environmental Protection -		
	609-882-4200	
	609-882-2000	
	609-292-5586, 7, 8	
	609-292-7372	

- d. The Radiopharmaceutical Department Head shall notify:  
General Manager Diagnostics Division

	<u>Office</u>	<u>Home</u>
S. Barker	2203	(b)(6)

- e. The Director of Quality Control Services shall notify:  
Vice President of Quality Control

E. A. Gusmano	3191	(b)(6)
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- f. Persons in the immediate area of the emergency condition shall take appropriate action to limit the extent of the incident with available means to the extent possible, then retreat to a safe location and await assistance.
- g. All shift personnel, not immediately involved with the incident, shall report to the area designated by Health Physics or shift supervisors.

### 5.2.3 Site Area Emergency

- a. Persons discovering the emergency condition shall immediately notify the Health Physics Office by the most expeditious means available.
- b. Telephone ext. 2168  
or  
Intercom 69 or 63
- c. Health Physics personnel or shift supervisors sound the appropriate alarm (horn) within the radiopharmaceutical production building and notify the Health Physics Department Head or his designee:

Health Physics Department Head	<u>Office</u>	<u>Home</u>
J. P. Gresh	2451	(b)(6)
or designee,		
D. K. Balkunow	3158	

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## d. The Health Physics Department Head shall notify:

1. Medical Ext. 3033
2. Fire Ext. 3011
3. Police Ext. 2111
4. Middlesex General Hospital - 828-3000, ext. 286
5. New Brunswick Police - 201-745-5400
6. North Brunswick Police - 201-545-3200
7. Radiopharmaceutical Department Head or designee:

	<u>Office</u>	<u>Home</u>
G. Thompson or designee, J. Frankowski	3061  3063	(b)(6)
8. Director of Quality Control Services P. A. Rava	2644	(b)(6)
9. Nuclear Regulatory Commission -		
10. N.J. State Department of Environmental Protection -		
	609-882-4200	
	609-882-2000	
	609-292-5586, 7, 8	
	609-292-7372	

## e. The Radiopharmaceutical Department Head shall notify:

General Manager Diagnostics  
Division

S. Barker

<u>Office</u>	<u>Home</u>
2203	(b)(6)

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- f. The Director of Quality Control Services shall notify:  
Vice President of Quality Control

	<u>Office</u>	<u>Home</u>
E. A. Gusmano	3191	(b)(6)

- g. Persons in the immediate area of the emergency condition shall take appropriate action to limit the extent of the incident with available means to the extent possible, then retreat to a safe location and await assistance.
- h. Shift operating personnel, not immediately involved with the incident, report to the Health Physics Office.

#### 5.2.4 General Emergency

- a. Person(s) discovering the emergency condition shall immediately notify the Health Physics Office by the most expeditious means available. (Tel. 2168; Intercom 69 or 63.)
- b. Health Physics personnel or shift supervisors sound the appropriate alarm within the radiopharmaceutical production building and notify the Health Physics Department Head or his designee:

Health Physics Department Head	<u>Office</u>	<u>Home</u>
J. P. Gresh or designee,	2451	(b)(6)
D. K. Balkunow	3158	

- c. The Health Physics Department Head shall notify:
1. Medical                      Ext. 3033
  2. Fire                              Ext. 3011
  3. Police                            Ext. 2111
  4. Middlesex General Hospital - 828-3000, ext. 286
  5. New Brunswick Police - 201-745-5400
  6. North Brunswick Police - 201-545-3200

## 7. Radiopharmaceutical Department Head or designee:

	<u>Office</u>	<u>Home</u>
G. Thompson or designee,	3061	(b)(6)
J. Frankowski	3063	

## 8. Director of Quality Control Services

P. A. Rava	2644	(b)(6)
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## 9. Nuclear Regulatory Commission - 215-337-5000

## 10. N.J. State Department of Environmental Protection -

609-882-4200

609-882-2000

609-292-5586, 7, 8

609-292-7372

d. The Radiopharmaceutical Department Head shall notify:  
General Manager Diagnostics Division

	<u>Office</u>	<u>Home</u>
S. Barker	2203	(b)(6)

e. The Director of Quality Control Services shall notify:  
Vice President of Quality Control

E. A. Gusmano	3191	(b)(6)
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## f. Persons in the immediate area of the emergency condition shall take appropriate action to limit the extent of the incident with available means, to the extent possible, then retreat to a safe location and await assistance.

5.3 Corrective Actions5.3.1 Notification of Unusual Event

- a. The Emergency Director shall designate personnel to proceed to the scene of the emergency with the necessary equipment to meet the emergency. These persons will evaluate the extent and magnitude of the emergency, determine if radiation hazards exist and report their findings to the Emergency Director.

- . Plant Medical Department Head
  - . Other personnel as required.
- g. Set up necessary auxiliary communications (walkie-talkie), if necessary.
  - h. Establish barricades with Plant Security force at the site boundary gate houses to restrict access to the site.
  - i. Evaluate the emergency and, as quickly as possible, and determine the release of radioactivity. Refer to Addendum V for methodology and parameters used in calculating atmospheric dispersion and dose rates to individuals.
  - j. If there are injured personnel, notify the senior Medical representative.
  - k. Provide a health physics representative to accompany the patient to the hospital with the ambulance emergency kit, to maintain radiological controls in the hospital.
  - l. Supervise collection of emergency data in the Contingency Monitoring Log.
  - m. Notify Plant Security to institute site industrial emergency and disaster control plan, if necessary.

#### 5.3.4 General Emergency

##### Plant Emergency Director

- a. Note the wind direction, instruct security to evacuate onsite personnel, if necessary, through the upwind exits of the site and sound the evacuation alarms.
- b. Notify the following members of Squibb Management:
  - . General Manager Diagnostics Division
  - . Radiopharmaceutical Department Head
  - . Radiopharmaceutical Quality Control Department Head
  - . Plant Security Head
  - . Plant Medical Department Head
  - . Quality Control Services Director
  - . Other personnel as required

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E. R. SQUIBB & SONS, INC.

EMERGENCY CALL LIST

<u>Title</u>	<u>Squibb Extension</u>
General Manager Diagnostics Division	2203
Dir Engineering & Maintenance	3587
Radiopharmaceutical Mfg Dept Head	3061
VP Quality Control	3191
Dir Quality Control Services	2644
Health Physics Department Head	2451
Health Physics Section Head	3158
Health Physics General Supervisor	2168
Health Physics Supervisor	2561
Plant Security Head	2101
Dir Personnel & Ind. Rel	3034
Dir Employee Health	2845
Mgr Ind Hygiene and Safety	2885
Radiopharm Quality Control Department Head	2419

NOTE: An updated emergency list of home addresses and telephone #'s are maintained by Security and Health Physics.

Nuclear Regulatory Commission	(215) 337-5000
NJ State Dept. of Environmental Protection	(609) 882-4200 (609) 882-2000 (609) 292-5586-7-8 (609) 292-7372



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