UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

before the

ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	
PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE, et al.	Docket Nos. 50-443-OL 50-444-OL
(Seabrook Station, Units 1 and 2)	May 19, 1986

AFFIDAVIT OF WILLIAM T. WALLACE, JR.
(CONTENTION SAPL-7)

I, WILLIAM T. WALLACE, JR., being on oath, depose and say as follows:

1. I am the Director of the New Hampshire Division of Public Health Services (DPHS).

2. Part H of Section II of the New Hampshire local radiological emergency response plans establishes that local emergency workers, equipment, and vehicles may be screened for contamination by either state or local emergency personnel. Monitoring of emergency workers at the local EOCs that reveals a level of radioactivity in excess of 100 CPM (.15mR/hr) will result in referral to a decontamination facility located at reception centers in host communities. Part H indicates that local emergency operations centers are equipped with

appropriate monitoring equipment for this purpose (CDV-700 Survey Meters). After referral to the state decontamination facilities, monitoring and, if necessary, decontamination of emergency personnel, equipment and vehicles will be conducted under the supervision of Division of Public Health Services personnel. Part H of Section II of a representative local radiological emergency response plan is attached hereto and marked "A".

3. Section 2.7.5 of the New Hampshire Radiological Emergency Response Plan (NHRERP), a copy of which is attached hereto and marked "B", establishes that monitoring and decontamination will be provided for emergency workers at decontamination facilities located at reception centers in host communities. The plans identify six host community reception centers for which provisions for establishing decontamination facilities have been, or will be made. Section 2.7.5 establishes that all monitoring and decontamination activities at reception centers will be supervised by Division of Public Health Services personnel.

4. Section 2.7.5 indicates that additional monitoring and decontamination services will be provided at the IFO-EOF in Newington for state emergency workers who are deployed from that location. Monitoring and decontamination will be conducted at the EOF in facilties established specifically for that purpose by the utility.

5. Appendix F of Volume 4, Section 3 of NHRERP which contains DPHS Emergency Response Procedures for Seabrook Station has been revised. A copy of the revised Appendix F is attached hereto and marked "C". Also attached hereto and marked "D" are representative site-specific decontamination procedures for the Manchester Radiological Decontamination Center. These procedures will be appropriately replicated for each decontamination Center. Revised Appendix F contains specific instructions for monitoring and decontamination of personnel, vehicles, equipment, instruments, and supplies. Revised Appendix F also contains an inventory of equipment and supplies to be maintained and used for decontamintion at each decontamination facility. The supplies listed in Revised Appendix F are generally available through normal commercial outlets and can be replenished during an emergency. Revised Appendix F includes instructions for isolation of contaminated materials for disposal or decontamination. The host community plans identify or will identify medical facilties to which referrals would be made for contamination that cannot be removed at the decontamination facilities. Referrals for treatment of emergency worker wounds would be made to the identified medical facilities.

6. Fire department personnel of the host communities where the decontamination facilities are located are being, and will continue to be, trained in decontamination procedures. There are a total of 643 fire department

personnel in the communities designated as host communities. A number of these personnel have received decontamination training.

7. Each decontamination facility is supervised by a Decontamination Administrator who is designated and trained by the Division of Public Health Services. Appendix A to Volume 4, Section 3 of the State Plan identifies a total of nine Decontamination Administrators who have been designated by DPHS. A DPHS Decontamination Administrator procedures is contained in Volume 4, Section 3 of the New Hampshire State Plan. The DPHS Decontamination Administrator procedures are attached hereto and marked "E".

8. Section 2.7.5 of the New Hampshire State Plan establishes that the Division of Public Health Services will supervise disposal of waste materials generated by decontamination activities. The disposal of this waste will be arranged by Division of Public Health Services officials, in accordance with state and federal law, and New Hampshire Administrative Rules for Control of Radiation, with the utility or with a local brokerage appropriately licensed to dispose of low level radioactive wastes.

9. Based on the foregoing, it is my opinion that there exists reasonable assurance that adequate procedures and facilties will be

available to decontaminate emergency personnel, wounds, supplies and equipment, and adquate means for waste disposal.

William T. Wallace, Jr., M.D., M.P.H.

STATE OF NEW HAMPSHIRE

MERRIMACK, SS. May 19, 1986

The above-subscribed William T. Wallace, Jr., appeared before me and made oath that he had read the foregoing affidavit and that the statements set forth therein are true to the best of his knowledge.

Before me,

Sharon E. DeHart
Notary Public
My Commission Expires: 8-15-89

H. RADIOLOGICAL EXPOSURE CONTROL

The objective of radiological exposure control is to protect emergency workers by restricting their exposure to radioactive materials in a manner consistent with EPA Protective Action Guidelines (see Table 4) and to provide a means for monitoring and decontamination of individuals and materials. These responsiblities are shared by State and local emergency response personnel. DPHS has State-wide responsibility for the radiological exposure control program; the Exeter RADEF Officer implements the local radiological control program.

Dosimetry

Three dosimeters will be used to monitor the whole body gamma exposure of emergency workers. These include two self-reading "pocket-types", a CDV-138 (0-200mR) and a CDV-730 (0-20R). The third is a thermo-luminescent permanent record dosimeter (TLD) which is used to measure the total exposure an emergency worker receives for the duration of the emergency. The dosimeters are stored, along with other radiological monitoring equipment, in the Exeter EOC. Similar equipment is stored by NHCDA in the IFO/EOF. Therefore, during an emergency, the Exeter EOC and the IFO/EOF will have available the equipment shown in Table 5. The IFO/EOF will have additional dosimetry equipment. This State supply may be used to supplement dosimetry on hand in Exeter if necessary.

The dosimeters will be distributed to the Exeter emergency workers from the EOC by the RADEF Officer. As he issues the pocket dosimeters the RADEF Officer will see that they are zeroed. He will initiate a log sheet that will serve as the basis for exposure records. It will be maintained at the EOC. All emergency workers will subsequently be required to wear these three dosimeters at all times. Once a release of radioactive materials has occurred each worker will be instructed to take readings from the self-reading dosimeters each 15 to 30 minutes. Emergency workers should report readings to the RADEF Officer at the EOC.

"A"

TABLE 4

PROTECTIVE ACTION GUIDES*

These Protective Action Guides are preliminary and will change. They are shown here to illustrate the types of numbers that can be expected in final guidance.

Projected Dose (Rem) to Individuals in the Population	Recommended Actions	Comments
Whole body <1 Thyroid <5	• No protective action required. • State may issue an advisory to seek shelter and await further instructions or to voluntarily evacuate. • Monitor environmental radiation levels.	Previously recommended protective actions may be reconsidered or terminated.
Whole body 1 to <5 Thyroid 5 to <25	• Seek shelter and wait further instructions. • Consider evacuation particularly for children and pregnant women. • Monitor environmental radiation levels. • Control access.	
Whole body 5 to 25 Thyroid 25 to 125	• Conduct mandatory evacuation of populations in the predetermined area. • Monitor environmental radiation levels and adjust area for mandatory evacuation based on these levels. • Control access.	Seeking shelter would be an alternative if evacuation were not immediately possible.
Projected Dose (Rem) to Emergency Team Workers		
Whole body 25 Thyroid 125	• Control exposure of emergency team members to these levels except for lifesaving missions. (Appropriate controls for emergency workers, include time limitations, respirators, and stable iodine.)	Although respirators and stable iodine should be used where effective to control dose to emergency team workers, thyroid dose may not be a limiting factor for lifesaving missions.
Whole body 75	• Control exposure of emergency team members performing lifesaving missions to this level. (Control of time of exposure will be most effective.)	

* Recommended protective actions to avoid whole body and thyroid dose from exposure to a gaseous plume.

TABLE 5

RADIOLOGICAL EQUIPMENT IN THE EXETER ECC

Four 777-1 kits each containing:

6 CDV 742 dosimeters (0-200 R)

1 CDV 750 dosimeter charger

1 CDV 700 survey meter

1 CDV 715 survey meter

and:

30 TLD dosimeters

30 CDV 138 dosimeters (0-200 mR)

30 CDV 730 dosimeters (0-20 R)

A storage container

Appropriate instructions and log forms

Thyroid and Respiratory Protection

As projected or actual doses approach the upper limit of the PAGs for the general population, the DPHS will order local emergency workers out of their towns. The local emergency workers will be replaced by State emergency workers if necessary. Accordingly, no radioprotective drugs or respiratory equipment is necessary in Exeter. The provisions for State emergency workers are described in Sections 2.7.3 and 2.7.4 of the NHRERP. These provisions include potassium iodide (KI) and protective clothing that will be available at the IFO/EOF.

Decontamination

Emergency workers, equipment used in the emergency response, evacuees, evacuees' possessions and vehicles may become contaminated with radioactive particulates that have been deposited from the Plume. These individuals, equipment and vehicles may be screened for contamination by either State or local emergency workers. This type of monitoring is handled primarily by the State at access control points or Reception Centers. Each community within the Plume Exposure EPZ, including Exeter, however, has CDV-700 survey instruments it may use for screening for contamination of its own emergency workers. Such screening by Exeter emergency workers will be conducted from the EOC, as deemed necessary by the local Civil Defense Coordinator.

If the Exeter emergency workers determine that the level of radioactivity on an individual or on surfaces of vehicles, equipment or other possessions exceeds 100 CPM above background levels, State DPHS will be contacted for instructions. The contaminated person and his possessions will be sent to a State decontamination facility located at the Reception Centers. Details on the monitoring to be provided by State personnel at the decontamination facilities are included in Section 2.7.5 of the NHRERP. Additional details on decontamination and waste disposal are provided in the DPHS procedures.

allowed into the affected area only if equipped with respiratory protection, or for periods brief enough to protect their health.

All workers are required to return their dosimeters to the facility from which they were distributed, or to the IFO/EOF if the local EOC has been evacuated. DPHS will analyze emergency worker exposure and send to all emergency workers who have been exposed to any amount of radiation a record of their exposure.

2.7.5 Decontamination

Emergency workers, equipment used in the emergency response, evacuees, evacuees' possessions and vehicles may become contaminated with radioactive particulates that have been deposited from the plume. These individuals, equipment and vehicles may be screened for contamination by either State or local emergency workers. Monitoring is the responsibility of the State. Each community within the Plume Exposure EPZ, however, has CDV-700 survey instruments it may use for spot-checking for contamination. Such screening by the local emergency workers will be conducted from the local EOC, as deemed necessary by the local Civil Defense Director. If the local emergency workers determine that the level of radioactivity on an individual or on surfaces of vehicles, equipment or other possessions exceeds 100 CPM above background, the contaminated person and his possessions will be sent to a state decontamination facility.

State monitoring teams may screen for contamination in either of two ways. Screening of evacuees, their vehicles and possessions will be conducted at the Reception Center parking areas. This may be done by either State emergency workers or by emergency workers from the host community. In addition, screening of State emergency workers, equipment and vehicles may take place at the IFO/EOF, under the supervision of DPHS. If levels of radioactivity appear to have potential to approach

levels mentioned above, a more vigorous evacuee monitoring method will be implemented. At this point, in addition to monitoring every vehicle at the Reception Center parking areas, all evacuees that have not yet left the EPZ will be asked to travel through the access control points (See Section 2.6.5) where screening of vehicles will be conducted by State emergency workers. If decontamination is indicated for some tested vehicles, all vehicles will be screened. In addition to vehicles needing decontamination, all evacuees that request decontamination will be sent to a decontamination facility.

Means of Decontamination

Decontamination procedures will be performed under the supervision of DPHS personnel. It is anticipated that decontamination of individuals will require showering and a change of clothing. Radioactive materials that have been deposited on surfaces of equipment and vehicles will be washed in outdoor parking areas. Decontamination procedures will follow standard radiological health practices and are contained in DPHS Procedures. If decontamination is not effective or internal contamination is suspected, people will be sent to facilities capable of handling individuals requiring more elaborate treatment or observation. These facilities have separate procedures for decontamination (see Section 2.8.4 of this RERP). Contaminated waste materials and contaminated personal articles will be stored at the Decontamination Centers for the duration of the emergency. Each Decontamination Center is capable of storing a minimum of 1 cubic meter of contaminated waste and 2 cubic meters of contaminated personal articles for quarantine. This is sufficient for the worst expected decontamination required. Following the emergency, DPHS will evaluate further decontamination or quarantine length and will dispose of waste materials through a local brokerage.

APPENDIX F

DECONTAMINATION

"C"

EMERGENCY RESPONSE PROCEDURE
(NH) RADIOLOGICAL DECONTAMINATION CENTER
FOR DECONTAMINATION PERSONNEL

PREPARED BY: NEW HAMPSHIRE DIVISION OF PUBLIC HEALTH SERVICES (DPHS)
RADIOLOGICAL HEALTH PROGRAM

This document provides a checklist of procedures, for the initial set up and continued operation of the Decontamination Center, to be followed by the Decontamination personnel in the event of a radiological emergency condition.

INITIAL

1. Receive notification from the Fire Chief (or delegate) to open the Decontamination Center. _____

2. If assigned, bring the Decontamination Kit (See Appendix F7) from the EOC (Fire Station) to the Decontamination Center _____

3. Upon arrival at the Decontamination Center, insure that at least ten (10) Decontamination persons are present.

4. Remove all nonessential people from the designated decontamination area. _____

5. Prepare area for receipt of possibly contaminated individuals by putting the Decontamination Center into operation (See Appendix F1). _____

FOR SEABROOK STATION INCIDENT

6A. Report to the DPHS Administrator in order to review the status of the equipment on hand and to discuss the specific duties (See Appendix F2) to be performed for the duration of this emergency. _____

7A. Report to the DPHS Administrator any need for additional personnel, equipment, information or radiological technical advice. _____

8A. Follow any additional instructions given by the DPHS Administrator (e.g., different methods of surveying, changes in decontamination procedures, etc.). (See Appendix F3 and F4 for normal surveying and decontamination procedures.) _____

9A. Insure that personnel dosimetry is read every half hour and that the reading is recorded. _____

10A. Close Decontamination Center upon notification from DPHS Administrator (See Appendix F6). _____

FOR LOCAL RADIOLOGICAL INCIDENT

6B. (TO BE DEVELOPED BY LOCAL STAFF.)

APPENDIX F1

INITIAL

Procedure in opening the Decontamination Center.

1. Remove all nonessential people from the designated decontamination area. _____

2. Set up interior of station (Girls' Locker Room) as shown at end of this procedure (Appendix F1 - Form 2).

   A. Remove any unnecessary equipment or material from the designated area. _____

   B. Set up radiation signs, yellow rope, tape or other appropriate barriers (i.e., close doors) in order to clearly delineate the area. _____

   C. Line large garbage containers with plastic trash bags. _____

   D. Cover the floors of both the buffer zone and the decontamination area with plastic material and paper (shower area). _____

   E. Cover all stationary devices in the designated area which are not needed for operation of Decontamination Center with plastic. _____

   F. Isolate the air system from the rest of the building. _____

   G. Put radiation detection instruments and the report forms on tables at the monitoring points. _____

   H. Place decontamination materials and necessary needed supplies on tables in the Decontamination Center. _____

   I. Attach the flexible shower hoses to showers for use. Insure that the water source flow and temperature will be adjustable for the comfort of the contaminated person. _____

3. Prepare exterior of Decontamination Center as shown at end of this procedure (Appendix F1 - Form 1). _____

   A. Rope off areas marking traffic flow into Center:

      MONITORING AREAS: Girls' Locker Room _____

      Vehicle _____

      Registration Area Entrance

APPENDIX F2

Description of the specific duties and attire of persons assigned to the Decontamination Center.

DECONTAMINATION ADMINISTRATOR "DPHS" (1)

He/she is the DPHS Liaison with the RHTA in Concord. Duties include:

(1) to follow decontamination personnel dosimetry,

(2) to note needs for personnel and/or equipment and supplies,

(3) to maintain contact with DPHS RHTA in Concord.

(4) to arrange for sufficient clothing in coordination with the Reception Center Manager,

(5) and to establish a means of communication between him/herself, the Reception Center Manager, the ranking police official, local on-site civil defense officials (if present), the local EOC and the hospital/medical center.

NOTE
PROTECTIVE CLOTHING WILL CONSIST OF PAPER COVERALLS AND SHOE COVERS AND WILL BE WORN IN THE INTERIOR OF THE DECONTAMINATION ONLY.

INTERIOR OF DECONTAMINATION CENTER (4)

Prior to the arrival of the contaminated persons, staff persons should each put on:

(1) "scrub" suit
(1) Tyvek coverall
(1) shower cap
(1) pair of PVC suits (taped around cuff)
(1) plastic apron
(1) pair of surgical gloves
(1) pair of nitrile gloves (taped around cuff)

Two (2) decontamination staff are stationed in the decontamination area, one (1) to each area fo the locker room (men and women).

Two (2) of the monitoring staff (one [1] in each area of the locker room) are stationed in the clean zone. Their function is to survey the contaminated individuals (See Appendix F3) and to complete the "Personnel Radiological Monitoring Report Form". (When form is completed, it will be given to the Decontamination staff.) Monitoring personnel also are to hand equipment into the Decontamination Room as required, without entering.

APPENDIX F2

EXTERIOR OF DECONTAMINATION CENTER (6)

Attire will be the normal firefighter equipment (boots, gloves, etc.).

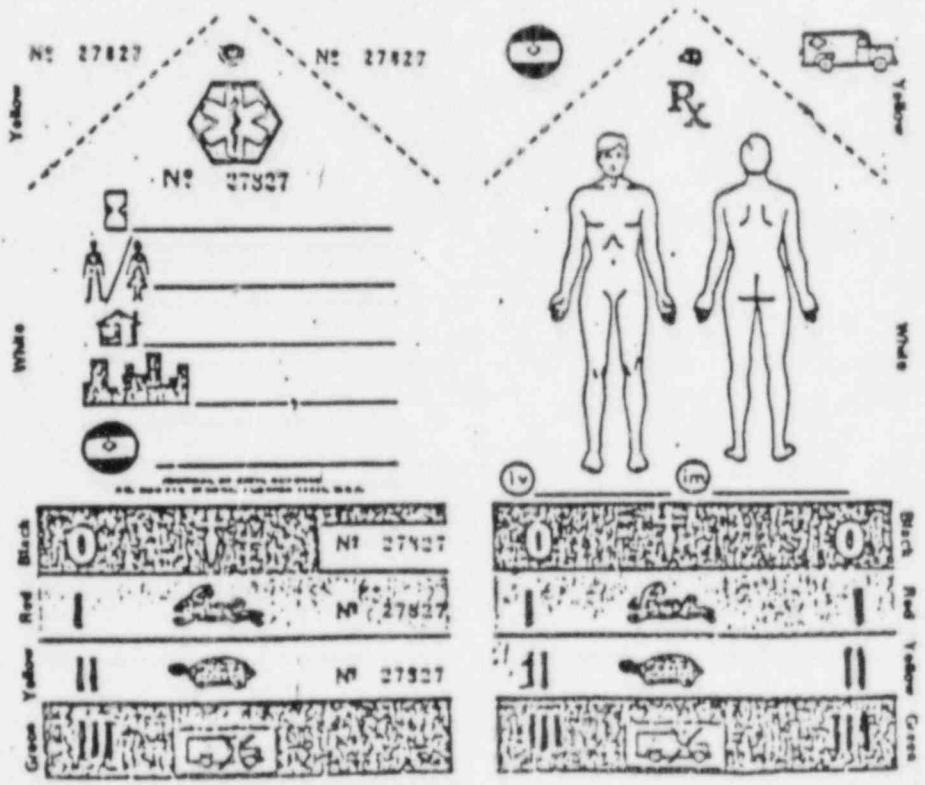
One (1) monitor staff person (at entrance to the locker room) is to be stationed at all times, at the control points between the outside area and the Buffer Zone. The contaminated area should be vacuumed and surveyed before letting another contaminated individual inside.

The three (3) monitors are assigned to vehicles and two (2) at the registration area. Vehicle interior monitoring and their decontamination will be done as time allows. Personnel and vehicle monitoring will be as per Appendix F3 unless otherwise advised. The only form to be filled by these monitors is for the vehicle monitoring (Vehicle Monitoring Report Form) and occupant referral (METTAG).

In the drive there will be three lanes prepared where cars and other vehicles will be directed for radiological monitoring and referral. Two lanes will be set aside for cars and the third lane will be reserved for buses and special vehicles such as ambulances and invalid coaches transporting the mobility-impaired.

After cars have been monitored, the use of a special tag (METTAG) and colored sticker will be used to refer and track both evacuees and their cars.

The Medical Emergency Triage Tag (METTAG) is shown below from both sides. Its colored "tear-off" tabs along with the tag's serial numbers on each tab will be used to sort and keep track of evacuees and their belongings.



APPENDIX F3
SURVEYING METHODS
(PERSONNEL, VEHICLE & AREA)

A. PROCEDURES FOR PERSONNEL MONITORS

- Verify operability of equipment frequently as per Appendix F5.
- Open the shield on the probe. Secure the probe in a surgical glove making sure glove fingers aren't dangling. Put on headphones so that you may observe the position of the probe rather than watch the meter readings.
- Determine background radiation levels. Recheck background from time to time with and without probe cover.
- Place the probe about 1/2 to 1 inch from the body of the individual being monitored, being careful not to touch the individual.
- DO NOT MOVE the probe too fast - only about 1 inch per second. The average personnel monitoring should be performed in 3 - 5 minutes per individual.
- Monitor the hands first, then have the person assume the "spread-eagle" position (Refer to Illustration 1).

  (a) If hands are contaminated, cover with plastic baggie or plastic wrap until monitoring survey is completed.

- Then move the probe downward on one side of the neck, the collar, the shoulder, arm, wrist, hand, underarm, armpit, side of the body, side of the leg, around the cuff and shoe, including the bottom of the shoe. Then monitor the inside of the leg from the cuff to the groin and continue the procedure on the other side of the body.
- Monitor the front and back of the body. Pay particular attention to covering the thyroid area in the throat.

  (a) To monitor bottoms of feet, have person lean against a wall (with hands covered if contaminated) for balance while he/she lifts one foot at a time.

- A person is considered CONTAMINATED if there is a reading of 0.15 mR/hr (100 cpm) or more above background (this limit may be adjusted by DPHS according to prevailing radiation levels outside). Do not confuse background radiation with your readings; contamination would be apparent by a <u>sustained increase</u> on the visual meter reading (Selector Switch on X 1 range), and also by a marked increase in the audible indication from the headphone. The audio response makes it possible to practically pinpoint any hot spots on the individual.

APPENDIX F3
SURVEYING METHODS
(PERSONNEL, VEHICLE & AREA)

- If the individual is contaminated, the interior monitor of the Decontamination Center must fill out a Personnel Radiological Monitoring Report Form (See Form attached). Send the contaminated individual to the decontamination room. Direct the individual to return after decontamination.

- Monitor individuals again after decontamination to verify that contamination has been removed. Repeat decontamination procedures if any contaminaton remains. If after a second decontamination attempt contamination remains, refer the individual for treatment at the medical facility appropriate for the Center.

- Collect and retain Personnel Radiological Monitoring Report Forms for all individuals found to be contaminated.

B. PROCEDURES FOR VEHICLE MONITORS

- Verify operability of equipment frequently as per Appendix F5.

- Open the shield on the probe. Secure the probe in a surgical glove making sure fingers aren't dangling. Put on headphones so that you may observe the position of the probe rather than watch the meter readings.

- Determine background radiation levels. Recheck background from time to time with and without probe cover.

- Place the probe about 1/2 to 1 inch from the vehicle being monitored, being careful not to touch the vehicle.

- Monitor the entire external area of the vehicle. Areas most likely to be contaminated are the wheelwells, radiator grill and air filter.

- Begin survey of vehicle at the bottom of the vehicle and work up. Consider all surfaces of the vehicle contaminated until proved otherwise by monitoring.

- Avoid contact with potentially contaminated surfaces of the vehicle to prevent contaminating yourself.

- Monitoring of internal areas of vehicle will be done only if time is available and is necessary only when:

  (1) vehicle is externally contaminated, or

  (2) personnel transported in vehicle are contaminated.

APPENDIX F3
SURVEYING METHODS
(PERSONNEL, VEHICLE & AREA)

- A vehicle is considered CONTAMINATED if there is a reading of 0.15 mR/hr (100 cpm) or more above background (this limit may be adjusted by DPHS according to prevailing radiation levels outside). Do not confuse background radiation with your readings; contamination would be apparent by a sustained increase on the visual meter reading (Selector Switch on X 1 range), and also by a marked increase in the audible indication from the headphone. The audio response makes it possible to practically pinpoint any hot spots on the vehicle.

- If the vehicle is contaminated, fill out the Vehicle Radiological Monitoring Report Form, (see form attached). Vehicles are identified on the front window with a sticky patch:

  GREEN = CLEAN
  RED = EXTERNALLY CONTAMINATED ONLY

- Collect Vehicle Radiological Monitoring Report Forms for all vehicles found to be contaminated.

C. PROCEDURES FOR AREA MONITORS

- Verify operability of equipment frequently as per Appendix F5.

- Open the shield on the probe. Secure the probe in a surgical glove making sure glove fingers aren't dangling. Put on headphones so that you may observe the position of the probe rather than watch the meter readings.

- Determine background radiation levels. Recheck background from time to time with and without probe cover.

- Place the probe about 1/2 to 1 inch from the area being monitored, being careful not to touch the area.

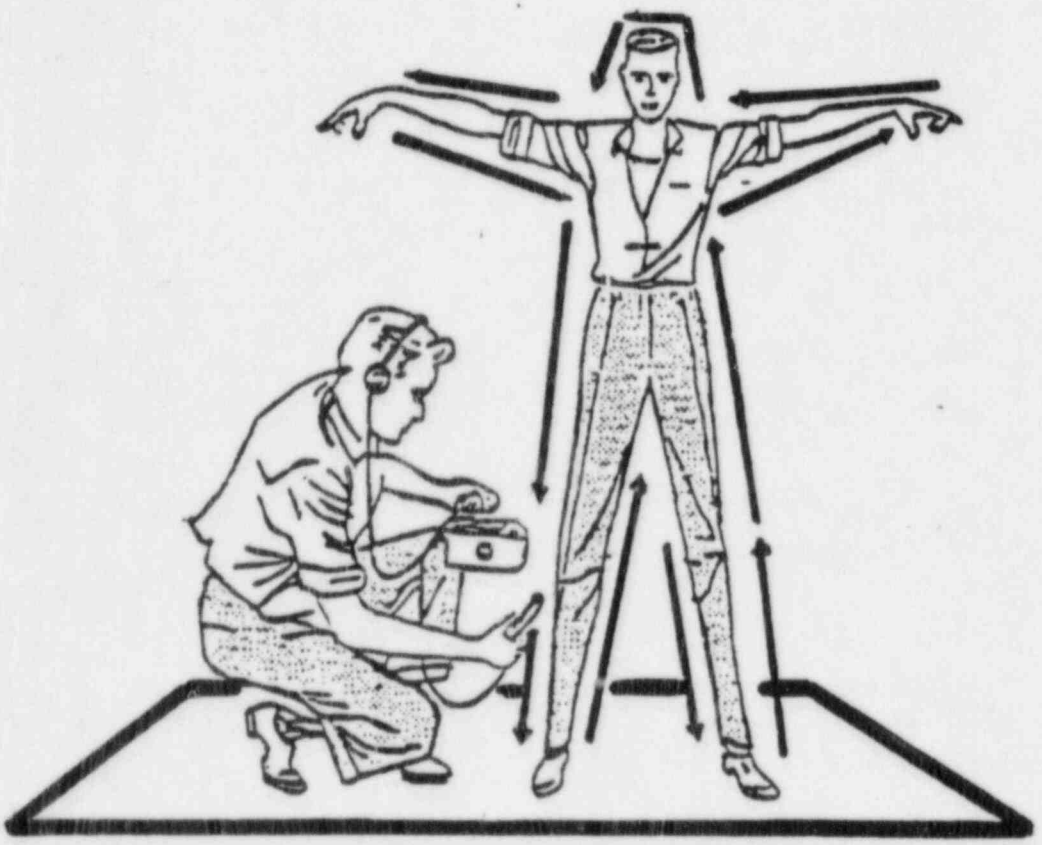
- Move the probe slowly on the suspected area.

- An area is considered CONTAMINATED if there is a reading of 0.15 mR/hr (100 cpm) or more above background. Do not confuse background radiation with your readings; contamination would be apparent by a sustained increase on the visual meter reading (Selector Switch on X 1 range), and also by a marked increase in the audible indication from the headphone. The audio response makes it possible to practically pinpoint any hot spots on the area.

- If the area is contaminated, remove the plastic material (if present), and cover with plastic material and secure with duct tape.

APPENDIX F3

ILLUSTRATION 1



PERSONNEL MONITORING

APPENDIX F3 - FORM 1
PERSONNEL RADIOLOGICAL MONITORING REPORT FORM

NOTE: This form will be completed for each individual with a reading of 0.15 mR/hr (100 cpm) or more above background.

NAME OF PERSON MONITORED: _____

SOCIAL SECURITY NUMBER: _ _ _ - _ _ - _ _ _ _

ADDRESS: Street/_____
City/_____ State/_____ Zip/_____

FIRST Radiological Monitoring:

Stamp Number:

SECOND Radiological Monitoring - to be completed after person has undergone decontamination including acquiring radiologically "clean" clothing.

Stamp Number:

THIRD Radiological Monitoring - to be completed after person has undergone decontamination a second time.

Stamp Number:

ANATOMY	FIRST MONITORING	SECOND MONITORING	THIRD MONITORING
head	cpm	cpm	cpm
face			
neck			
rt.shoulder			
rt. arm			
rt. hand			
rt. side			
rt. outside leg			
rt. foot			
rt. inside leg			
groin			
lt. inside leg			
lt. foot			
lt. outside leg			
lt.side			
lt. hand			
lt. arm			
lt. shoulder			
chest			
stomach			
back			
buttocks			
thyroid			

MEDICAL REFERRAL: Individual sent to _____ HOSPITAL/CENTER for decontamination and/or treatment at (Time)_____AM_____PM_____ on

DATE_____ SIGNATURE_____
DPHS Administrator

One copy to hospital/medical center; one copy to Decontamination Center.

APPENDIX F3 - FORM 2

VEHICLE MONITORING REPORT FORM

DATE: _____

VEHICLE REGISTRATION	DRIVER'S METTAG NUMBER	AREAS CONTAMINATED	INITIALS	TIME/DATE DECONTAMINATION	INITIALS

NOTE: Take all contamination surveys with beta window open. Decontamination required when contamination levels are greater than 0.15 mR/hr (100 cpm) above background.

APPENDIX F4
DECONTAMINATION
(PERSONNEL AND VEHICLE)

A. PERSONNEL DECONTAMINATION

Prior to personnel decontamination, all contaminated individuals will be given procedures to follow in the Decontamination Rooms (See Form 1 attached).

Decontamination is essentially the physical removal of radioactive "dirt" from the skin. There are three (3) methods used at the Decontamination Center:

1) Local Decontamination
2) General Decontamination, and
3) Local and General Decontamination

Generally, decontamination should begin from the highest point of contamination and proceed to the lowest point. If there is only localized contamination, it should be handled directly. General bathing would merely spread such contamination. Most of the radioactive material will be removed during the first decontamination effort.

- The initial step in decontamination is to remove carefully all contaminated clothing and to place it in a personnally identified plastic bag and fill out a Personnal Belongings Listing Form (See Form 2 attached).
- Then the contaminated area should be dry wiped and, if possible, damp wiped.
- Make an effort not to contaminate hairy areas which are initially free of radioactivity.
- Use precautions in order to prevent contamination from entering body openings.

1. Localized Decontamination

- Lightly wet the contaminated area using lukewarm water. Water should be used in such a way as to avoid splashing outside the shower.
- Use detergent or soap and gently work up a lather (for some individuals, use HYPOALLERGENIC soap).
- Wash the area for one to two minutes. Soft surgical brushes or gauze sponges are used to scrub contaminated areas of the skin. Care should be taken not to abrase the skin. Frequently, abrasion and redness of the skin may not be visible for hours. Hair, nails and skin folds should receive special attention.
- After scrubbing, the involved areas of the person's body should be rinsed thoroughly, dried, surveyed and the results recorded. Levels of contamination will generally decrease by about a factor of ten with the first decontamination effort.

APPENDIX F4
DECONTAMINATION
(PERSONNEL AND VEHICLE)

° The scrub, rinse, drying and resurveying should be repeated a second time if the level found is more than 0.15 mR/hr (100 cpm) above background. All survey reading should be done in an adjacent clean area of the shower.

° In some cases, there may be localized areas of residual contamination that persists in spite of the two decontamination efforts. If this is, for example, a small area of the skin, a plastic covering can be taped over the area; on a hand, a surgical glove may be taped; or, for the hair, a surgical cap may be worn. For all unsuccessful decontamination efforts, persons would be referred with a copy of APPENDIX F-3, FORM 1 to the medical care facility for this center.

2. General Decontamination

° Showering is recommended when:

1) the individual is uniformly contaminated over a large portion of the body, and/or

2) the local decontamination would require too much time and result in delays in decontamination of other personnel.

° Shower procedures for decontamination:

- It is imperative that the individual's dignity be maintained to the highest degree possible.

- Lightly wet the most highly contaminated area(s) using lukewarm water. Water should be used in such a way as to avoid splashing.

- Use detergent or soap and gently work up a lather on the contaminated area(s).

- Wash the area for one to two minutes. Soft surgical brushes or gauze sponges are used to scrub contaminated areas of the skin.

- Pay particular attention to hair, armpits, fingernails and body orifices.

- After the scrubbing, the involved area(s) of the individual's body should be rinsed thoroughly.

- Then a complete shower is taken. At no time should a shower take more than ten (10) minutes.

- Dry and resurvey a second time.

- If, in spite of two (2) decontamination efforts, residual contamination of more than 0.15 mR/hr (100 cpm) above background persist, refer the individual with a copy of APPENDIX F3, FORM 1, to the medical care facility for this center after covering the contaminated area(s).

APPENDIX F4
DECONTAMINATION
(PERSONNEL AND VEHICLE)

3. Local and General Decontamination

- A combination of showering and the local decontamination, as appropriate, is recommended in situations where:

  An individual is contaminated over a large portion of the body but has "hot spots" such as hands, fingernails, hair, etc., which are contaminated to much higher levels than other portions of the body.

In these cases, the "hot spots" should be pre-washed with soap and water, followed by a complete shower.

MISCELLANEOUS

- After decontamination, individuals are provided with clean clothing.
- Individuals with contaminated wounds, eyes or body cavities are immediately referred to the appropriate medical care facility for specialized treatment. For example:

  If there is any significant radioactivity in the nasal cavity, nose blowing and immediate referral to medical facilities is recommended.

- Any area of the skin can be covered with a gentle emollient salve such as lanolin.
- AT NO TIME should any hair be cut by the decontamination staff!
- Contaminated water should be flushed into ordinary drains. Faucets or shower heads should be left open to insure dilution in accordance with the NH Rules for the Control of Radiation.
- Contaminated waste materials, including clothing and contaminated towels should be packaged in plastic bags securely tied at the top. If possible, plastic bags should be placed in metal containers and stored in a secured room. Clothing, valuables and personal items are set aside for ultimate return to owners. These salvageable materials will be labeled with the owner's name, address and telephone number. Both salvageable and disposable waste should be retained for decontamination or disposal by radiological health officials at the conclusion of the emergency.
- A completed Personnel Radiological Monitoring Report Form for each individual found to be contaminated is compiled and kept on file at the Decontamination Center for the duraton of the emergency. At the conclusion of the emergency, the forms are forwarded to the New Hampshire Radiological Health Program located in Concord, N.H.

APPENDIX F4
DECONTAMINATION
(PERSONNEL AND VEHICLE)

B. VEHICLE DECONTAMINATION

- After surveyed, vehicle is identified on the front window with a sticky patch:

  GREEN = CLEAN
  RED = ENTERNALLY CONTAMINATED ONLY

- Ensure that all areas of contamination on the vehicle have been identified and accurately recorded on the Vehicle Contamination Report Form.

- When complete vehicle monitoring demonstrates internal contamination these vehicles will be stored in a secure area until decontamination by DPHS.

- Vehicles that are only externally contaminated can be sent, after the occupants are clean and have received the appropriate procedures and directions to a car wash.

- These vehicles are remonitored at the Decontamination Center to verify that contamination has been removed. Repeat decontamination procedures if any contamination remains. If, after a second decontamination attempt, contamination remains, leave the vehicle in the vehicle "Contaminated" area until Radiation Division of DPHS arrives to clean up the area.

- If only localized ocntamination areas have been identified on the vehicle and time permits, proceed as follows:

  (1) Lightly wet contaminated area;

  (2) Using soap, work up a lather;

  (3) Continue to wash for one minute in such a way as to prevent spreading of the contaminants;

  (4) Rinse; and

  (5) Monitor decontamination progress.

  If large areas or the entire vehicle is contaminated:

  (1) Hose the vehicle with water

- Repeat decontamination procedures of any contamination remains. If, (i.e. less than 0.15 mR/hr [100 cpm] over the background using a CPV-700 meter) after a second decontamination attempt, contamination remains, leave the vehicle in the vehicle contaminated area until Radiation Division of DPHS arrives to clean up the area.

  In winter, a vehicle wash is necessary to achieve decontamination.

APPENDIX F4 - FORM 1

WHAT HAPPENS IN THE DECONTAMINATION CENTER?

Decontamination is essentially the physical removal of radioactive "dirt" from the skin. If you have minor cuts or scratches you should be very sure that the Decontamination personnel know so they can cover the area(s) with surgical dressing. Also, individuals with contaminated wounds, eyes or body cavities will be immediately referred to medical facilities for specialized treatment.

There are three (3) methods used at the Decontamination Center:

1) Local Decontamination
2) General Decontamination, and
3) Local and General Decontamination

Generally, decontamination should begin from the highest point of contamination and proceed to the lowest point. If there is only localized contamination, it should be handled directly. General bathing would merely spread such contamination. Most of the radioactive material will be removed during the first decontamination effort.

- The initial step in decontamination is to remove carefully all contaminated clothing and to place it in a personnally identified plastic bag and fill out a Personnal Belongings Listing Form.
- Then the contaminated area should be dry wiped and, if possible, damp wiped.
- Make an effort not to contaminate hairy areas which are initially free of radioactivity.
- Use precautions in order to prevent contamination from entering body openings.

1. Localized Decontamination

- Lightly wet the contaminated area using lukewarm water. Water should be used in such a way as to avoid splashing outside the sink.
- Use detergent or soap and gently work up a lather (for some skin allergic individuals, use HYPOALLERGENIC soap.)
- Wash the area for one to two minutes. Soft surgical brushes or gauze sponges are used to scrub contaminated areas of the skin.
- The purpose of the brush or gauze sponges is to agitate the cleaning agent and to scrape off the contamination.
- You should be careful not to scrub or rub the skin to the point where it reddens, because then there is a risk of the contamination entering your blood stream directly.

APPENDIX F4 - FORM 1

WHAT HAPPENS IN THE DECONTAMINATION CENTER?

- After the scrubbing, the involved areas of the person's body should be rinsed thoroughly, dried, surveyed and the results recorded.
- The scrub, rinse, drying and resurveying should be repeated a second time if still contaminated. All survey readings will be done in an adjacent clean area of the shower.
- If, inspite of two (2) decontamination efforts, risidual contamination still persists, the person will be referred to the hospital after covering the contaminated area(s).

2. General Decontamination

- Showering is recommended when:

  1) the individual is uniformly contaminated over a large portion of the body, and/or

  2) the local decontamination would require too much time and result in delays in decontamination of other personnel.

- Shower procedures for decontamination:

  - The individual's dignity is maintained to the highest degree possible.
  - Lightly wet the most highly contaminated area(s) using lukewarm water. Water should be used in such a way as to avoid splashing.
  - Use detergent or soap and gently work up a lather on the contaminated area(s).
  - Wash the area for one to two minutes. Soft surgical brushes or gauze sponges are used to scrub contaminated areas of the skin.
  - Pay particular attention to hair, armpits, fingernails and body orifices.
  - After the scrubbing, the involved area(s) of the individual's body should be rinsed throughly.
  - Then a complete shower is taken. At no time should a shower take more than ten (10) minutes.
  - Dry and resurvey a second time.
  - If, in spite of two (2) decontamination efforts, residual contamination still persists, the individual will be referred to the hospital after covering the contaminated area(s).

APPENDIX F4 - FORM 1

WHAT HAPPENS IN THE DECONTAMINATION CENTER?

3. Local and General Decontamination

- A combination of showering and the local decontamination, as appropriate, is recommended in situations where:

  An individual is contaminated over a large portion of the body but has "hot spots" such as hands, fingernails, hair, etc., which are contaminated to much higher levels than other portions of the body.

  In these cases, the "hot spots" should be pre-washed with soap and water, followed by a complete shower.

- After decontamination, people are provided with clean clothing.

- Any areas of the skin can be covered with a gentle emollient salve such as lanolin.

METTAG TAB #_____

APPENDIX F4 - FORM 2

DECONTAMINATION CENTER
PERSONAL BELONGINGS LIST

INDIVIDUAL:_____

ADDRESS: Street_____

City_____ State _____ Zip_____

Telephone (___)_____

CONTAMINATED VALUABLES LEFT AT DECONTAMINATION CENTER

The following contaminated items have been left for decontamination at the Manchester Decontamination Center:

CASH /RING /OTHER

CHECKS /JEWELRY (Describe) /

GLASSES / /

DENTURE(S): Upper Lower / /

DENTURE: Partial Plate(s)/ /

PROTHESIS / /

WATCH / /

The above is an accurate list of valuables left at the Manchester Decontamination Center. SIGNATURE OF OWNER_____

DATE:_____ SIGNATURE DECON PERSONNEL_____

Attach one copy to plastic bag containing belongings;
One copy to Owner; & one copy to Decontamination Center.

RELEASE OF VALUABLES TO OWNER

I hereby signify that I am again in full possession of my personnal property which was left at the Decontamination Center to be decontaminated.

SIGNATURE_____

DATE:_____ WITNESS_____

APPENDIX F4 - FORM 3

PROCEDURE AND DIRECTIONS IN DRIVING YOUR VEHICLE TO THE CAR WASH.

This procedure is for externally contaminated vehicles only.

1. Notify the firefighter responsible for your vehicle that you are ready to go to the vehicle wash.

   Do not use your vehicle without first seeing the firefighter because you could get contaminated.

2. Follow the firefighter's instructions in getting into your vehicle.

3. Once in the vehicle, do not get out (unless an emergency) until the vehicle has been washed.

4. Close all vents. Do not use the vehicle's heater or air conditioner and close all vents and windows and do not open them even if it is uncomfortable.

5. Do not, eat, drink or smoke in the vehicle.

6. For your protection, after the vehicle has been washed, come back to the Reception Center so your vehicle may be remonitored.

7. For you and your loved ones protection, follow the firefighter's instructions!

APPENDIX F5

MONITORING EQUIPMENT AND OPERATIONAL PROCEDURES

A. CDV-700 SURVEY RATE METER

Opertations Check for CDV-700

1. Check visually to see that fresh batteries are in place. If not, insert them, observing the indicated polarity.

2. Turn the selector switch to the x10 range.

3. Allow 30 seconds for warm-up time.

4. Open the probe shield and place the open area directly against the check source. There should be a deflection of the meter needle indicating that the instrument is responding to radiation.

5. Determine the background radiation level by setting the instrument on the most sensitive scale (x1) and observing it for about 30 seconds.

B. EXPOSURE MEASURING INSTRUMENTS

Decontamination personnel will not be allowed to receive more than 5R total exposure unless sanctioned by DPHS!

1. Thermoluminescent Dosimeter

   a. Thermoluminescent dosimeters (TLD) measure radiation absorption or dose and are highly accurate, but they must be read by special instruments. The TLD's record doses of gamma radiation.

   b. Emergency workers should clip the TLD and the self-reading dosimeters to their inside clothes somewhere between the neck and waist. The windows on the TLD should face outward.

   c. Each emergency worker should retain their individual TLD until the end of the emergency when the TLD's should be returned to the Decontamination Administrator.

2. Self-reading Dosimeters

   a. Self-reading dosimeters enable emergency workers to continually keep track of individual radiological exposure. However, self-reading dosimeters are not as accurate as TLD's and also only record gamma radiation.

   b. Each emergency worker will be given two self-reading dosimeters to wear while inside the risk area. One dosimeter will serve as a back-up for the other.

      (1) CDV-138 dosimeters can measure between 0 - 200 milliroentgens of gamma radiation, and would be the primary dosimeter used by emergency workers in radiological response.

APPENDIX F5

(ii) CDV-730 dosimeters can measure between 0 - 20 rogentgens of gamma radiation and would serve as the back-up dosimeters for emergency workers.

c. Since the self-reading dosimeters do not have their own batteries, they must be charged or zeroed before they can be used. CDV-750 dosimeters charges are used to zero dosimeters for accuracy and recording purposes. You should zero your dosimeters before use. Read them and record your exposure on the "Personnel Exposure Record".

d. Dosimeters should be read every half hour and the reading recorded.

e. Reading and Charging a Dosimeter:

- Point the dosimeter at a source of light - even a match or a flashlight will do - and observe the position of the hairline indicator. If the line is visible and less than about one quarter up-scale, record the reading. If the line is above one-quarter scale or not visible, the dosimeter must be zeroed.

- To operate the dosimeter charger, lossen the thumbscrew in the top or bottom center of the charger with a coin and remove the bottom of the case. Install a battery, observing polarity (+ and -), and reassemble.

- Position the charger on a flat, steady surface. Unscrew the cap on the charging contact and place the end of the dosimeter (opposite the pocket clip and eye piece) on the charging contact of the charger.

- Apply a firm downward pressure. You should see a meter scale and hairline while looking through the dosimeter. If no line is visible, rotate the control knob of the charger until a line appears.

- Set the line on, or slightly above, zero using the control knob.

- Be sure to read the self-reading dosimeter with a light source immediately after zeroing because the setting can shift slightly after removal from the charger.

- To read the dosimeter at any time, point it at a source of light and note the reading by looking through the dosimeter. Your accumulated exposure, in Roentgens or Millirogentgens (R or mR), is the number you now read less your initial reading.

APPENDIX F5

EMERGENCY PROCEDURE

PERSONNEL EXPOSURE RECORD

PERSONNEL INFORMATION

Last Name | First Name | Middle Initial | Soc. Sec. #

Fire Station Group | Immediate Supervisor

Stamp # (If Applicable) | Survey Meter #(s) (If Applicable)

DOSIMETERY:

TLD Serial #_____

CDV-730 _____

Serial # | Initial Reading | Final Reading | Total Dose (R)

CDV-138 EXPOSURE RECORD:

DOSIMETER READINGS

DATE/TIME	INITIAL	FINAL	CUMULATIVE TOTAL (mRem)

APPENDIX F6

PROCEDURE IN CLOSING THE
DECONTAMINATION CENTER

Upon notification from DPHS RADIOLOGICAL HEALTH PROGRAM, the Decontamination Center can be closed. The Decontamination Staff should remove their last set of protective clothing and place it in the available plastic containers. The order of removal of this attire is similar to that used when handling septic patients, with the gloves removed last. As shoe covers are removed, each attendant should step across the junction between the contaminated area and the clean part. Here the attendant should be carefully monitored and, if found free of contamination, should pass through the clean area. If attendants are contaminated, they should change clothes, wash to remove local contamination or take a general shower and be resurveyed. When all attendants have left the area, it should be roped off, access restricted, and all material and equipment should be left until a representative of DPHS who is knowledgeable in special surveying and decontamination, arrives to clean up the area.

APPENDIX F7

SUPPLY INVENTORY

ITEMS	QUANTITY	QUANTITY USED	BALANCE	WHERE OBTAINED
CDV-700 Survey Meter with headphones CDV-138 Dosimeters, 0 - 200mR CDV-730 Dosimeters, 0 - 20R CDV-750 Dosimeter chargers Potassium Iodide	14 tablets			New Hampshire Civil Defense Agency 1(800)852-3792
"Scrub " clothes ($4.00 each new; 2.00 each used)	3 doz. lg. tops (used) 3 doz. lg. pants (new) 1 doz. lg. tops (new) 4 doz. sm. tops (new) 4 doz. sm. pants (new)			
Exam gloves ($4.75/box)	10 boxes (500 pr.)			
Small Dial soaps ($84.00/case)	1 box			
Shampoo - castelle soaps ($1.75/box)	4 boxes			
Scrub brushes ($6.75/box)	4 boxes			
Disposable wash towels ($34.00/case)	2 cases (30 units)			
Surgical Masks ($7.75/box)	2 boxes (100 units)			
2" Dermicil Tape ($6.25/box)	6 boxes (36 units)			
5" x 9" Dressings ($2.30/box)	10 boxes			
Shoe covers ($25.00/case)	(200 pair)			
Tyvek coveralls ($60.00/box)	2 boxes (50 units)			
Cotton swabs ($3.70/box)	1 box (1000 units)			

APPENDIX F7

SUPPLY INVENTORY

ITEMS	QUANTITY	QUANTITY USED	BALANCE	WHERE OBTAINED
Masking tape 1" ($1.99/roll)	10 rolls			
Duct tape ($4.00/roll)	10 rolls			
Taylor Tarp. ($4.00/roll)				
10' x 12' ($8.00)	4			
8' x 10' ($5.33)	4			
Scissors ($3.29 pair)	4 pairs			
Retractable utility knife	6			
Car wash ($1.49/can)	6 cans			
Car wash brushes ($8.06/brush)	2			
12" squeeges ($5.84/brush)	2			
Tapered poles ($2.43/pole)	4			
Sponge Mop ($7.04/mop)	3			
Sponge Mop refills ($3.14/refill)	6			
600' 3/8" polypropylene rope (yellow) ($.09/foot)	1 roll			
8' x 100', 6 mil polyethylene ($16.20/roll)	3 rolls			
Large garden trash bags ($2.09/box)	9 boxes			

APPENDIX F7

SUPPLY INVENTORY

ITEMS	QUANTITY	QUANTITY USED	BALANCE	WHERE OBTAINED
Trash bags ($22.46/box)	1 box (250 units)			
Bucket ($4.86/unit)	4			
Signs: Entrance ($.74)	1			
Men ($.74)	1			
Women ($.74)	1			
Exit ($.59)	2			
Trash Can ($11.99/unit)	4			
Black & Decker Dustbuster Plus ($33.94 each)	4			
Flashlight with D batteries ($3.97 each)	12 packages (24 units)			
#91014 Blue vinyl aprons ($22.00/dz)	1 dozen			
Caution tape 3" x 1000' ($27.00/roll)	1 roll			
G-211-13R American Allsafe Goggles ($5.50/pr)	12 pair			
#1020 (XL) Lakeland Tyvek coveralls ($55.00/case)	1 case (25 units)			
#1018 (L) Lakeland Tyvek coveralls ($60.00/case)	1 case (25 units)			
T-205 Yellow coded safety tape ($7.70/roll)	5			
Yellow PVC boots ($5.50/pr)	6			

APPENDIX F7

SUPPLY INVENTORY

ITEMS	QUANTITY	QUANTITY USED	BALANCE	WHERE OBTAINED
(3) size 10 = (2) 16" - (1) 10"				
(1) size 11 - 16"				
(2) size 13 - 16"				
CTS- 28 28" traffic cones ($10.18 each)	10			
LA-111-EB Nitrile gloves (size 9) ($13.90/dz)	1 dozen			
5110-PE SIGN "No smoking, eating or drinking in this area" ($4.40/sign)	2			
Stop/slow paddle sign ($12.20 each)	2			
2756 5 1/2 lb. irregular 20" x 40" bath towels ($18.65/doz)	30 dozen			
Disposable shower caps ($75.00/case)	1 case (1000 units)			

APPENDIX F7

SUPPLY INVENTORY

ITEMS	QUANTITY	QUANTITY USED	BALANCE	WHERE OBTAINED
Neutrogena Hypoallergenic soap - original formula ($1.88/bar)	6 bars			
Rubber bands ($.39/pkg.)	5 pkgs.			
Zip-loc sandwich bags ($1.53/box)	9 boxes			
Zip-loc large bags ($1.59/box)	1 box			
Medical emergency triage tag (METTAG) (No charge)	200 tags			
3 x 5 Index cards ($.43/100)	1000 (10 pkgs.)			
Clipboards ($1.23/each)	24			
Pencils ($1.19/each)	12 dozen			
Ruled Pads ($5.59/dozen)	3 dozen			
Battery-Powered pencil sharpener ($3.99 each)	4			
C" - size batteries ($.49 each)	12			
Stapler ($7.96 each)	4			
Staples ($.98/box - 5000 units)	2 boxes			
Colored (red/green)				

APPENDIX F7

SUPPLY INVENTORY

ITEMS	QUANTITY	QUANTITY USED	BALANCE	WHERE OBTAINED
Stick-on labels ($65.00)				
Paper roll ($100.00)	1 roll			
Ink pad & stamp ($7.50 set)	5 sets			

F-8

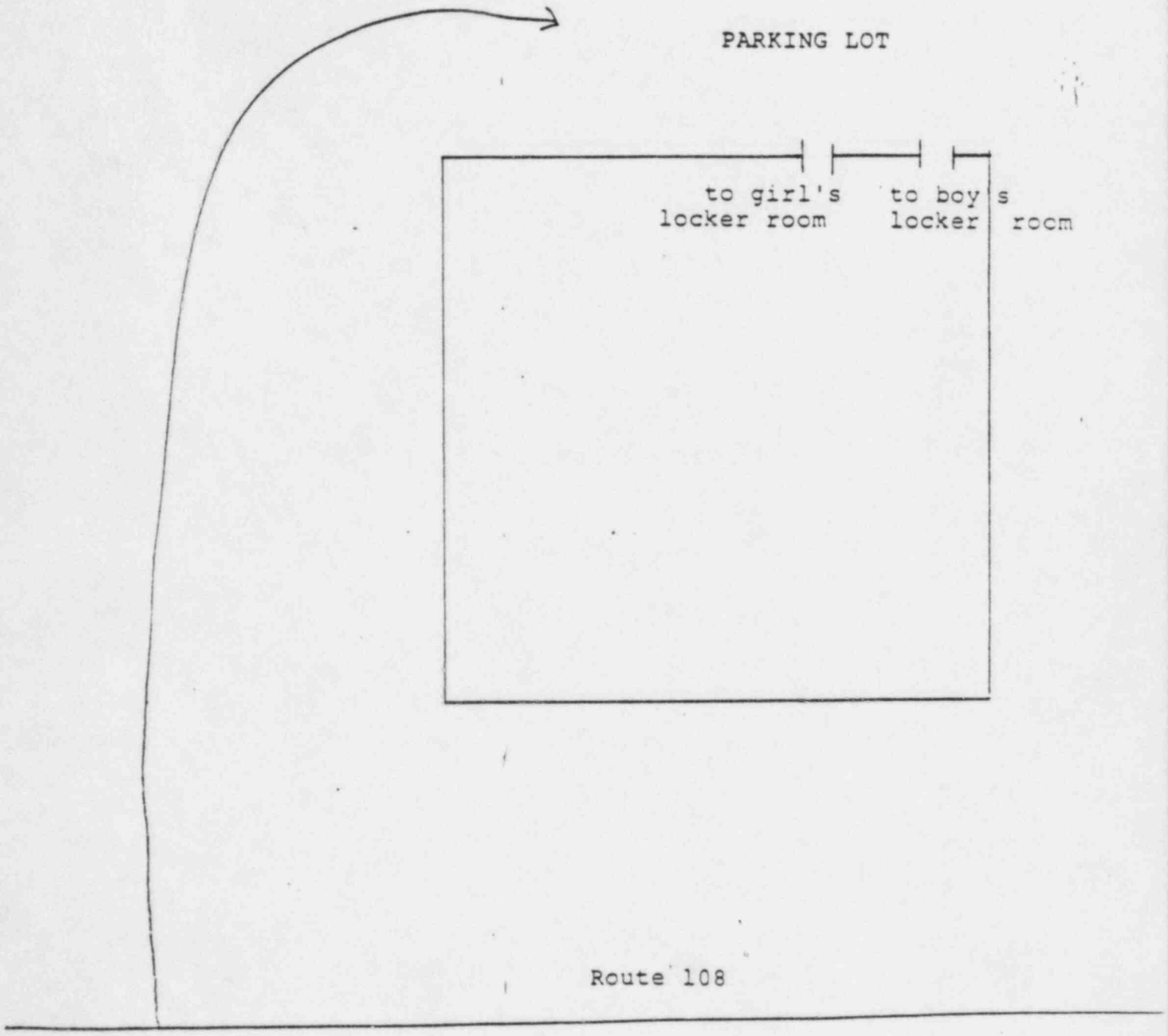
LOCAL DECONTAMINATION CENTER FLOOR PLANS

AND

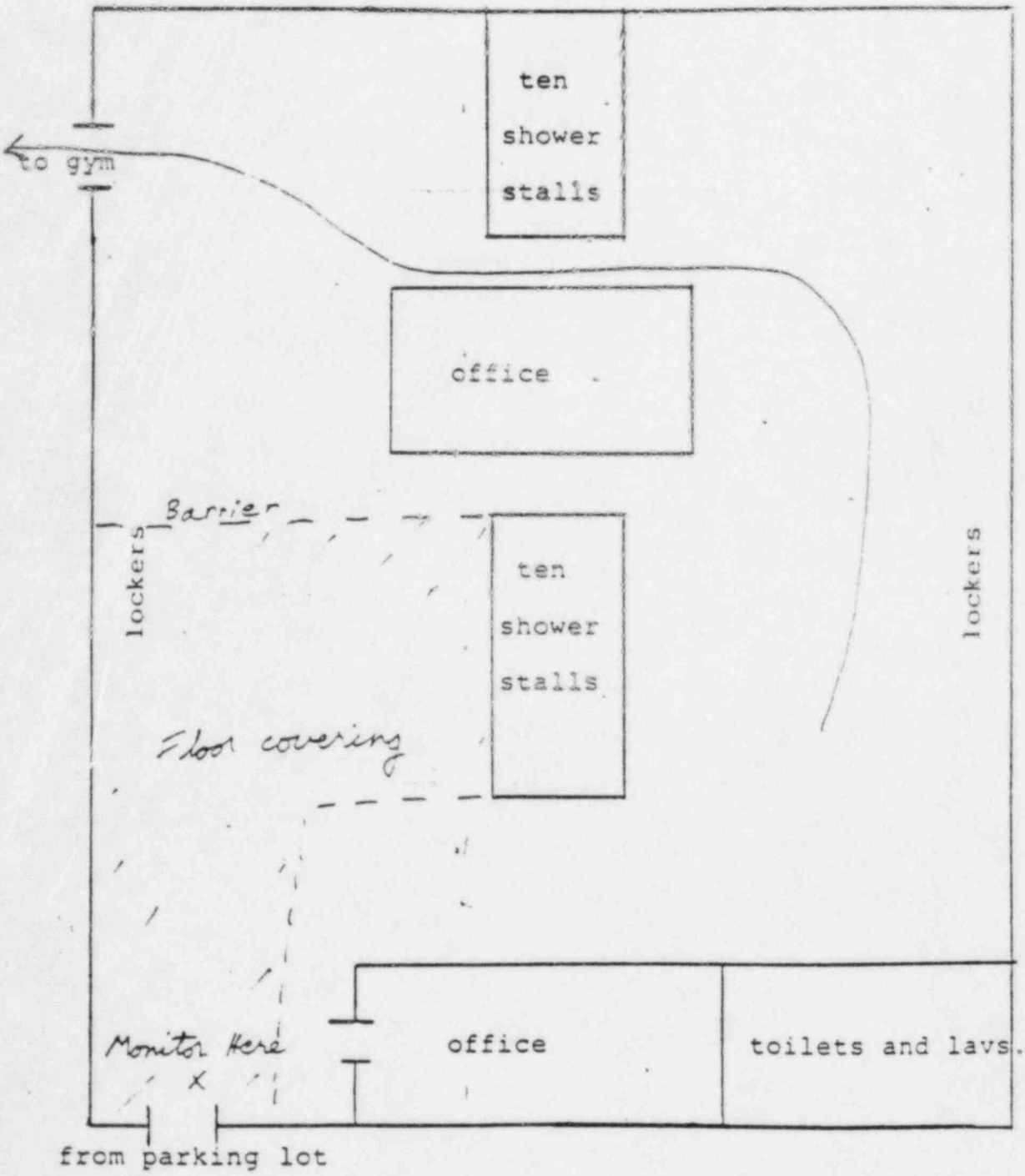
PROCEDURE STEPS

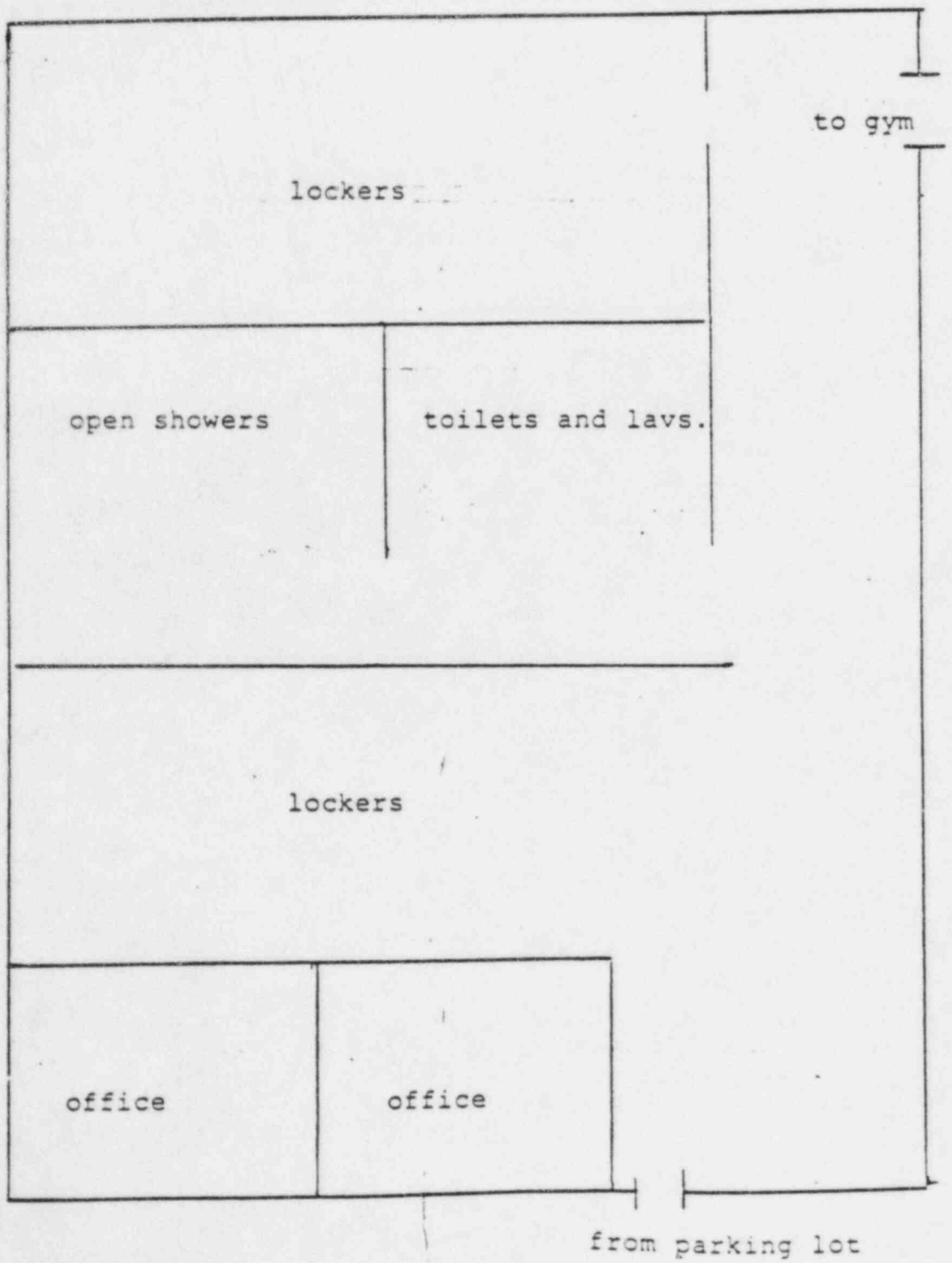
DOVER HIGH SCHOOL, DOVER,NH

Take exit 7 from the Spaulding Turnpike to Rte. 108. Go south on 108 .he High School, which is on the right.



Girl's Locker Room

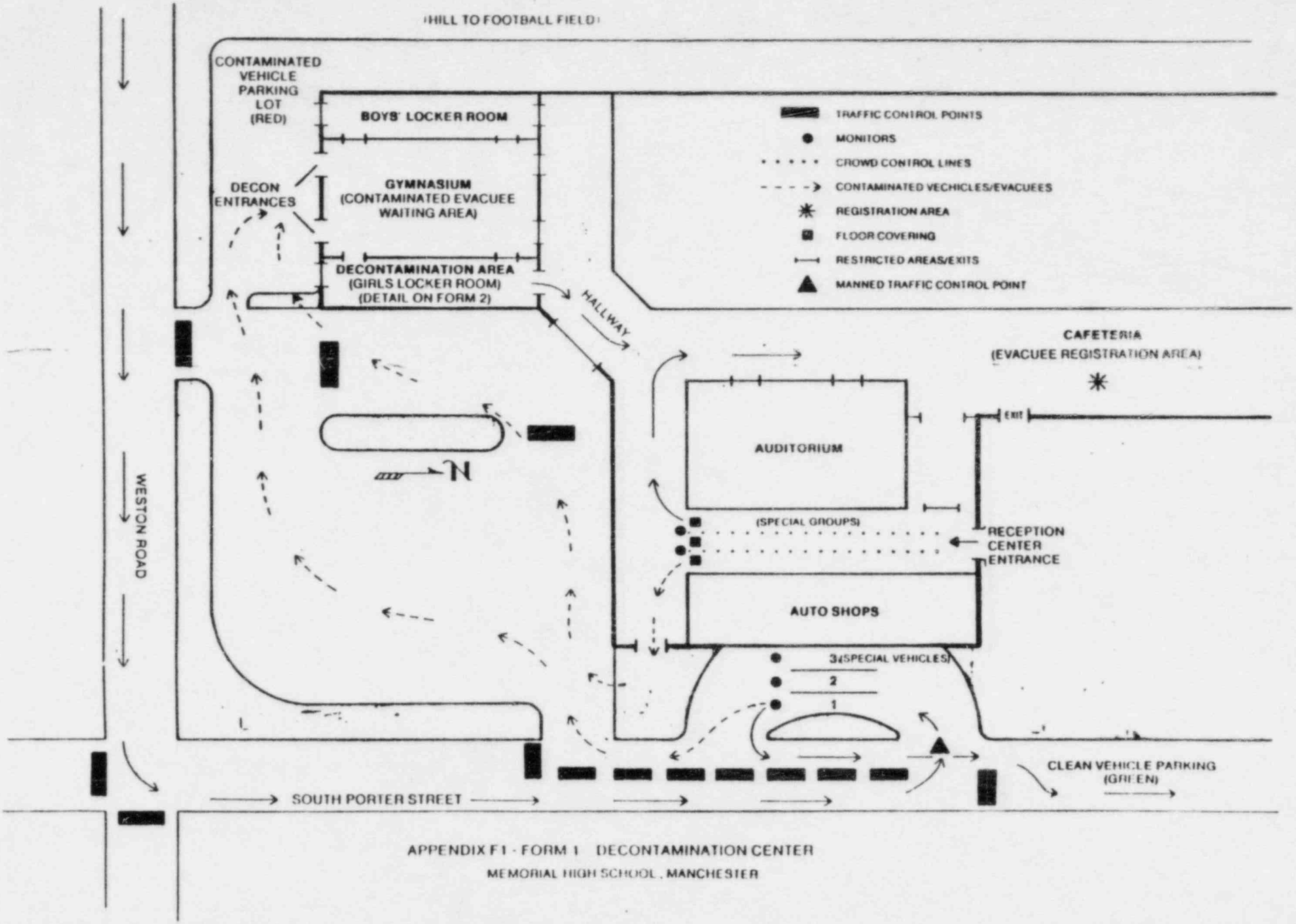



to gym
lockers
open showers
toilets and lavs.
lockers
office
office
from parking lot

DURHAM

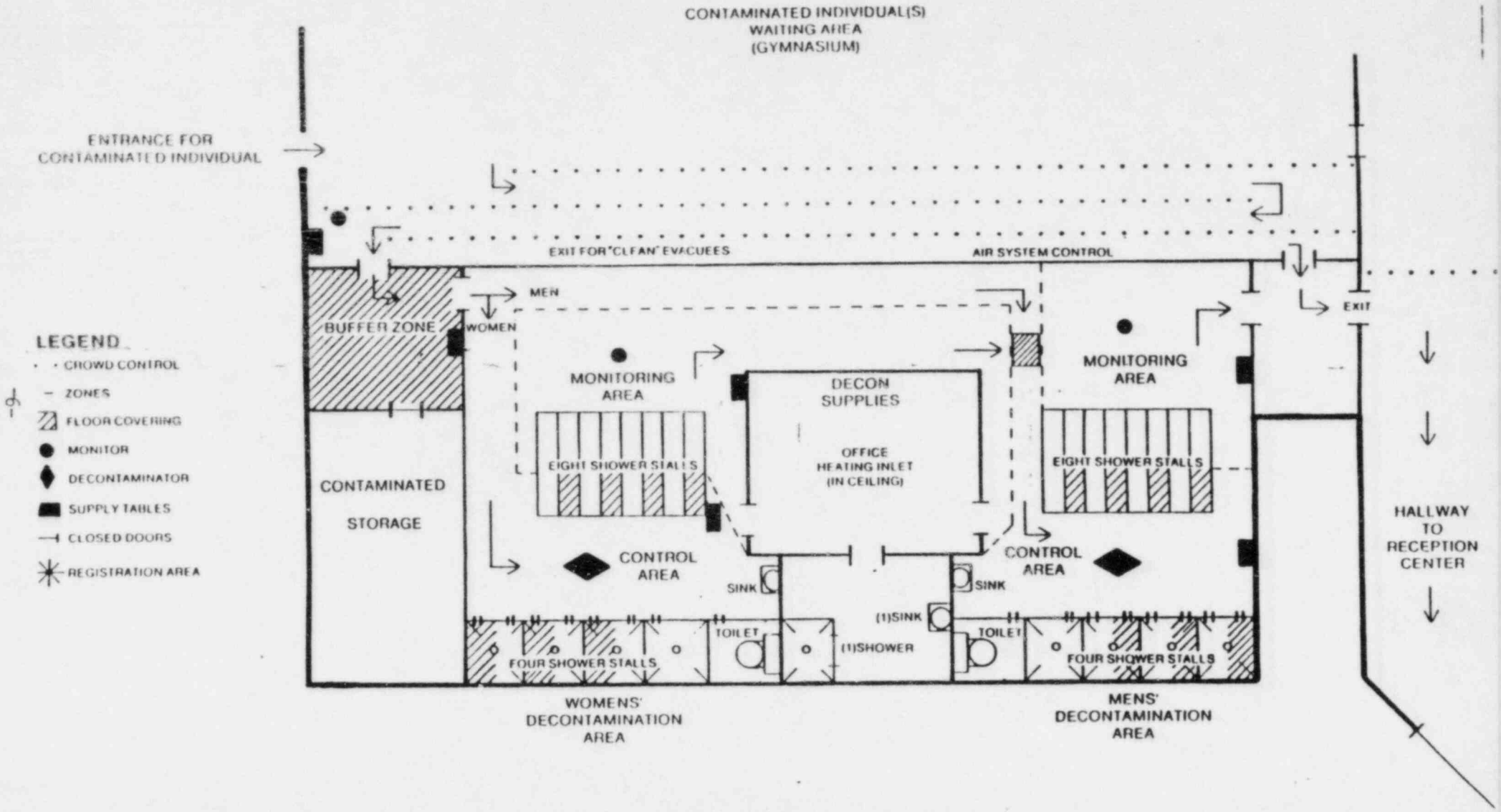
DECONTAMINATION CENTER

(NOT AVAILABLE AT THIS TIME)



APPENDIX F1 - FORM 1 DECONTAMINATION CENTER

MEMORIAL HIGH SCHOOL, MANCHESTER



APPENDIX F1 - FORM 2 DECONTAMINATION CENTER
MEMORIAL HIGH SCHOOL, MANCHESTER
(GIRLS LOCKER ROOM)

APPENDIX F2

REFERRAL OF EVACUEES
AND THEIR VEHICLES

VEHICLE CLEAN-NO CONTAMINATION

VEHICLE MONITORED-CLEAN

EACH PERSON IN CAR GETS INTACT METTAG

GREEN STICKER PLACED ON WINDSHIELD

VEHICLE DIRECTED OUT DRIVEWAY AND NORTH ON SOUTH PORTER TO PARK. SHUTTLE BUS WILL PROVIDE RIDES BACK TO MEMORIAL HIGH SCHOOL.

EVACUEES ENTER "CLEAN" ENTRANCE BY AUDITORIUM JUST NORTH OF AUTO SHOP GARAGE DOORS

EVACUEES MONITORED BEFORE ENTERING REGISTRATION AREA

CLEAN

TEAR-OFF ALL COLORED TABS LEAVING BLACK TAB SHOWING

MONITOR WILL STAMP TAG ON THE BLANK ALLOWING EVACUEE TO ENTER REGISTRATION AREA

TAG SERIAL NUMBER WILL BE PLACED ON RECEPTION CENTER REGISTRATION FORM

DIRTY

MONITOR MARKS FIRST CONTAMINATED AREA ON BODY DIAGRAM AND RECORDS SURVEY METER READING ON LINE UNDER BODY DIAGRAM.

AFTER FINDING A CONTAMINATED AREA ON EVACUEE, MONITOR NO FURTHER

TEAR-OFF GREEN AND YELLOW TABS LEAVING RED TAB

IMMEDIATELY REFER EVACUEE TO THE DECONTAMINATION AREA VIA THE ESTABLISHED ROUTE

SINCE EVACUEE'S CAR IS PROBABLY INTERNALLY CONTAMINATED, PERSONNEL WILL NOTE CAR LOCATION AND REGISTRATION.

APPENDIX F2
REFERRAL OF EVACUEES AND THEIR VEHICLES
VEHICLE DIRTY-CONTAMINATED

VEHICLE MONITORED-CONTAMINATED (RECORD ON "VEHICLE MONITORING REPORT FORM" - APPENDIX F3 - FORM 2)

EACH PERSON IN CAR GETS TAG AFTER GREEN TAB IS TORN OFF, LEAVING YELLOW TAB SHOWING

RED STICKER PLACED ON WINDSHIELD WITH ALL GREEN TABS REPRESENTING VEHICLE OCCUPANTS PLACED PARTIALLY UNDERNEATH STICKER

VEHICLE DIRECTED OUT DRIVEWAY AND SOUTH ON SOUTH PORTER TO MAKE AN IMMEDIATE RIGHT INTO SCHOOL PARKING LOT FOR DIRTY VEHICLES.

EVAUCUEES EXIT VEHICLES, ENTER GYM AND GO TO YELLOW TAB AREA

EVACUEES MONITORED FOR RADIATION

DIRTY

CONTAMINATED AREA VACUUMED, PERSON REMONITORED

CLEAN

STILL DIRTY

TEAR OFF YELLOW AND RED TABS LEAVING THE BLACK TAB SHOWING

MONITOR WILL STAMP TAG ON THE BLANK ALLOWING EVACUEE TO ENTER THE REGISTRATION AREA.

BUFFER ZONE MONITOR MARKS CONTAMINATED AREAS ON BODY DIAGRAMS AND CALLS OUT READINGS FOR PERSON COMPLETING "PERSONNEL RADIOLOGICAL MONITORING REPORT FORM" (APPENDIX F3, FORM 1)

TEAR OFF YELLOW TAB LEAVING THE RED TAB SHOWING

EVACUEE ENTERS CONTROL AREA FOR DECONTAMINATION

PERSONNEL OBSERVE TAG FOR BODY AREAS CONTAMINATED AS SHOWN ON BODY DIAGRAMS

DIRTY CLOTHES/BELONGINGS ARE BAGGED WITH TAB CORNER (WITH PRINTED NUMBER) PLACED INSIDE STAPLED TO AN INDEX CARD

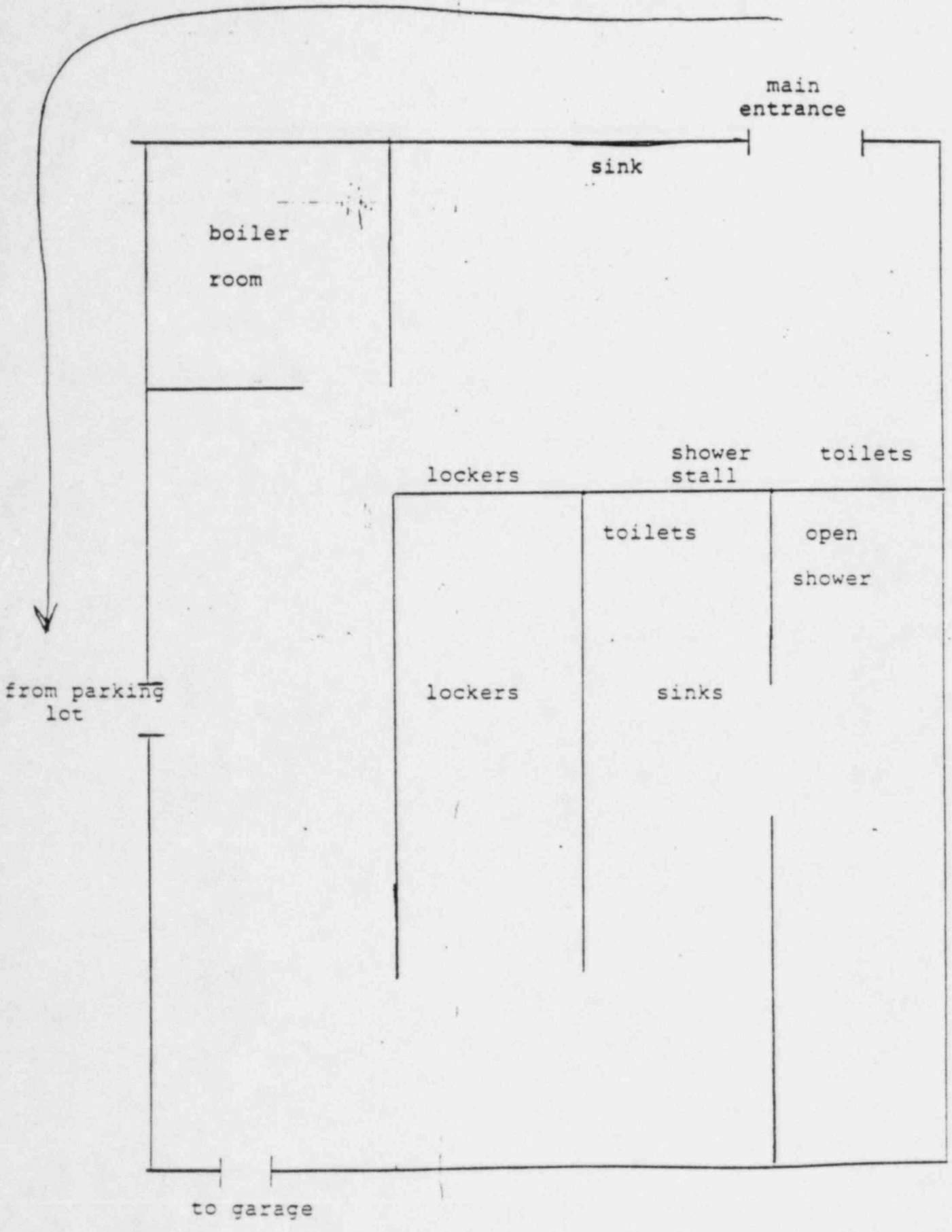
AFTER EVACUEE IS CLEAN, TEAR OFF RED TAB LEAVING THE BLACK TAB SHOWING

THE REMAINING TAG CORNER IS STAPLED ON THE "PERSONAL BELONGINGS LIST" (APPENDIX F4-FORM 2)

MONITOR WILL STAMP TAB ON THE BLANK ALLOWING EVACUEE TO ENTER THE REGISTRATION AREA.

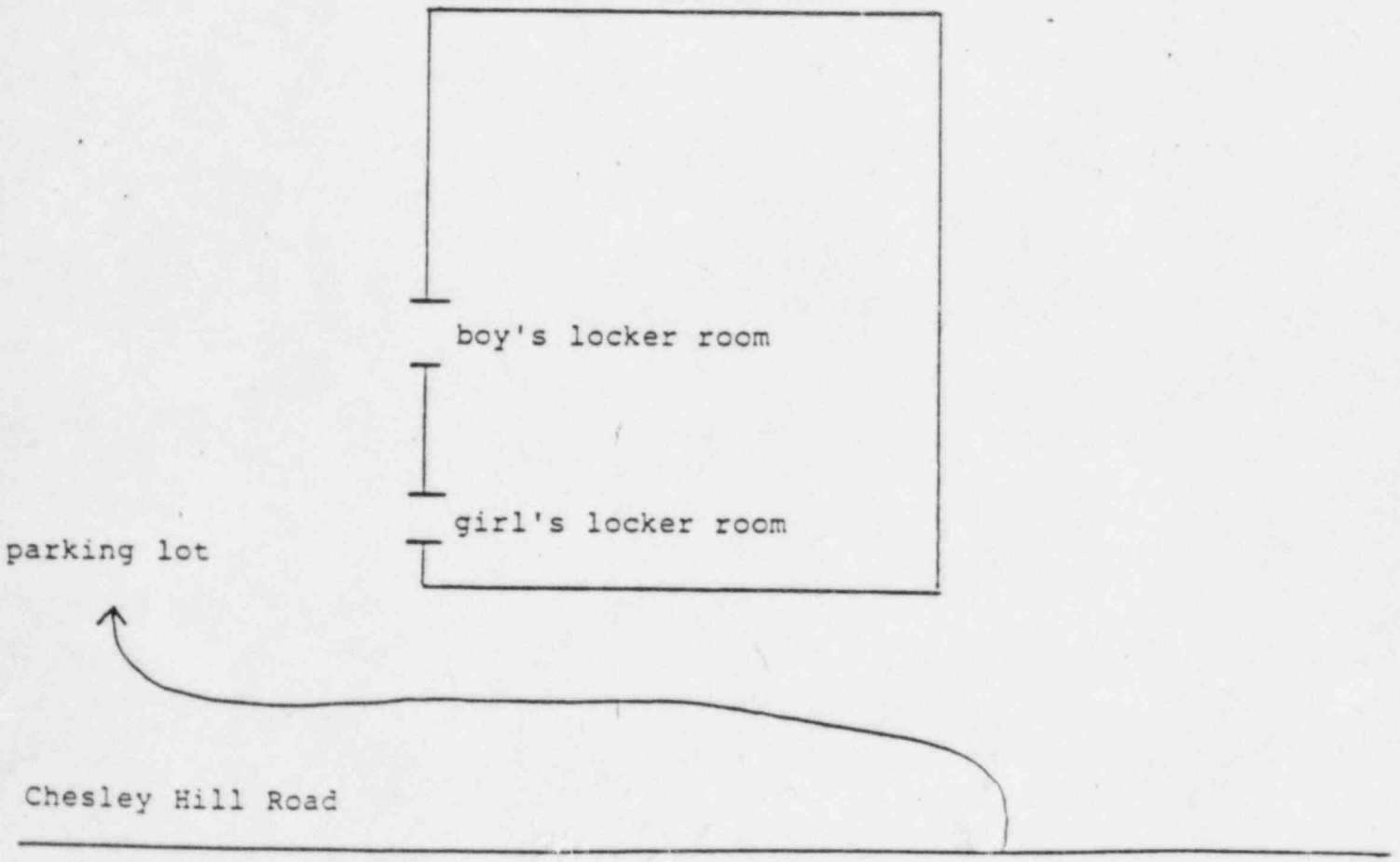
NASHUA TOWN GARAGE, NASHUA,NH

Take the F.E.Everett Turnpike to exit 5.

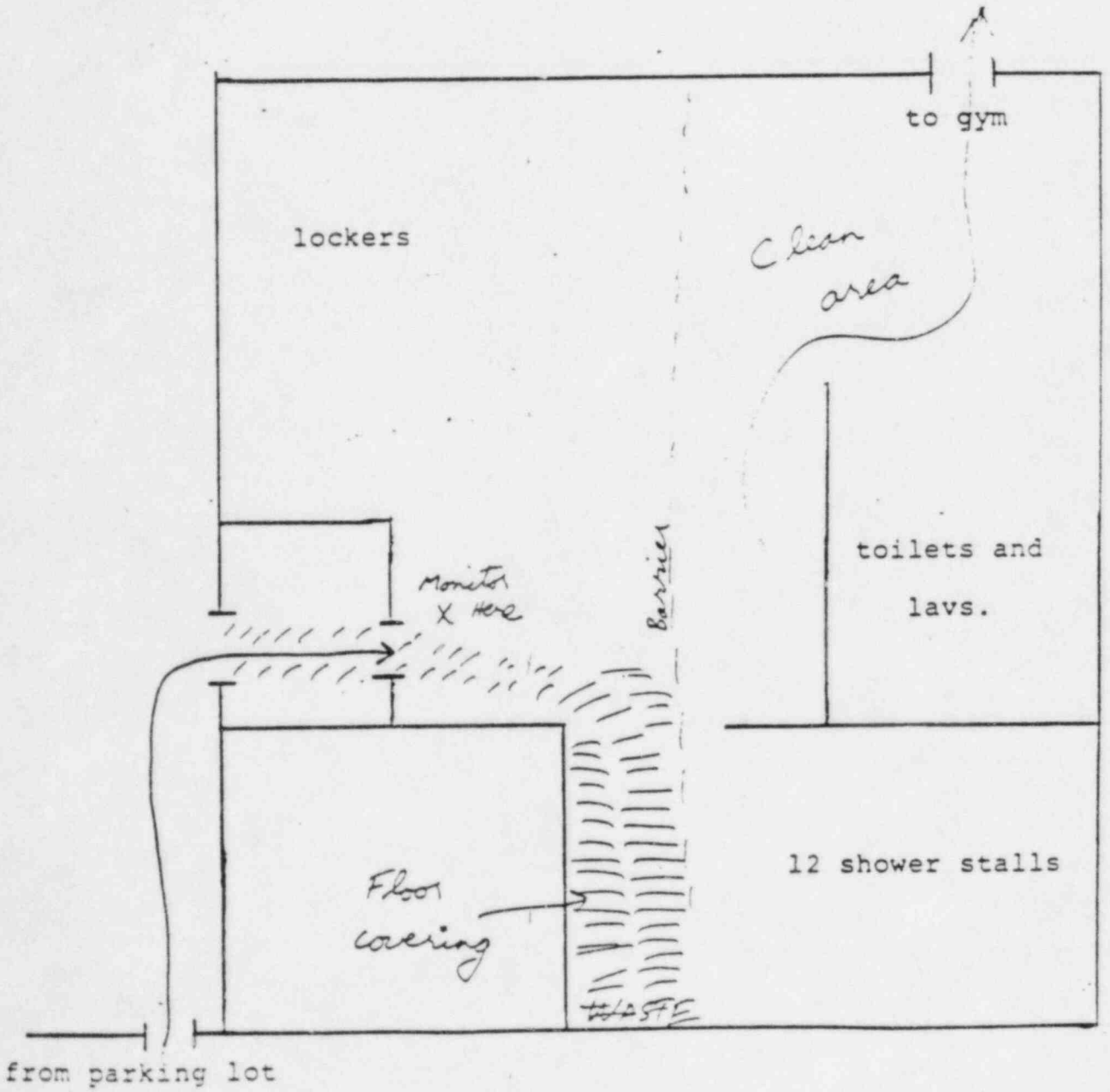


SPAULDING HIGH SCHOOL, ROCHESTER, NH

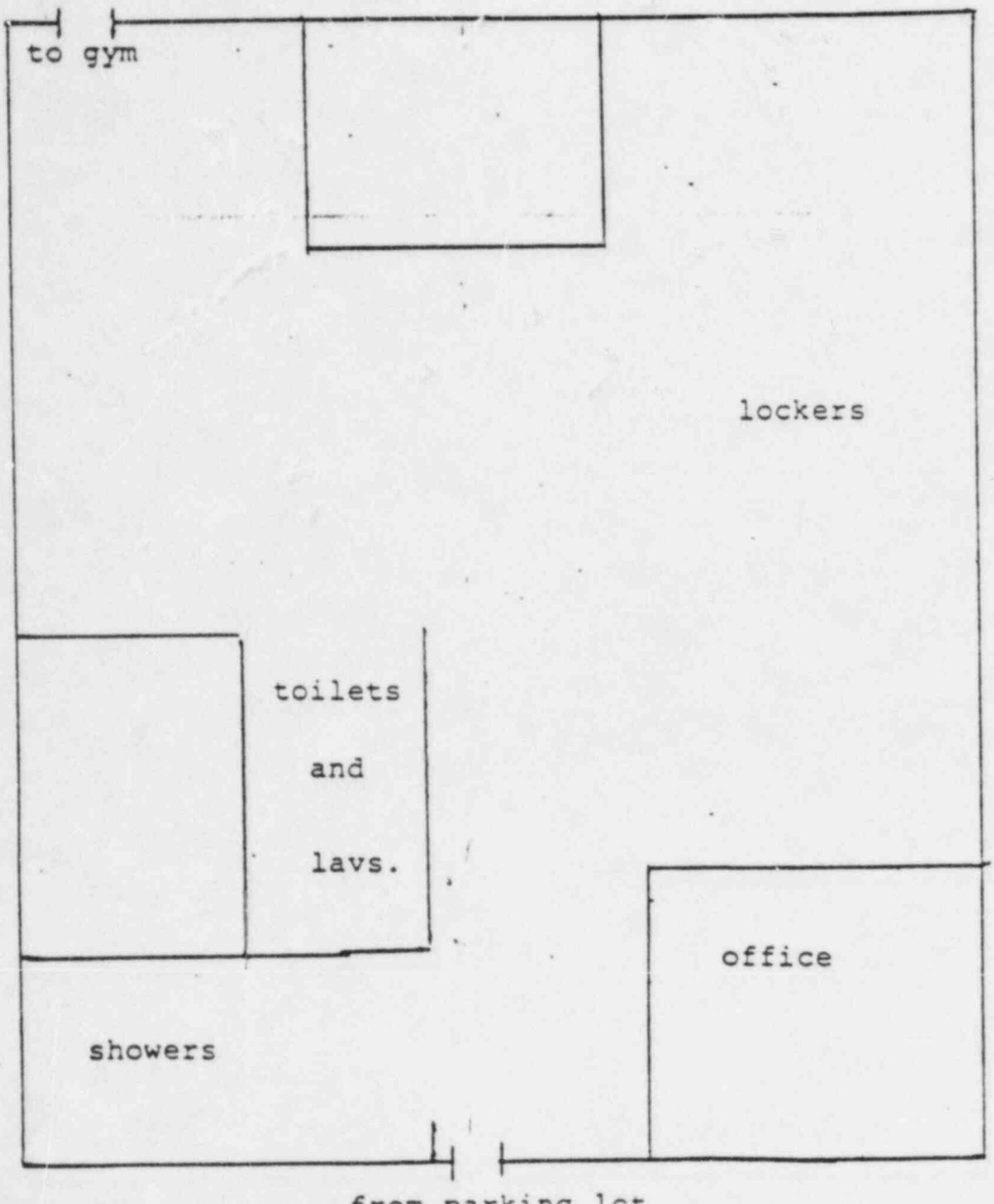
Take exit 16 from the Spaulding Turnpike and turn left on to Route 202. Go to Chesley Hill Road and turn left. Spaulding High is ahead on the left.



Girl's Locker Room

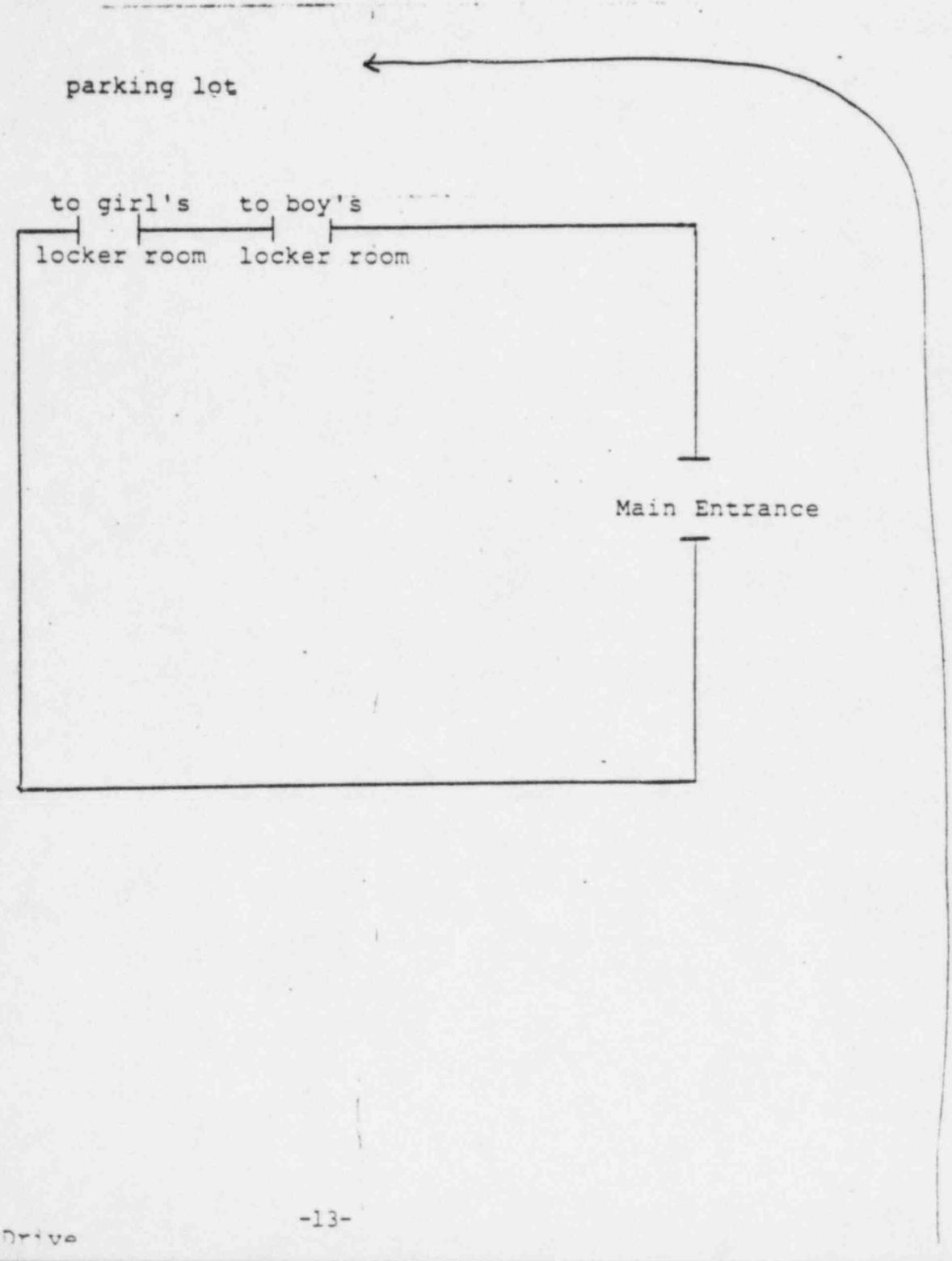


Boy's Locker Room

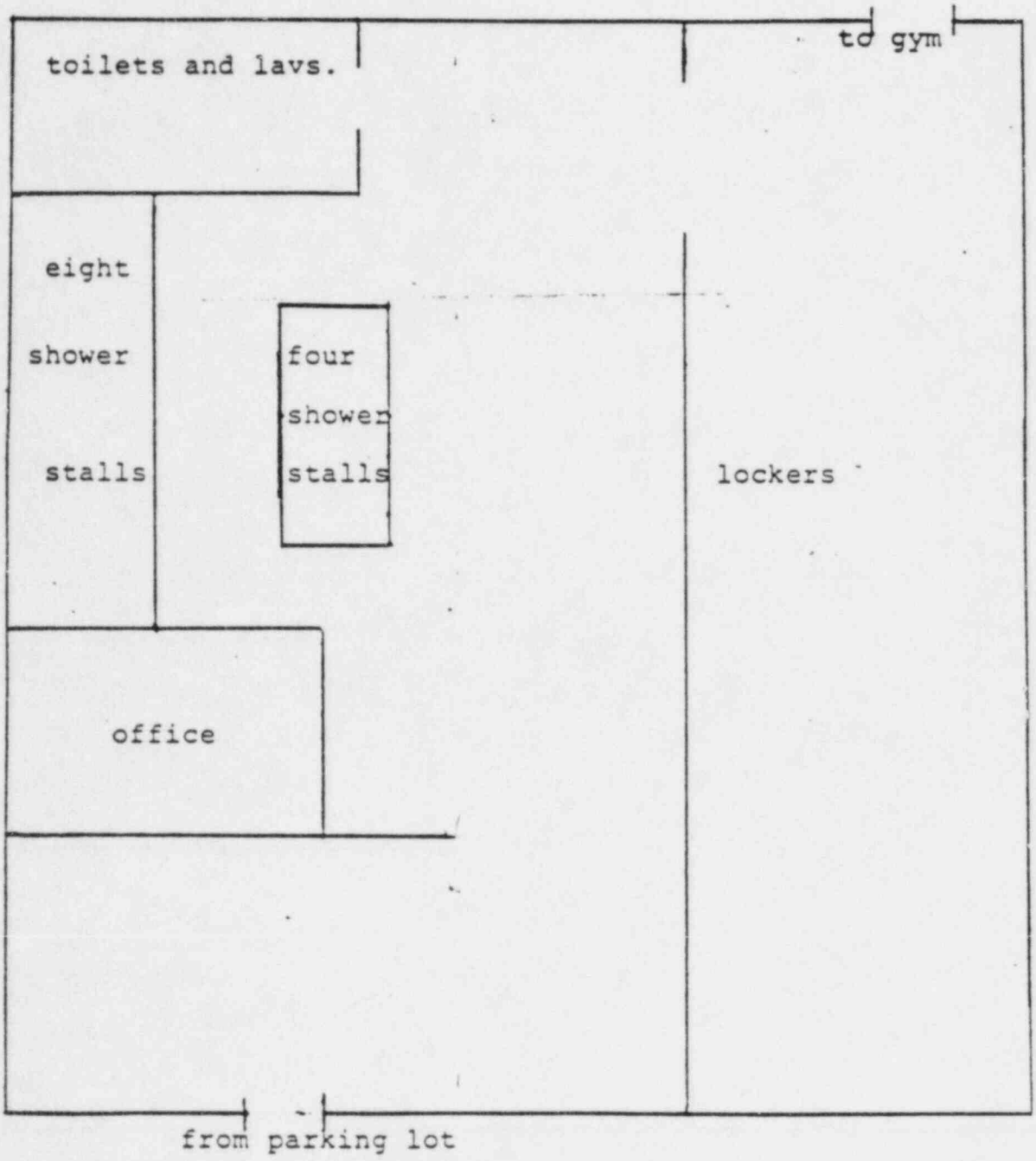


SALEM HIGH SCHOOL, SALEM, NH

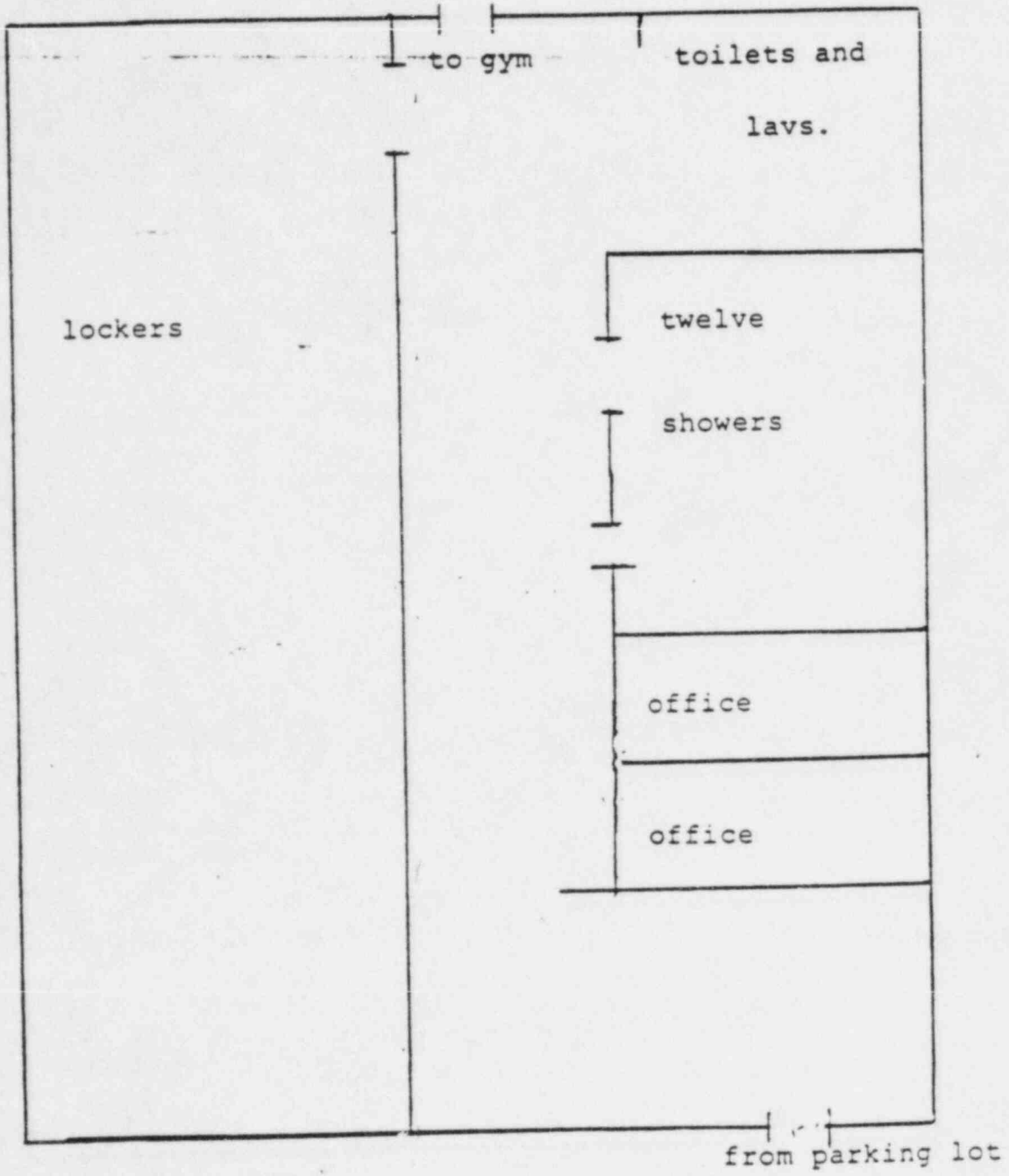
Take exit 2 from I-93 on to Route 97 (Main Street) going east. Turn right on to Geremonty Drive (just after the Public Library on Main Street). The High School is ahead on the right.



Girl's Locker Room



Boy's Locker Room



EMERGENCY RESPONSE PROCEDURE
MANCHESTER (NH) RADIOLOGICAL DECONTAMINATION CENTER
FOR DECONTAMINATION PERSONNEL
PREPARED BY: NEW HAMPSHIRE DIVISION OF PUBLIC HEALTH SERVICES (DPHS)
RADIOLOGICAL HEALTH PROGRAM

This document provides a checklist of procedures, for the initial set up and continued operation of the Decontamination Center, to be followed by the Decontamination personnel in the event of a radiological emergency condition.

INITIAL

1. Receive notification from the Fire Chief (or delegate) to open the Decontamination Center. _____

2. If assigned, bring the Decontamination Kit (See Appendix F7) from the EOC (Fire Station) to the Decontamination Center (Memorial High School). _____

3. Upon arrival at the Decontamination Center, insure that at least ten (10) Decontamination persons are present.

4. Remove all nonessential people from the designated decontamination area. _____

5. Prepare area for receipt of possibly contaminated individuals by putting the Decontamination Center into operation (See Appendix F1). _____

FOR SEABROOK STATION INCIDENT

6A. Report to the DPHS Administrator in order to review the status of the equipment on hand and to discuss the specific duties (See Appendix F2) to be performed for the duration of this emergency. _____

7A. Report to the DPHS Administrator any need for additional personnel, equipment, information or radiological technical advice. _____

8A. Follow any additional instructions given by the DPHS Administrator (e.g., different methods of surveying, changes in decontamination procedures, etc.). (See Appendix F3 and F4 for normal surveying and decontamination procedures.) _____

9A. Insure that personnel dosimetry is read every half hour and that the reading is recorded. _____

10A. Close Decontamination Center upon notification from DPHS Administrator (See Appendix F6). _____

FOR LOCAL RADIOLOGICAL INCIDENT

6B. (TO BE DEVELOPED BY LOCAL STAFF.)

"D"

APPENDIX F1

INITIAL

Procedure in opening the Decontamination Center.

1. Remove all nonessential people from the designated decontamination area. _____

2. Set up interior of station (Girls' Locker Room) as shown at end of this procedure (Appendix F1 - Form 2).

   A. Remove any unnecessary equipment or material from the designated area. _____

   B. Set up radiation signs, yellow rope, tape or other appropriate barriers (i.e., close doors) in order to clearly delineate the area. _____

   C. Line large garbage containers with plastic trash bags. _____

   D. Cover the floors of both the buffer zone and the decontamination area with plastic material and paper (shower area). _____

   E. Cover all stationary devices in the designated area which are not needed for operation of Decontamination Center with plastic. _____

   F. Isolate the air system from the rest of the building. _____

   G. Put radiation detection instruments and the report forms on tables at the monitoring points. _____

   H. Place decontamination materials and necessary needed supplies on tables in the Decontamination Center. _____

   I. Attach the flexible shower hoses to showers for use. Insure that the water source flow and temperature will be adjustable for the comfort of the contaminated person. _____

3. Prepare exterior of Decontamination Center as shown at end of this procedure (Appendix F1 - Form 1). _____

   A. Rope off areas marking traffic flow into Center:

      MONITORING AREAS: Girls' Locker Room _____

      Vehicle _____

      Registration Area Entrance

APPENDIX F1

WAITING AREAS: People (Gymnasium) _____

Registration Area Entrance _____

Vehicle "Clean" Parking _____

Vehicle "Contaminated" Parking _____

B. Put radiation detection instruments and equipment on tables at monitoring areas. _____

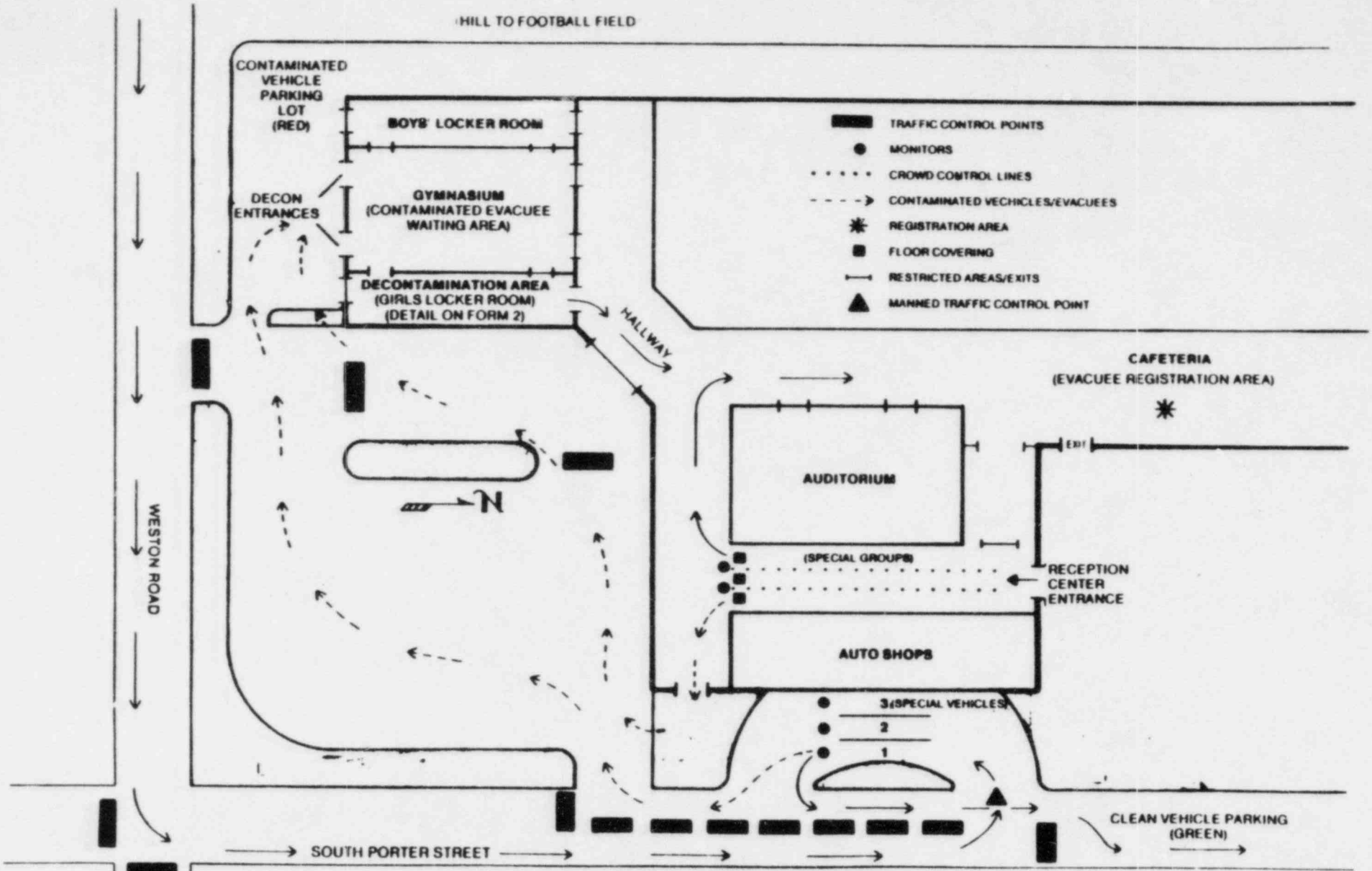
C. At registration entrance monitoring area (at the front of each line) place plastic sheet down for each incoming line. _____

D. Remove any unnecessary equipment. _____

4. Make operational check of dosimeters and of radiation instruments (See Appendix F5). _____

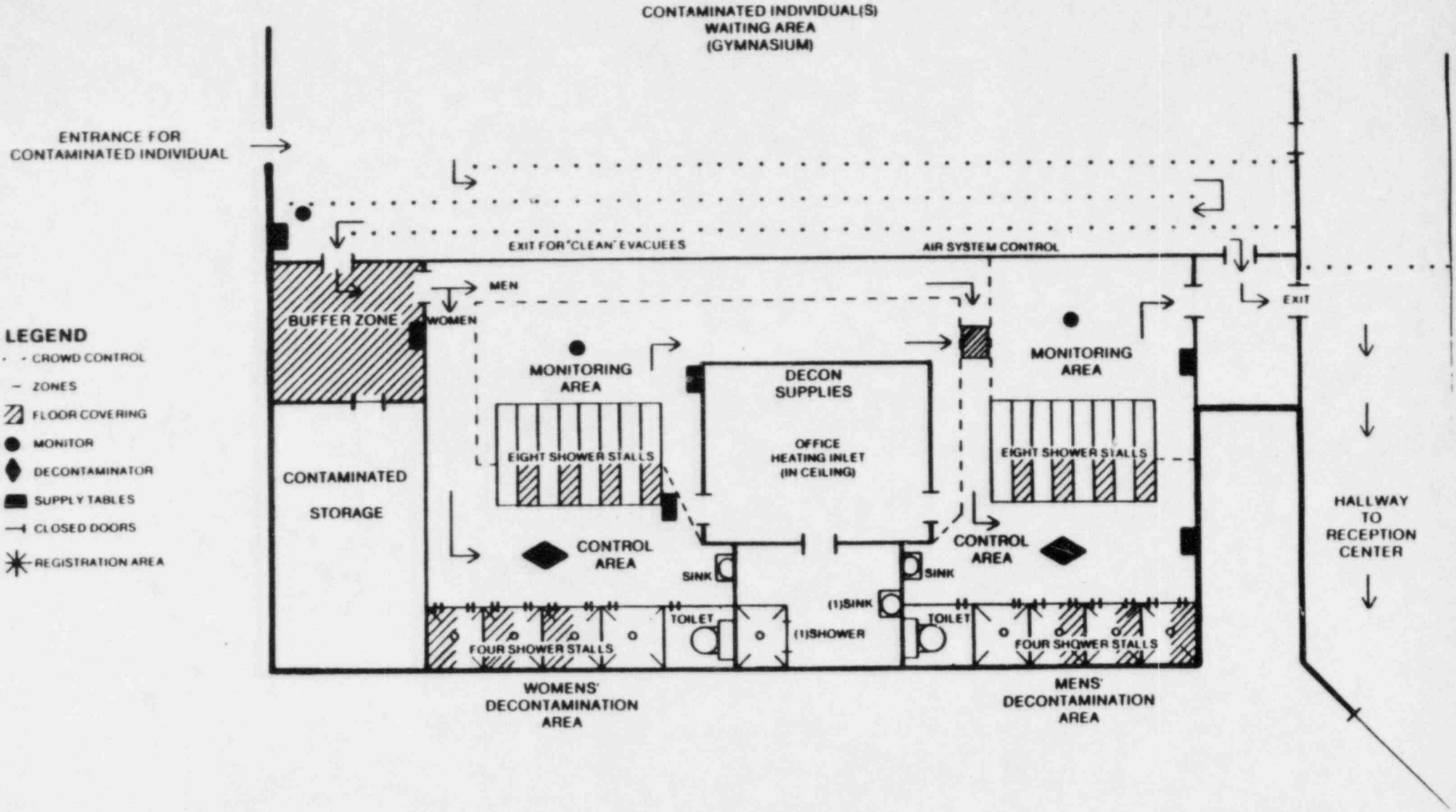
5. Wear appropriate protective clothing in order to perform the specific duties assigned for duration of emergency (See Appendix F2). _____

6. Make note of any diminished supplies (See Appendix F7) and/or of any malfunction of instruments. _____



APPENDIX F1 - FORM 1 DECONTAMINATION CENTER

MEMORIAL HIGH SCHOOL, MANCHESTER



APPENDIX F1 - FORM 2 DECONTAMINATION CENTER
MEMORIAL HIGH SCHOOL , MANCHESTER
(GIRLS LOCKER ROOM)

APPENDIX F2

Description of the specific duties and attire of persons assigned to the Decontamination Center.

DECONTAMINATION ADMINISTRATOR "DPHS" (1)

He/she is the DPHS Liaison with the IOF/EOF in Newington. Duties include:

(1) to follow decontamination personnel dosimetry,

(2) to note needs for personnel and/or equipment and supplies,

(3) to maintain contact with DPHS Monitoring/Decontamination Center Coordinator who is in contact with DPHS Radiation Specialists,

(4) to arrange for sufficient clothing in coordination with the Reception Center Manager,

(5) and to establish a means of communication between him/herself, the Reception Center Manager, the ranking police official, local on-site civil defense officials (if present), the local EOC and the hospital/medical center.

NOTE
PROTECTIVE CLOTHING WILL CONSIST OF PAPER COVERALLS AND SHOE COVERS AND WILL BE WORN IN THE INTERIOR OF THE DECONTAMINATION ONLY.

INTERIOR OF DECONTAMINATION CENTER (4)

Prior to the arrival of the contaminated persons, staff persons should each put on:

(1) "scrub" suit
(1) Tyvek coverall
(1) shower cap
(1) pair of PVC suits (taped around cuff)
(1) plastic apron
(1) pair of surgical gloves
(1) pair of nitrile gloves (taped around cuff)

Two (2) decontamination staff are stationed in the decontamination area, one (1) to each area fo the locker room (men and women).

Two (2) of the monitoring staff (one [1] in each area of the locker room) are stationed in the clean zone. Their function is to survey the contaminated individuals (See Appendix F3) and to complete the "Personnel Radiological Monitoring Report Form". (When form is completed, it will be given to the Decontamination staff.) Monitoring personnel also are to hand equipment into the Decontamination Room as required, without entering.

APPENDIX F2

EXTERIOR OF DECONTAMINATION CENTER (6)

Attire will be the normal firefighter equipment (boots, gloves, etc.).

One (1) monitor staff person (at entrance to the locker room) is to be stationed at all times, at the control points between the outside area and the Buffer Zone. The contaminated area should be vacuumed and surveyed before letting another contaminated individual inside.

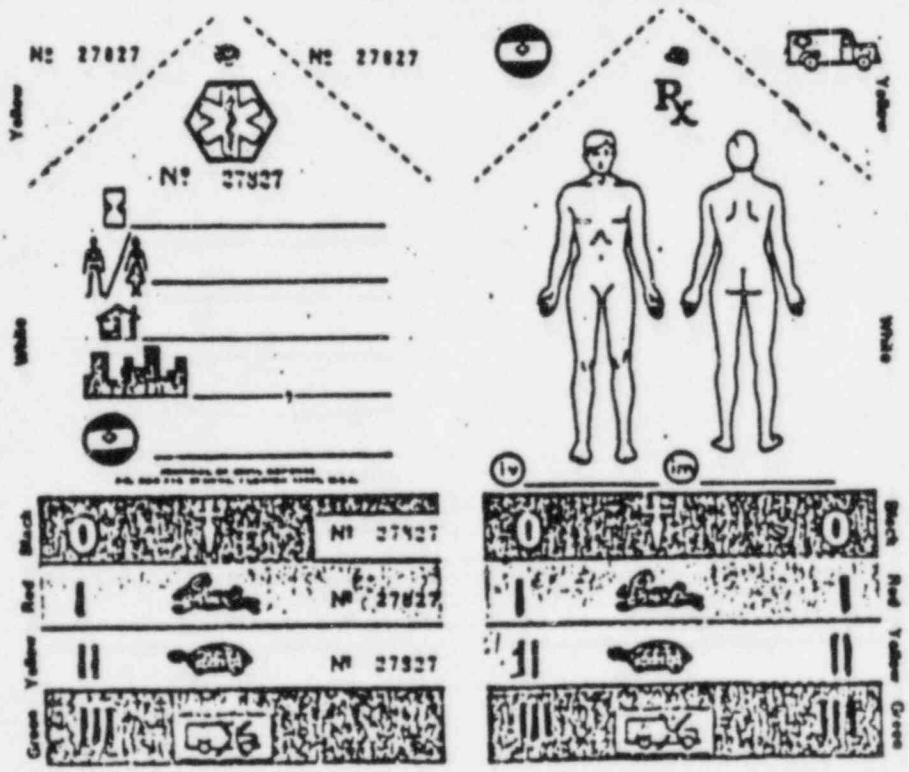
The three (3) monitors are assigned to vehicles and two (2) at the registration area. Vehicle interior monitoring and their decontamination will be done as time allows. Personnel and vehicle monitoring will be as per Appendix F3 unless otherwise advised. The only form to be filled by these monitors is for the vehicle monitoring (Vehicle Monitoring Report Form) and occupant referral (METTAG).

Cars will enter the Reception Center from the South Porter Street side into the north entrance of the semi-circular drive by the auto shop garage doors.

In the drive there will be three lanes prepared where cars and other vehicles will be directed for radiological monitoring and referral. Two lanes will be set aside for cars and the third lane will be reserved for buses and special vehicles such as ambulances and invalid coaches transporting the mobility-impaired.

After cars have been monitored, the use of a special tag (METTAG) and colored sticker will be used to refer and track both evacuees and their cars.

The Medical Emergency Triage Tag (METTAG) is shown below from both sides. Its colored "tear-off" tabs along with the tag's serial numbers on each tab will be used to sort and keep track of evacuees and their belongings.



REFERRAL OF EVACUEES AND THEIR VEHICLES

VEHICLE CLEAN-NO CONTAMINATION

VEHICLE MONITORED-CLEAN

EACH PERSON IN CAR GETS INTACT METTAG

GREEN STICKER PLACED ON WINDSHIELD

VEHICLE DIRECTED OUT DRIVEWAY AND NORTH ON SOUTH PORTER TO PARK. SHUTTLE BUS WILL PROVIDE RIDES BACK TO MEMORIAL HIGH SCHOOL.

EVACUEES ENTER "CLEAN" ENTRANCE BY AUDITORIUM JUST NORTH OF AUTO SHOP GARAGE DOORS

EVACUEES MONITORED BEFORE ENTERING REGISTRATION AREA

CLEAN

TEAR-OFF ALL COLORED TABS LEAVING BLACK TAB SHOWING

MONITOR WILL STAMP TAG ON THE BLANK ALLOWING EVACUEE TO ENTER REGISTRATION AREA

TAG SERIAL NUMBER WILL BE PLACED ON RECEPTION CENTER REGISTRATION FORM

DIRTY

MONITOR MARKS FIRST CONTAMINATED AREA ON BODY DIAGRAM AND RECORDS SURVEY METER READING ON LINE UNDER BODY DIAGRAM.

AFTER FINDING A CONTAMINATED AREA ON EVACUEE, MONITOR NO FURTHER

TEAR-OFF GREEN AND YELLOW TABS LEAVING RED TAB

IMMEDIATELY REFER EVACUEE TO THE DECONTAMINATION AREA VIA THE ESTABLISHED ROUTE

SINCE EVACUEE'S CAR IS PROBABLY INTERNALLY CONTAMINATED, PERSONNEL WILL NOTE CAR LOCATION AND REGISTRATION.

APPENDIX F2
REFERRAL OF EVACUEES AND THEIR VEHICLES
VEHICLE DIRTY-CONTAMINATED

VEHICLE MONITORED-CONTAMINATED (RECORD ON "VEHICLE MONITORING REPORT FORM" - APPENDIX F3 - FORM 2)

EACH PERSON IN CAR GETS TAG AFTER GREEN TAB IS TORN OFF, LEAVING YELLOW TAB SHOWING

RED STICKER PLACED ON WINDSHIELD WITH ALL GREEN TABS REPRESENTING VEHICLE OCCUPANTS PLACED PARTIALLY UNDERNEATH STICKER

VEHICLE DIRECTED OUT DRIVEWAY AND SOUTH ON SOUTH PORTER TO MAKE AN IMMEDIATE RIGHT INTO SCHOOL PARKING LOT FOR DIRTY VEHICLES.

EVAUCUEES EXIT VEHICLES, ENTER GYM AND GO TO YELLOW TAB AREA

EVACUEES MONITORED FOR RADIATION

DIRTY

CONTAMINATED AREA VACUUMED, PERSON REMONITORED

CLEAN

STILL DIRTY

TEAR OFF YELLOW AND RED TABS LEAVING THE BLACK TAB SHOWING

MONITOR WILL STAMP TAG ON THE BLANK ALLOWING EVACUEE TO ENTER THE REGISTRATION AREA.

BUFFER ZONE MONITOR MARKS CONTAMINATED AREAS ON BODY DIAGRAMS AND CALLS OUT READINGS FOR PERSON COMPLETING "PERSONNEL RADIOLOGICAL MONITORING REPORT FORM" (APPENDIX F3, FORM 1)

TEAR OFF YELLOW TAB LEAVING THE RED TAB SHOWING

EVACUEE ENTERS CONTROL AREA FOR DECONTAMINATION

PERSONNEL OBSERVE TAG FOR BODY AREAS CONTAMINATED AS SHOWN ON BODY DIAGRAMS

DIRTY CLOTHES/BELONGINGS ARE BAGGED WITH TAB CORNER (WITH PRINTED NUMBER) PLACED INSIDE STAPLED TO AN INDEX CARD

AFTER EVACUEE IS CLEAN, TEAR OFF RED TAB LEAVING THE BLACK TAB SHOWING

THE REMAINING TAG CORNER IS STAPLED ON THE "PERSONAL BELONGINGS LIST" (APPENDIX F4-FORM 2)

MONITOR WILL STAMP TAB ON THE BLANK ALLOWING EVACUEE TO ENTER THE REGISTRATION AREA.

APPENDIX F3
SURVEYING METHODS
(PERSONNEL, VEHICLE & AREA)

A. PROCEDURES FOR PERSONNEL MONITORS

- Verify operability of equipment frequently as per Appendix F5.
- Open the shield on the probe. Secure the probe in a surgical glove making sure glove fingers aren't dangling. Put on headphones so that you may observe the position of the probe rather than watch the meter readings.
- Determine background radiation levels. Recheck background from time to time with and without probe cover.
- Place the probe about 1/2 to 1 inch from the body of the individual being monitored, being careful not to touch the individual.
- DO NOT MOVE the probe too fast - only about 1 inch per second. The average personnel monitoring should be performed in 3 - 5 minutes per individual.
- Monitor the hands first, then have the person assume the "spread-eagle" position (Refer to Illustration 1).

  (a) If hands are contaminated, cover with plastic baggie or plastic wrap until monitoring survey is completed.

- Then move the probe downward on one side of the neck, the collar, the shoulder, arm, wrist, hand, underarm, armpit, side of the body, side of the leg, around the cuff and shoe, including the bottom of the shoe. Then monitor the inside of the leg from the cuff to the groin and continue the procedure on the other side of the body.
- Monitor the front and back of the body. Pay particular attention to covering the thyroid area in the throat.

  (a) To monitor bottoms of feet, have person lean against a wall (with hands covered if contaminated) for balance while he/she lifts one foot at a time.

- A person is considered CONTAMINATED if there is a reading of 0.15 mR/hr (100 cpm) or more above background (this limit may be adjusted by DPHS according to prevailing radiation levels outside). Do not confuse background radiation with your readings; contamination would be apparent by a <u>sustained increase</u> on the visual meter reading (Selector Switch on X 1 range), and also by a marked increase in the audible indication from the headphone. The audio response makes it possible to practically pinpoint any hot spots on the individual.

APPENDIX F3
SURVEYING METHODS
(PERSONNEL, VEHICLE & AREA)

- If the individual is contaminated, the interior monitor of the Decontamination Center must fill out a Personnel Radiological Monitoring Report Form (See Form attached). Send the contaminated individual to the decontamination room. Direct the individual to return after decontamination.

- Monitor individuals again after decontamination to verify that contamination has been removed. Repeat decontamination procedures if any contaminaton remains. If after a second decontamination attempt contamination remains, refer the individual for treatment at the Catholic Medical Center and/or Elliot Hospital.

- Collect and retain Personnel Radiological Monitoring Report Forms for all individuals found to be contaminated.

B. PROCEDURES FOR VEHICLE MONITORS

- Verify operability of equipment frequently as per Appendix F5.

- Open the shield on the probe. Secure the probe in a surgical glove making sure fingers aren't dangling. Put on headphones so that you may observe the position of the probe rather than watch the meter readings.

- Determine background radiation levels. Recheck background from time to time with and without probe cover.

- Place the probe about 1/2 to 1 inch from the vehicle being monitored, being careful not to touch the vehicle.

- Monitor the entire external area of the vehicle. Areas most likely to be contaminated are the wheelwells, radiator grill and air filter.

- Begin survey of vehicle at the bottom of the vehicle and work up. Consider all surfaces of the vehicle contaminated until proved otherwise by monitoring.

- Avoid contact with potentially contaminated surfaces of the vehicle to prevent contaminating yourself.

- Monitoring of internal areas of vehicle will be done only if time is available and is necessary only when:

  (1) vehicle is externally contaminated, or

  (2) personnel transported in vehicle are contaminated.

APPENDIX F3
SURVEYING METHODS
(PERSONNEL, VEHICLE & AREA)

- A vehicle is considered CONTAMINATED if there is a reading of 0.15 mR/hr (100 cpm) or more above background (this limit may be adjusted by DPHS according to prevailing radiation levels outside). Do not confuse background radiation with your readings; contamination would be apparent by a sustained increase on the visual meter reading (Selector Switch on X 1 range), and also by a marked increase in the audible indication from the headphone. The audio response makes it possible to practically pinpoint any hot spots on the vehicle.

- If the vehicle is contaminated, fill out the Vehicle Radiological Monitoring Report Form, (see form attached). Vehicles are identified on the front window with a sticky patch:

  GREEN = CLEAN
  RED = EXTERNALLY CONTAMINATED ONLY

- Collect Vehicle Radiological Monitoring Report Forms for all vehicles found to be contaminated.

C. PROCEDURES FOR AREA MONITORS

- Verify operability of equipment frequently as per Appendix F5.

- Open the shield on the probe. Secure the probe in a surgical glove making sure glove fingers aren't dangling. Put on headphones so that you may observe the position of the probe rather than watch the meter readings.

- Determine background radiation levels. Recheck background from time to time with and without probe cover.

- Place the probe about 1/2 to 1 inch from the area being monitored, being careful not to touch the area.

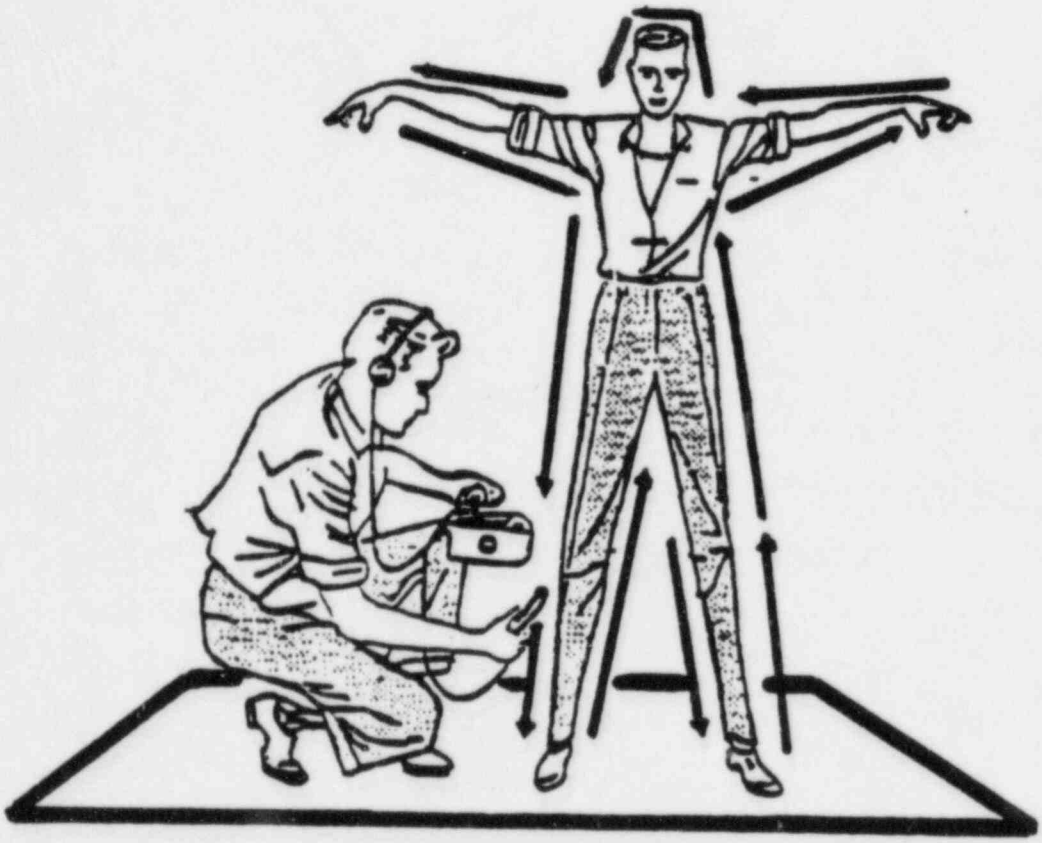
- Move the probe slowly on the suspected area.

- An area is considered CONTAMINATED if there is a reading of 0.15 mR/hr (100 cpm) or more above background. Do not confuse background radiation with your readings; contamination would be apparent by a sustained increase on the visual meter reading (Selector Switch on X 1 range), and also by a marked increase in the audible indication from the headphone. The audio response makes it possible to practically pinpoint any hot spots on the area.

- If the area is contaminated, remove the plastic material (if present), and cover with plastic material and secure with duct tape.

APPENDIX F3

ILLUSTRATION 1



PERSONNEL MONITORING

APPENDIX F3 - FORM 1

PERSONNEL RADIOLOGICAL MONITORING REPORT FORM

NOTE: This form will be completed for each individual with a reading of 0.15 mR/hr (100 cpm) or more above background.

NAME OF PERSON MONITORED: _____

SOCIAL SECURITY NUMBER: ___ ___ ___ - ___ ___ - ___ ___ ___ ___

ADDRESS: Street/_____

City/_____ State/_____ Zip/_____

FIRST Radiological Monitoring:

Stamp Number:

SECOND Radiological Monitoring - to be completed after person has undergone decontamination including acquiring radiologically "clean" clothing.

Stamp Number:

THIRD Radiological Monitoring - to be completed after person has undergone decontamination a second time.

Stamp Number:

ANATOMY	FIRST MONITORING	SECOND MONITORING	THIRD MONITORING
head	cpm	cpm	cpm
face			
neck			
rt.shoulder			
rt. arm			
rt. hand			
rt. side			
rt. outside leg			
rt. foot			
rt. inside leg			
groin			
lt. inside leg			
lt. foot			
lt. outside leg			
lt.side			
lt. hand			
lt. arm			
lt. shoulder			
chest			
stomach			
back			
buttocks			
thyroid			

MEDICAL REFERRAL: Individual sent to _____ HOSPITAL/CENTER for decontamination and/or treatment at (Time)____AM____PM____ on

DATE _____ SIGNATURE _____

DPHS Administrator

One copy to hospital/medical center; one copy to Decontamination Center.

APPENDIX F3 - FORM 2

VEHICLE MONITORING REPORT FORM

DATE: _____

VEHICLE REGISTRATION	DRIVER'S METTAG NUMBER	AREAS CONTAMINATED	INITIALS	TIME/DATE DECONTAMINATION	INITIALS

NOTE: Take all contamination surveys with beta window open. Decontamination required when contamination levels are greater than 0.15 mR/hr (100 cpm) above background.

APPENDIX F4
DECONTAMINATION
(PERSONNEL AND VEHICLE)

A. PERSONNEL DECONTAMINATION

Prior to personnel decontamination, all contaminated individuals will be given procedures to follow in the Decontamination Rooms (See Form 1 attached).

Decontamination is essentially the physical removal of radioactive "dirt" from the skin. There are three (3) methods used at the Decontamination Center:

1) Local Decontamination
2) General Decontamination, and
3) Local and General Decontamination

Generally, decontamination should begin from the highest point of contamination and proceed to the lowest point. If there is only localized contamination, it should be handled directly. General bathing would merely spread such contamination. Most of the radioactive material will be removed during the first decontamination effort.

- The initial step in decontamination is to remove carefully all contaminated clothing and to place it in a personnally identified plastic bag and fill out a Personnal Belongings Listing Form (See Form 2 attached).

- Then the contaminated area should be dry wiped and, if possible, damp wiped.

- Make an effort not to contaminate hairy areas which are initially free of radioactivity.

- Use precautions in order to prevent contamination from entering body openings.

1. Localized Decontamination

- Lightly wet the contaminated area using lukewarm water. Water should be used in such a way as to avoid splashing outside the shower.

- Use detergent or soap and gently work up a lather (for some individuals, use HYPOALLERGENIC soap).

- Wash the area for one to two minutes. Soft surgical brushes or gauze sponges are used to scrub contaminated areas of the skin. Care should be taken not to abrase the skin. Frequently, abrasion and redness of the skin may not be visible for hours. Hair, nails and skin folds should receive special attention.

- After scrubbing, the involved areas of the person's body should be rinsed thoroughly, dried, surveyed and the results recorded. Levels of contamination will generally decrease by about a factor of ten with the first decontamination effort.

APPENDIX F4
DECONTAMINATION
(PERSONNEL AND VEHICLE)

- The scrub, rinse, drying and resurveying should be repeated a second time if the level found is more than 0.15 mR/hr (100 cpm) above background. All survey reading should be done in an adjacent clean area of the shower.

- In some cases, there may be localized areas of residual contamination that persists in spite of the two decontamination efforts. If this is, for example, a small area of the skin, a plastic covering can be taped over the area; on a hand, a surgical glove may be taped; or, for the hair, a surgical cap may be worn. For all unsuccessful decontamination efforts, persons would be referred with a copy of APPENDIX F-3, FORM 1 to the Catholic Medical Center and/or the Elliot Hospital.

2. General Decontamination

- Showering is recommended when:

  1) the individual is uniformly contaminated over a large portion of the body, and/or

  2) the local decontamination would require too much time and result in delays in decontamination of other personnel.

- Shower procedures for decontamination:

  - It is imperative that the individual's dignity be maintained to the highest degree possible.

  - Lightly wet the most highly contaminated area(s) using lukewarm water. Water should be used in such a way as to avoid splashing.

  - Use detergent or soap and gently work up a lather on the contaminated area(s).

  - Wash the area for one to two minutes. Soft surgical brushes or gauze sponges are used to scrub contaminated areas of the skin.

  - Pay particular attention to hair, armpits, fingernails and body orifices.

  - After the scrubbing, the involved area(s) of the individual's body should be rinsed thoroughly.

  - Then a complete shower is taken. At no time should a shower take more than ten (10) minutes.

  - Dry and resurvey a second time.

  - If, in spite of two (2) decontamination efforts, residual contamination of more than 0.15 mR/hr (100 cpm) above background persist, refer the individual with a copy of APPENDIX F3, FORM 1, to the Catholic Medical Center and/or Elliot Hospital after covering the contaminated area(s).

APPENDIX F4
DECONTAMINATION
(PERSONNEL AND VEHICLE)

3. Local and General Decontamination

- A combination of showering and the local decontamination, as appropriate, is recommended in situations where:

  An individual is contaminated over a large portion of the body but has "hot spots" such as hands, fingernails, hair, etc., which are contaminated to much higher levels than other portions of the body.

In these cases, the "hot spots" should be pre-washed with soap and water, followed by a complete shower.

MISCELLANEOUS

- After decontamination, individuals are provided with clean clothing.
- Individuals with contaminated wounds, eyes or body cavities are immediately referred to Catholic Medical Center and/or Elliot Hospital for specialized treatment. For example:

  If there is any significant radioactivity in the nasal cavity, nose blowing and immediate referral to medical facilities is recommended.

- Any area of the skin can be covered with a gentle emollient salve such as lanolin.
- AT NO TIME should any hair be cut by the decontamination staff!
- Contaminated water should be flushed into ordinary drains. Faucets or shower heads should be left open to insure dilution in accordance with the NH Rules for the Control of Radiation.
- Contaminated waste materials, including clothing and contaminated towels should be packaged in plastic bags securely tied at the top. If possible, plastic bags should be placed in metal containers and stored in a secured room. Clothing, valuables and personal items are set aside for ultimate return to owners. These salvageable materials will be labeled with the owner's name, address and telephone number. Both salvageable and disposable waste should be retained for decontamination or disposal by radiological health officials at the conclusion of the emergency.
- A completed Personnel Radiological Monitoring Report Form for each individual found to be contaminated is compiled and kept on file at the Decontamination Center for the duraton of the emergency. At the conclusion of the emergency, the forms are forwarded to the New Hampshire Radiological Health Program located in Concord, N.H.

APPENDIX F4
DECONTAMINATION
(PERSONNEL AND VEHICLE)

B. VEHICLE DECONTAMINATION

- After surveyed, vehicle is identified on the front window with a sticky patch:

  GREEN = CLEAN
  RED = ENTERNALLY CONTAMINATED ONLY

- Ensure that all areas of contamination on the vehicle have been identified and accurately recorded on the Vehicle Contamination Report Form.

- When complete vehicle monitoring demonstrates internal contamination these vehicles will be stored in a secure area until decontamination by DPHS.

- Vehicles that are only externally contaminated can be sent, after the occupants are clean and have received the appropriate procedures and directions to the Federal Post Office car wash or the Manchester Transit larger vehicle wash.

- These vehicles are remonitored at the Decontamination Center to verify that contamination has been removed. Repeat decontamination procedures if any contamination remains. If, after a second decontamination attempt, contamination remains, leave the vehicle in the vehicle "Contaminated" area until Radiation Division of DPHS arrives to clean up the area.

- If only localized ocntamination areas have been identified on the vehicle and time permits, proceed as follows:

  (1) Lightly wet contaminated area;

  (2) Using soap, work up a lather;

  (3) Continue to wash for one minute in such a way as to prevent spreading of the contaminants;

  (4) Rinse; and

  (5) Monitor decontamination progress.

  If large areas or the entire vehicle is contaminated:

  (1) Hose the vehicle with water

- Repeat decontamination procedures of any contamination remains. If, (i.e. less than 0.15 mR/hr [100 cpm] over the background using a CPV-700 meter) after a second decontamination attempt, contamination remains, leave the vehicle in the vehicle contaminated area until Radiation Division of DPHS arrives to clean up the area.

  In winter, a vehicle wash is necessary to achieve decontamination.

APPENDIX F4 - FORM 1

WHAT HAPPENS IN THE DECONTAMINATION CENTER?

Decontamination is essentially the physical removal of radioactive "dirt" from the skin. If you have minor cuts or scratches you should be very sure that the Decontamination personnel know so they can cover the area(s) with surgical dressing. Also, individuals with contaminated wounds, eyes or body cavities will be immediately referred to medical facilities for specialized treatment.

There are three (3) methods used at the Decontamination Center:

1) Local Decontamination
2) General Decontamination, and
3) Local and General Decontamination

Generally, decontamination should begin from the highest point of contamination and proceed to the lowest point. If there is only localized contamination, it should be handled directly. General bathing would merely spread such contamination. Most of the radioactive material will be removed during the first decontamination effort.

- The initial step in decontamination is to remove carefully all contaminated clothing and to place it in a personnally identified plastic bag and fill out a Personnal Belongings Listing Form.
- Then the contaminated area should be dry wiped and, if possible, damp wiped.
- Make an effort not to contaminate hairy areas which are initially free of radioactivity.
- Use precautions in order to prevent contamination from entering body openings.

1. Localized Decontamination

- Lightly wet the contaminated area using lukewarm water. Water should be used in such a way as to avoid splashing outside the sink.
- Use detergent or soap and gently work up a lather (for some skin allergic individuals, use HYPOALLERGENIC soap.)
- Wash the area for one to two minutes. Soft surgical brushes or gauze sponges are used to scrub contaminated areas of the skin.
- The purpose of the brush or gauze sponges is to agitate the cleaning agent and to scrape off the contamination.
- You should be careful not to scrub or rub the skin to the point where it reddens, because then there is a risk of the contamination entering your blood stream directly.

APPENDIX F4 - FORM 1

WHAT HAPPENS IN THE DECONTAMINATION CENTER?

- After the scrubbing, the involved areas of the person's body should be rinsed thoroughly, dried, surveyed and the results recorded.

- The scrub, rinse, drying and resurveying should be repeated a second time if still contaminated. All survey readings will be done in an adjacent clean area of the shower.

- If, inspite of two (2) decontamination efforts, risidual contamination still persists, the person will be referred to the hospital after covering the contaminated area(s).

2. General Decontamination

- Showering is recommended when:

  1) the individual is uniformly contaminated over a large portion of the body, and/or

  2) the local decontamination would require too much time and result in delays in decontamination of other personnel.

- Shower procedures for decontamination:

  - The individual's dignity is maintained to the highest degree possible.

  - Lightly wet the most highly contaminated area(s) using lukewarm water. Water should be used in such a way as to avoid splashing.

  - Use detergent or soap and gently work up a lather on the contaminated area(s).

  - Wash the area for one to two minutes. Soft surgical brushes or gauze sponges are used to scrub contaminated areas of the skin.

  - Pay particular attention to hair, armpits, fingernails and body orifices.

  - After the scrubbing, the involved area(s) of the individual's body should be rinsed throughly.

  - Then a complete shower is taken. At no time should a shower take more than ten (10) minutes.

  - Dry and resurvey a second time.

  - If, in spite of two (2) decontamination efforts, residual contamination still persists, the individual will be referred to the hospital after covering the contaminated area(s).

APPENDIX F4 - FORM 1

WHAT HAPPENS IN THE DECONTAMINATION CENTER?

3. Local and General Decontamination

- A combination of showering and the local decontamination, as appropriate, is recommended in situations where:

  An individual is contaminated over a large portion of the body but has "hot spots" such as hands, fingernails, hair, etc., which are contaminated to much higher levels than other portions of the body.

  In these cases, the "hot spots" should be pre-washed with soap and water, followed by a complete shower.

- After decontamination, people are provided with clean clothing.

- Any areas of the skin can be covered with a gentle emollient salve such as lanolin.

METTAG TAB #_____

APPENDIX F4 - FORM 2

MANCHESTER DECONTAMINATION CENTER
PERSONAL BELONGINGS LIST

INDIVIDUAL:_____

ADDRESS: Street_____

City_____ State _____ Zip_____

Telephone (___)_____

CONTAMINATED VALUABLES LEFT AT MANCHESTER DECONTAMINATION CENTER

The following contaminated items have been left for decontamination at the Manchester Decontamination Center:

CASH _____/RING _____/OTHER _____

CHECKS _____/JEWELRY (Describe) _____/_____

GLASSES _____/_____/_____

DENTURE(S): Upper Lower /_____/_____

DENTURE: Partial Plate(s)/_____/_____

PROTHESIS _____/_____/_____

WATCH _____/_____/_____

The above is an accurate list of valuables left at the Manchester Decontamination Center. SIGNATURE OF OWNER_____

DATE:_____ SIGNATURE DECON PERSONNEL_____

Attach one copy to plastic bag containing belongings;
One copy to Owner; & one copy to Decontamination Center.

RELEASE OF VALUABLES TO OWNER

I hereby signify that I am again in full possession of my personnal property which was left at the Manchester Decontamination Center to be decontaminated.

SIGNATURE_____

DATE:_____ WITNESS_____

PROCEDURE AND DIRECTIONS IN DRIVING YOUR VEHICLE TO THE MANCHESTER FEDERAL POST OFFICE CAR WASH OR THE MANCHESTER TRANSIT LARGER VEHICLE WASH

This procedure is for externally contaminated vehicles only.

1. Notify the firefighter responsible for your vehicle that you are ready to go to the vehicle wash.

   Do not use your vehicle without first seeing the firefighter because you could get contaminated.

2. Follow the firefighter's instructions in getting into your vehicle.

3. Once in the vehicle, do not get out (unless an emergency) until the vehicle has been washed.

4. Close all vents. Do not use the vehicle's heater or air conditioner and close all vents and windows and do not open them even if it is uncomfortable.

5. Do not, eat, drink or smoke in the vehicle.

6. For your protection, after the vehicle has been washed, come back to the Reception Center so your vehicle may be remonitored.

7. For you and your loved ones protection, follow the firefighter's instructions!

APPENDIX F5

MONITORING EQUIPMENT AND OPERATIONAL PROCEDURES

A. CDV-700 SURVEY RATE METER

Opertations Check for CDV-700

1. Check visually to see that fresh batteries are in place. If not, insert them, observing the indicated polarity.

2. Turn the selector switch to the x10 range.

3. Allow 30 seconds for warm-up time.

4. Open the probe shield and place the open area directly against the check source. There should be a deflection of the meter needle indicating that the instrument is responding to radiation.

5. Determine the background radiation level by setting the instrument on the most sensitive scale (x1) and observing it for about 30 seconds.

B. EXPOSURE MEASURING INSTRUMENTS

Decontamination personnel will not be allowed to receive more than 5R total exposure unless sanctioned by DPHS!

1. Thermoluminescent Dosimeter

   a. Thermoluminescent dosimeters (TLD) measure radiation absorption or dose and are highly accurate, but they must be read by special instruments. The TLD's record doses of gamma radiation.

   b. Emergency workers should clip the TLD and the self-reading dosimeters to their inside clothes somewhere between the neck and waist. The windows on the TLD should face outward.

   c. Each emergency worker should retain their individual TLD until the end of the emergency when the TLD's should be returned to the Decontamination Administrator.

2. Self-reading Dosimeters

   a. Self-reading dosimeters enable emergency workers to continually keep track of individual radiological exposure. However, self-reading dosimeters are not as accurate as TLD's and also only record gamma radiation.

   b. Each emergency worker will be given two self-reading dosimeters to wear while inside the risk area. One dosimeter will serve as a back-up for the other.

      (i) CDV-138 dosimeters can measure between 0 - 200 milliroentgens of gamma radiation, and would be the primary dosimeter used by emergency workers in radiological response.

APPENDIX F5

(ii) CDV-730 dosimeters can measure between 0 - 20 rogentgens of gamma radiation and would serve as the back-up dosimeters for emergency workers.

c. Since the self-reading dosimeters do not have their own batteries, they must be charged or zeroed before they can be used. CDV-750 dosimeters charges are used to zero dosimeters for accuracy and recording purposes. You should zero your dosimeters before use. Read them and record your exposure on the "Personnel Exposure Record".

d. Dosimeters should be read every half hour and the reading recorded.

e. Reading and Charging a Dosimeter:

- Point the dosimeter at a source of light - even a match or a flashlight will do - and observe the position of the hairline indicator. If the line is visible and less than about one quarter up-scale, record the reading. If the line is above one-quarter scale or not visible, the dosimeter must be zeroed.

- To operate the dosimeter charger, lossen the thumbscrew in the top or bottom center of the charger with a coin and remove the bottom of the case. Install a battery, observing polarity (+ and -), and reassemble.

- Position the charger on a flat, steady surface. Unscrew the cap on the charging contact and place the end of the dosimeter (opposite the pocket clip and eye piece) on the charging contact of the charger.

- Apply a firm downward pressure. You should see a meter scale and hairline while looking through the dosimeter. If no line is visible, rotate the control knob of the charger until a line appears.

- Set the line on, or slightly above, zero using the control knob.

- Be sure to read the self-reading dosimeter with a light source immediately after zeroing because the setting can shift slightly after removal from the charger.

- To read the dosimeter at any time, point it at a source of light and note the reading by looking through the dosimeter. Your accumulated exposure, in Roentgens or Millirogentgens (R or mR), is the number you now read less your initial reading.

APPENDIX F5

EMERGENCY PROCEDURE

PERSONNEL EXPOSURE RECORD

PERSONNEL INFORMATION

Last Name | First Name | Middle Initial | Soc. Sec. #

Fire Station Group | Immediate Supervisor

Stamp # (If Applicable) | Survey Meter #(s) (If Applicable)

DOSIMETERY:

TLD Serial #_____

CDV-730 _____ Serial # | Initial Reading | Final Reading | Total Dose (R)

CDV-138 EXPOSURE RECORD:

DOSIMETER READINGS

DATE/TIME	INITIAL	FINAL	CUMULATIVE TOTAL (mRem)

APPENDIX F6

PROCEDURE IN CLOSING THE DECONTAMINATION CENTER

Upon notification from DPHS RADIOLOGICAL HEALTH PROGRAM, the Decontamination Center can be closed. The Decontamination Staff should remove their last set of protective clothing and place it in the available plastic containers. The order of removal of this attire is similar to that used when handling septic patients, with the gloves removed last. As shoe covers are removed, each attendant should step across the junction between the contaminated area and the clean part. Here the attendant should be carefully monitored and, if found free of contamination, should pass through the clean area. If attendants are contaminated, they should change clothes, wash to remove local contamination or take a general shower and be resurveyed. When all attendants have left the area, it should be roped off, access restricted, and all material and equipment should be left until a representative of DPHS who is knowledgeable in special surveying and decontamination, arrives to clean up the area.

APPENDIX F7

SUPPLY INVENTORY

ITEMS	QUANTITY	QUANTITY USED	BALANCE	WHERE OBTAINED
CDV-700 Survey Meter with headphones CDV-138 Dosimeters, 0 - 200mR CDV-730 Dosimeters, 0 - 20R CDV-750 Dosimeter chargers Potassium Iodide	14 tablets			New Hampshire Civil Defense Agency 1(800)852-3792
"Scrub " clothes ($4.00 each new; 2.00 each used)	3 doz. lg. tops (used) 3 doz. lg. pants (new) 1 doz. lg. tops (new) 4 doz. sm. tops (new) 4 doz. sm. pants (new)			Elliot Hospital Manchester, NH 03103 contact: David Kaczmarek (603)669-5300 ext. 2429
Exam gloves ($4.75/box)	10 boxes (500 pr.)			
Small Dial soaps ($84.00/case)	1 box			
Shampoo - castelle soaps ($1.75/box)	4 boxes			
Scrub brushes ($6.75/box)	4 boxes			
Disposable wash towels ($34.00/case)	2 cases (30 units)			
Surgical Masks ($7.75/box)	2 boxes (100 units)			
2" Dermicil Tape ($6.25/box)	6 boxes (36 units)			
5" x 9" Dressings ($2.30/box)	10 boxes			
Shoe covers ($25.00/case)	(200 pair)			
Tyvek coveralls ($60.00/box)	2 boxes (50 units)			
Cotton swabs ($3.70/box)	1 box (1000 units)			

APPENDIX F7

SUPPLY INVENTORY

ITEMS	QUANTITY	QUANTITY USED	BALANCE	WHERE OBTAINED
Masking tape 1" ($1.99/roll)	10 rolls			Hammar Industrial Supply, Inc. 592 Harvey Road Manchester, NH 03103 (603) 622-4425 Contact: Jack Etter
Duct tape ($4.00/roll)	10 rolls			
Taylor Tarp. ($4.00/roll)				
10' x 12' ($8.00)	4			
8' x 10' ($5.33)	4			
Scissors ($3.29 pair)	4 pairs			
Retractable utility knife	6			
Car wash ($1.49/can)	6 cans			
Car wash brushes ($8.05/brush)	2			
12" squeeges ($5.84/brush)	2			
Tapered poles ($2.43/pole)	4			
Sponge Mop ($7.04/mop)	3			
Sponge Mop refills ($3.14/refill)	6			
600' 3/8" polypropylene rope (yellow) ($.09/foot)	1 roll			
8' x 100', 6 mil polyethylene ($16.20/roll)	3 rolls			
Large garden trash bags ($2.09/box)	9 boxes			

APPENDIX F7

SUPPLY INVENTORY

ITEMS	QUANTITY	QUANTITY USED	BALANCE	WHERE OBTAINED
Trash bags ($22.46/box)	1 box (250 units)			
Bucket ($4.86/unit)	4			
Signs: Entrance ($.74)	1			
Men ($.74)	1			
Women ($.74)	1			
Exit ($.59)	2			
Trash Can ($11.99/unit)	4			
Black & Decker Dustbuster Plus ($33.94 each)	4			Service Merchandise Co., Inc. 65 State St. Manchester, NH 669-1340
Flashlight with D batteries ($3.97 each)	12 packages (24 units)			
#91014 Blue vinyl aprons ($22.00/dz)	1 dozen			Safety Equipment, Inc. 142 Merrimac St. Manchester, NH 03103 1 (800) 562-3836 669-4499 Contact: Art Ruszenas
Caution tape 3" x 1000' ($27.00/roll)	1 roll			
G-211-13R American Allsafe Goggles ($5.50/pr)	12 pair			
#1020 (XL) Lakeland Tyvek coveralls ($55.00/case)	1 case (25 units)			
#1018 (L) Lakeland Tyvek coveralls ($60.00/case)	1 case (25 units)			
T-205 Yellow coded safety tape ($7.70/roll)	5			
Yellow PVC boots ($5.50/pr)	6			

APPENDIX F7

SUPPLY INVENTORY

ITEMS	QUANTITY	QUANTITY USED	BALANCE	WHERE OBTAINED
(3) size 10 - (2) 16" - (1) 10" (1) size 11 - 16" (2) size 13 - 16"				
CTS- 28 28" traffic cones ($10.18 each)	10			
LA-111-EB Nitrile gloves (size 9) ($13.90/dz)	1 dozen			
5110-PE SIGN "No smoking, eating or drinking in this area" ($4.40/sign)	2			
Stop/slow paddle sign ($12.20 each)	2			
2756 5 1/2 lb. irregular 20" x 40" bath towels ($18.65/doz)	30 dozen			Craig Supply Co., Inc. 99 Madbury Rd. PO Box "CC" Durham, NH 03824 (603) 868-5558 Contact: Hunter Brownley or Randy Dumont
Disposable shower caps ($75.00/case)	1 case (1000 units)			P.W.A. Monarch 51 Beechem St. Everett, MA 02149 1 (800) 225-3420 Contact: Larry Parrotta

APPENDIX F7

SUPPLY INVENTORY

ITEMS	QUANTITY	QUANTITY USED	BALANCE	WHERE OBTAINED
Neutrogena Hypoallergenic soap - original formula ($1.88/bar)	6 bars			Osco Drug #956 111 South Willow St. Manchester, NH 668-2040
Rubber bands ($.39/pkg.)	5 pkgs.			
Zip-loc sandwich bags ($1.53/box)	9 boxes			
Zip-loc large bags ($1.59/box)	1 box			
Medical emergency triage tag (METTAG) (No charge)	200 tags			NH-EMS Regional Office 955 Auburn Street Manchester, NH 668-8420 Contact: Dave Dow Larry Rupp
3 x 5 Index cards ($.43/100)	1000 (10 pkgs.)			The Paper Center 394 Second St. Manchester, NH 03102 (603) 668-1424 Contact: Harold "Pip" Adams
Clipboards ($1.23/each)	24			
Pencils ($1.19/each)	12 dozen			
Ruled Pads ($5.59/dozen)	3 dozen			
Battery-Powered pencil sharpener ($3.99 each)	4			
C" - size batteries ($.49 each)	12			
Stapler ($7.96 each)	4			
Staples ($.98/box - 5000 units)	2 boxes			
Colored (red/green)				

APPENDIX F7

SUPPLY INVENTORY

ITEMS	QUANTITY	QUANTITY USED	BALANCE	WHERE OBTAINED
Stick-on labels ($65.00)				
Paper roll ($100.00)	1 roll			
Ink pad & stamp ($7.50 set)	5 sets			

Division of Public Health Services
EMERGENCY RESPONSE PROCEDURES
for the
Seabrook Station Nuclear Power Plant

DECONTAMINATION ADMINISTRATOR "DPHS"

This document provides checklist procedures to be followed in the event of an emergency condition at the Seabrook Station Nuclear Power Plant. The Decontamination Administrator's responsiblities are (1) to follow decontamination personnel dosimetry, (2) to note any unmet needs related to personnel and/or equipment and supplies, (3) to maintain contact with DPHS EOC Radiological Health Technical Assistant (RHTA) who is in contact with DPHS Radiation Specialists, (4) in coordination with the reception centern manager, to have sufficient clothes to replace contaminated clothing of evacuee (s) and personnel going through decontamination, and (5) to establish a means of communication between your self, the reception center manager, the ranking police official, local on-site civil defence officials (if present), the local EOC and the hospital/center.

		STATUS*	(24 HR) TIME DONE	INITIAL
ECL #1	UNUSUAL EVENT			
	(No Action required at this ECL)			
ECL #2	ALERT			
	1. Receive notification from the EOC RHTA that an ALERT has been declared.	___	_____	___
	2. Standby for notification of (a) termination of emergemcy status, or (b) escalation of emergency status.	___	_____	___
ECL #3 ECL #4	SITE AREA EMERGENCY AND?OR General EMERGENCY			
	1.. After receiving notification of the declaration of an escalation of Site AREA EMERGENCY and/or GENERAL EMERGENCY from the EOC RHTA report to the specified decontamination center Manchester, Nashua, Rochester, Salem, Dover, or Durham).	___	_____	___

* + = DONE
\- = NOT DONE
N = NOT APPLICABLE

1453o

11-18-86jc
03-28-86me
REV 1

"E"

ECL #3 SITE AREA EMERGENCY AND/OR
ECL #4 General EMERGENCY

	STATUS*	TIME DONE	INITIAL
2. Assemble (if applicable) with the reception center manager (DPSH), the ranking fire official, police official and any local on-site civil defence authorities to establish a means of on-site communication (using messengers, school intercom system etc.) and to coordinate general on-site operations (NOTE that the reception center staff are activiated only at the GENERAL EMERGENCY level).	___	___	___
3. With the ranking fire official[1], conduct a briefing on the status of the equipment on hand and to discuss the specific duties to be performed for the duration of this emergency.	___	___	___
4.Establish contact with the EOC RHTA to confirm the telephone number where you can be reached (217-2231)	___	___	___
5. Contact, if applicable, the local EOC (See Attachment 1 for specified decontamination center) & confirm the telephone number where you can be reached (000-0000)	___	___	___
6. Contact, if applicable, the reception center manager (See Attachment 1 for specified decontamination center for expected arrival time of clothing from the Red Cross (or related agency) and comfirm the telephone number where you can reached (000-0000). (NOTE that the reception staff are activated only at the GENERAL EMERGENCY level.	___	___	___
7. Report any unmet needs of personnel to the local EOC. Report any need for information or radiological technical advise to the EOC RHTA and follow any instructions given.	___	___	___
8. Insure that personnel dosimetry is read every half hour and that the reading is recorded. Request relief personnel when a dose of 4.5 Rem is expected soon in any decontamination personnel.	___	___	___

* + = DONE
\- = NOT DONE
N = NOT APPLICABLE

1453o

11-18-86jc
03-28-86me
REV 1

	STATUS*	TIME DONE	INITIAL
9. Contact (if needed) the local Hospital/ Medical Center (See Attachment 1 for specified decontamination center) and confirm the telephone number where you can be reached (000-0000).	___	_____	___

RECOVERY/DE-ESCALATION

Close Decontamination Center upon notififation from the EOC RHTA.	___	_____	___

1 Detail of the specific host communtiy Decontamination Personnel (firefighters and Decontamination Administrator) procedures are found in Appendix F.

NOTE: Protective clothing is worn in the interior of the Decontamination Center ONLY and is (paper) coveralls and plastic shoe covers.

* + = DONE
- = NOT DONE
N = NOT APPLICABLE

ATTACHMENT 1

TELEPHONE NUMBERS

HOST COMMUNITY	LOCAL EOC	RECEPTION CTR	HOSPITAL/MED. CTR.
MANCHESTER	Local EOC representative and Reception Ctr Manager are in the same building.		CMC: 000-0000 Elliot: 000-0000
NASHUA			
ROCHESTER			
SALEM			
DOVER			
DURHAM			

FOLLOW-UP INFORMATION FORM

* Indicates items to be completed by STED

*1. Name of Communicator: _____

*2. Location: Seabrook Station, Seabrook, New Hampshire

*3. Classification Level: [ ] Unusual Event [ ] Site Area Emergency
[ ] Alert [ ] General Emergency

*4. Declaration Date: _____ Time: _____

*5. Brief Description (EAL, Current Plant Status, Safety Systems Affected, Response Actions Taken):

_____

_____

_____

Meteorological Information

A Point

*6. Windspeed _____ mph A1628

*7. Wind Direction FROM _____ (degrees) A1630

*8. Stability Class (Circle) Delta T (A1632)

A	B	C	D	E	F
≤-1.69	≤-1.51	≤-1.34	≤-0.45	≤+1.51	>+1.51

*9 Precipitation [ ] Yes [ ] No

Radioactive Release Date

*10. Radioactivity [ ] Has [ ] Has not been released

*11. Noble Gas Release Rate: _____ uCi/sec (RDMS)

12. Iodine Release Rate: _____ uCi/sec

13. Particulate Release Rate: _____ uCi/sec

*14. Time release started: _____

*15. Release Terminated: [ ] YES [ ] NO

FOLLOW-UP INFORMATION FORM
(continued)

*16. Time release terminated_____

*17. Estimated release duration_____hours

Off-site Exposure Data

	Site Boundary	2Mi	5Mi
*18. Whole body dose rate (R/hr)			
19. Thyroid dose rate (R/hr)			
*20. Whole body dose (R)			
21. Thyroid dose (R)			

From HP41C, Form 5.1A

22. Surface Spill Information: Volume:_____liters

Concentration:_____ uCi/ml

Location:_____

23. Surface Contamination: a. On-site:_____dpm/100cm^2

Location:_____

b. Off-site:_____dpm/100cm^2

Location:_____

*24. Prognosis for Worsening or Termination:

_____

_____

_____

*25. Contact:

New Hampshire_____ _____ _____ _____
Name Organization Time Phone No.

Massachusetts_____ _____ _____ _____
Name Organization Time Phone No.

26. Authorized by:_____ _____
STED/SED/EOF Co. Date/Time