

# Love Canal Containment Facility

## Contingency Plan

Revised:

SPEED  
MESSAGE 44-900

Wilson Jones Carbonless  
Snap-A-Way® Forms

SPEED MESSAGE

TO

Ben

FROM

Jerry

SUBJECT

Love Canal Contingency Plan

DATE

4/20/93

Please review Brian's changes and let me know if any questions arise. Should be straight forward. Substitute new sheets and make a copy for yourself.

1 Please return my copy! Thanks!

To:

Jerry

No comments

BBW

SIGNED

ORIGINAL

SPEED MESSAGE

TO: General Rivera Jr. P.C. N.Y.S.D.C.  
DTM SECTION CHIEF  
CENTRAL OFFICE - ALBANY

FROM: Brian Spadowski N.Y.S.D.C.  
DTM SECTION  
LOWE CANAL - NIAGARA FALLS

SUBJECT: CONTINGENCY PLAN REVISIONS

DATE: APRIL 14, 1993

PLEASE FIND ENCLOSED REVISIONS (UPDATED) TO  
OUR CONTINGENCY PLAN. PLEASE PLACE THE INSERTS INTO THEIR  
RESPECTIVE AREAS. THANK YOU.

APR 19 1993

cc T. Sciascia w/ENCL.  
ENV. ENGR. III  
BUFFALO

SIGNED: Amun

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
 LOVE CANAL CONTAINMENT FACILITY  
 CONTINGENCY PLAN  
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EMERGENCY TELEPHONE NUMBERS

EMERGENCY . . . . . 911

AMBULANCE SERVICE

Frontier Ambulance Service	285-3663
Niagara Ambulance Service	284-4228
Niagara Falls Memorial Hospital	278-4000

POLICE

Niagara Falls	278-8280
Sheriff	285-5355
State Police	297-0755

SPILL CONTROL

N.Y.S. Oil and Hazardous Material Spill Notification	(518) 457-7362	OR	(800) 457-7362
National Response Center	(800) 424-8802		
Niagara Falls Wastewater Treatment Plant	278-8138		
	286-4973	Shift Operator	

NIAGARA COUNTY HEALTH DEPARTMENT

Business Hours	284-3124
After 5 pm & weekends	439-7430

NIAGARA COUNTY

Emergency Management Office	
Emergency Operating Center	283-0371

## EMERGENCY COORDINATORS

During normal operations at the Love Canal Leachate Treatment Facility, there are two on-site plant operators. In the event of a spill or other emergency, both persons have full authority and responsibilities for implementing the contingency plan. The primary emergency coordinator will:

1. direct work by on-site personnel or private contractors in clean-up operations,
2. be responsible for the notification of all outside agencies during the implementation,
3. provide an accurate description of the situation to outside response groups, and
4. insure that clean-up operations are carried out as described in this plan.

The Emergency Coordinators are listed on the following page.

**EMERGENCY COORDINATORS**

Name	Telephone Number		Title
	Office	Home	
* Brian Sadowski	(716) 283-0111	(716) 731-5654	Senior Treat. Fac. Operator
2) Maurice Moore	(716) 283-0111	(716) 283-5230	Treatment Fac. Operator
3) Loren Green	(716) 283-0111	(716) 283-2335	Maintenance Assistant
4) Abul Barkat	(716) 851-7220	(716) 691-4157	Environmental Engineer II
5) Michael Hinton	(716) 851-7220	(716) 433-9387	Environmental Engineer II
6) Joseph Sciascia	(716) 851-7220	(716) 631-8118	Environmental Engineer III

Additionally, there are personnel based in Albany who are on-site from time to time. Again, these are listed in order of priority.

Albany, NY-based personnel

* Gerald Rider	(518) 457-0927	(518) 674-5985	Section Chief
7) John Strang	(518) 457-0927	(518) 235-7883	Environmental Engineer II

\*Mr. Rider will act as primary emergency coordinator whenever he is on-site. Mr. Strang, when on-site, will act as primary emergency coordinator in Mr. Rider's absence. If neither Mr. Rider nor Mr. Strang is on-site, Mr. Sadowski will act as primary emergency coordinator.

RESPONSE TO EMERGENCY SITUATIONS  
GENERAL INSTRUCTIONS

For all cases which require implementation of the contingency plan, the following actions should be taken in order:

1. Notify the emergency coordinator
2. Get immediate attention for any injuries. Emergency phone numbers for police, fire or ambulance is 911. Other emergency phone numbers are listed on Page 1.
3. Shut down all plant process pumps and field pumps. Field pumps can be shut down from the treatment plant office control panel by turning all switches on the MDCP to the "off" position. Plant pumps can be shut down by closing the air valve at each individual pump. If the emergency situation exists within the treatment area, plant pumps are to be shut down by turning off the air compressor in the mechanical room.
4. Don Level B protection until lesser level of protection is ascertained to be appropriate.
5. Determine severity of situation based on amount of release, material involved and area damaged.
6. Stop any continuous release if able to do so without entering contaminated environment.
7. Inform the appropriate emergency-response organizations and the NYSDEC Central Office in Albany.
8. Proceed with response and cleanup activities outlined in each section.
9. An investigation should be conducted to determine the cause of the event which triggered the implementation of this contingency plan. Ways to reduce a future occurrence of the event should be undertaken.

Each time the Contingency Plan is put into effect, the complete details of the incident must be noted in the operator's daily log, and reported to the Chief of the Operation & Maintenance Section in a written report. An incident report form is included in the Appendix.



AQUEOUS PHASE LEAKS  
(RAW WATER AND FILTER FEED TANKS, NON-SLUDGE PIPING SYSTEM)

- a. Protective Clothing Required:
- 1) Level B protective gear.
  - 2) Supplied air respirators. Respiratory protection may be reduced to full-face air purifying respirator after sufficient air monitoring shows continuous levels of less than 5 ppm total organic vapor concentration and oxygen levels greater than 19.5%.
- b. Equipment and materials required for cleanup:
- 1) A minimum of 3 persons, 2 of which must have completed required training. At least one NYSDEC person must supervise the cleanup.
  - 2) Protective clothing, mops, absorbent pigs, used clothing drums and detergent are stored in the process area. If protective clothing and supplied air cannot be obtained because of the spill, duplicate equipment is stored in the administration building storage room.
- c. Action to be taken.
1. Shut down all plant processes.<sup>1</sup>
  2. Suit up in protective clothing and supplied air.
  3. Close upstream valve.
  4. If leak is continuing, take action to contain then stop the leak. For a leaking pipe, patch pipe or contain and collect leaking fluids. For a tank leak, empty contents of tank to below the source of the leak.
  4. Bleed pipe from valve to source of leak if necessary.
  5. Flush spilled material to chemical floor drain with large volume of water using available low pressure water hoses with nozzle in the treatment room. Use industrial cleaning agents or penetone to aid in flushing to chemical drain.
  6. Steam clean affected areas of floor using high pressure steam from Steam Jenny.
  7. Mop floor and dispose of mop(s) when done with cleanup.
  8. Decontaminate any equipment which became contaminated during leak (such as lawn mower or items stored under adsorber unit)

<sup>1</sup> Process pumps may be run under the observation of the treatment plant operator for the purposes of emptying a leaking tank.

- d. Final clean-up and inspection.
- All mop heads, absorbent pigs, squeegees and protective clothing should be placed in drums for disposal in accordance with the facility's drum storage policy. The floor should be visually inspected (especially in tight areas around the tank) for contamination. Air should be monitored with an HNu meter. If readings persist above background levels, the floor should be steam cleaned and scrubbed until readings correspond to background levels.
- Immediate arrangements should be made through the Special Projects Section to replace or repair tank and all affected pipes. Similar equipment should be inspected for possible failure in the same area; if the raw water tank cracked at the connection to the pump suction line, for example, the corresponding connection should be closely inspected on the filter feed tank.

NON-AQUEOUS PHASE LEAKS  
(RUPTURE OF INDOOR SLUDGE TANK AND SLUDGE TRANSPORT LINES)

a. Protective Clothing Required:

- 1) Level B protective gear.
- 2) Supplied air respirators. Respiratory protection may be reduced to full-face air purifying respirator after sufficient air monitoring shows continuous levels of less than 5 ppm total organic vapor concentration and oxygen levels greater than 19.5%.

b. Equipment and materials required for cleanup:

- 1) A minimum of 3 persons, 2 of which must have completed required training. At least one NYSDEC person must supervise the cleanup.
- 2) Protective clothing, shovels, hard bristle brooms, absorbent pigs, used clothing drums and detergent are stored in the process area. If protective clothing and supplied air cannot be obtained because of the spill, duplicate equipment is stored in the administration building storage room.
- 3) Floorsorb is located in the storage blockhouse

c. Action to be taken.

1. Shut down all plant processes.<sup>1</sup>
2. Suit up in protective clothing and supplied air.
3. If leak is continuing, take action to contain then stop the leak. For a leaking pipe, place pail under leak and close valve. For a tank leak, empty contents of tank to below the source of the leak.
4. Bleed pipe from valve to source of leak if necessary.
5. Set up a perimeter berm around the spill using floorsorb to contain the sludge.
6. Take shovels full of floor sorb and apply to sludge perimeter and leak area.
7. Cover the spill with floorsorb until the sludge is not permeating the upper layer.
8. Shovel the spent floorsorb into drums. Position the drum so that drum moving equipment has access to it.
9. Scrub floor with hard bristle brooms using hot water and detergent solution. Work all water using squeegees including rinse water towards the chemical floor drain.
10. Scrub floor a second time using hot water and detergent solution. Work all water including rinse water towards the chemical floor drain.
11. Decontaminate any equipment which became contaminated during leak (such as lawn mower or items stored under adsorber unit)

<sup>1</sup> Process pumps may be run under the observation of the treatment plant operator for the purposes of emptying a leaking tank.

Final cleanup and inspection:

All shovels, mop heads, other expendables and protective clothing should be placed in drums for final disposal in accordance with the Site's drum storage policy. Immediate arrangements should be made through Albany to replace or repair tank and all affected pipes. The floor should be visually inspected (especially in tight areas around the tank) for contamination. Trough area should also be checked for sludge buildup. Air should be monitored with an HNu meter. If reading persist above background levels, the floor should be steam cleaned and rinsed until readings correspond to background levels.

## CLARIFIER LEAK

- a. Protective Clothing Required:
- 1) Level B protective gear.
  - 2) Supplied air respirators. Respiratory protection may be reduced to full-face air purifying respirator after sufficient air monitoring shows continuous levels of less than 5 ppm total organic vapor concentration and oxygen levels greater than 19.5%.
- b. Equipment and materials required for cleanup:
- 1) A minimum of 3 persons, 2 of which must have completed required training. At least one NYSDEC person must supervise the cleanup.
  - 2) Protective clothing, shovels, mops, absorbent pigs, used clothing drums and detergent are stored in the process area. If protective clothing and supplied air cannot be obtained because of the spill, duplicate equipment is stored in the administration building storage room.
  - 3) Floorsorb is located in the storage blockhouse
- c. Action to be taken.
1. Shut down clarifier feed pump if on.
  2. Suit up in protective clothing and supplied air.
  3. Empty clarifier by connecting hose to drain connection on influent side of clarifier and throttling to chemical drain trench.
  4. Set up a perimeter berm around the spill using floorsorb to contain sludge or leachate.
  5. Take shovels full of floor sorb and apply to sludge perimeter and leak area.
  6. Cover the spill with floorsorb until the sludge is not permeating the upper layer. Leachate can be flushed to floor trench or utility pumped to raw water tank.
  7. Shovel the spent floorsorb into drums. Position the drum so that drum moving equipment has access to it.
  8. Flush floor with large volume of water using hoses in treatment room.
  9. Scrub floor with hard bristle push brooms using hot water and detergent solution. Work all water with squeegee including rinse water towards the chemical floor drain.
  10. Scrub floor a second time using hot water and detergent solution. Work all water including rinse water towards the chemical floor drain.
- d. Final Cleanup
- Decontaminate any equipment which became contaminated during leak (such as lawn mower or items stored under adsorber unit). Drum all contaminated expendables. Immediate arrangements should be made through Albany to replace or repair tank and all affected pipes. The floor should be visually inspected (especially in tight areas around the tank) for contamination. Trough area should also be checked for sludge buildup. Air should be monitored with an HNu meter. If reading persist above background levels, the floor should be steam cleaned and rinsed until readings correspond to background levels.

TREATMENT PLANT

## FIRE

### A) SMALL FIRE with no threat of chemical contamination

a. Protective clothing required:

Level D or greater level of protection if already being worn.

b. Equipment and materials required:

Fire extinguishers are located in the treatment area as shown on the floor plan.

c. Action to be taken.

1. Shut down electrical equipment.
2. If alone, use intercom to tell other plant personnel you are fighting a fire and give location.
3. Use appropriate fire extinguisher.
4. If extinguisher is ineffective in fighting the fire, take the same action described below for a large fire. Dial 911.
5. Watch for reignition.
6. Notify Albany DEC Office.

d. Final cleanup and inspection

When cool, dispose of all waste items properly.

If fire was electrical, have electrical contractor review circuits prior to energizing.

Try to determine cause of fire.

Make a list of all items destroyed or unusable.

Get extinguisher recharged.

### B) LARGE FIRE or fire WITH THREAT of chemical CONTAMINATION

a. Protective clothing required:

None initially. During final cleanup and inspection Level B shall be worn unless a lesser level is appropriate in accordance with DEC Guidance.

b. Equipment and materials required:

None.

c. Action to be taken.

1. Shut down electrical equipment and compressors.
2. Use intercom or alarm to alert all on-site personnel.
3. Call Fire Department. Dial 911.
4. Evacuate to Administration Building or Public Information Office at the discretion of the emergency coordinator. Emergency coordinator should be able to open gate and direct Fire Dept. personnel. At least one NYSDEC person must be present at all times at the site entrance gate.
5. Emergency coordinator will coordinate with the Fire and Police Departments in accordance with their Department's Standard Operating Procedures.

d. Final Cleanup and inspection

Approval will be obtained by the Fire Department prior to a site building entry. Upon approval, the emergency coordinator will conduct a thorough investigation of the building and establish a list of cleanup and inspection priorities.

## EXPLOSION.

a) Protective Clothing Required:

See Action to be Taken.

b) Equipment and Materials required:

Fire extinguisher.

c) Action to be taken:

1. Report incident to Emergency Coordinator
2. Call Fire Department
3. Cease operations
4. Notify others in vicinity
5. Leave Building Quickly. Commence Evacuation Plan if necessary.
6. Fire Department to enter building first. Be aware of possible vapor buildup. Monitor air, use Level B personal protection and explosion proof equipment.

d) Final cleanup and inspection.

After the Fire Department has determined the area of the explosion to be safe, cleanup released NAPL and APL first. Cleanup contaminated debris next, then non-contaminated debris. Assess damage, being sure to also look for any splattering of liquids on walls and process equipment, cracked windows and loose pipe connections.

## SPILL - ADMINISTRATION BUILDING

No hazardous waste is stored in or near the administration building. At times there may be ignitable solvents in the lab room. Ignitable solvents will not exceed 5 gallons and will not be stored overnight.

a. Protective clothing required:

Level C protection.

b. Equipment and materials required:

Detergent, mop and pail, rags.

c. Action to be taken.

1. If there is a solvent spill or gasoline spill in the Administration Bldg., a no smoking rule will be put into effect until the spill is cleaned up.
2. Ventilate the building by opening doors and windows.
3. Use mop and pail with industrial detergent to clean up spill. Dispose of liquid into leachate collection system.
4. If the spilled material reached the floor drains, flush drains with a generous amount of soapy water.

d. Final clean-up and inspection.

Emergency coordinator will determine when area is clean by a visual inspection. Leave solvent-soaked rags in a pail of water on the Decon Pad for 24 hours prior to placing in trash or storing as a hazardous waste.

## FIRE - ADMINISTRATION BUILDING

### A) SMALL Fire

#### a. Protective clothing required:

Level D.

#### b. Equipment and materials required:

Fire extinguishers are located in each room as shown on the floor plan.  
(Floor plan shown in Equipment List Section.)

#### c. Action to be taken.

1. If alone, use intercom to tell other plant personnel you are fighting a fire and give location.
2. Use fire extinguisher.
3. If extinguisher is ineffective in fighting the fire, take the same action described below for a large fire.
4. Watch for reignition.
5. Notify Albany DEC Office.

#### d. Final cleanup and inspection

When cool, dispose of all waste items properly.  
If fire was electrical, have electrical contractor evaluate the circuit prior to energizing.  
Try to determine cause of fire.  
Make a list of all items destroyed or unusable.  
Get extinguisher recharged.

### B) LARGE fire

#### a. Protective clothing required:

Stay in clothing being presently worn and do not enter into the hazardous area.

#### b. Equipment and materials required:

Spill cleanup equipment for use after the fire is out. (Refer to specific section of Contingency Plan for cleanup.)

#### c. Action to be taken.

1. Shut down electrical equipment.
2. Use intercom or alarm to alert all on-site personnel.
3. Call Fire Department. Dial 911.
4. Evacuate to Treatment Facility Building or Public Information Office at the discretion of the emergency coordinator. Emergency coordinator should be able to open gate and direct Fire Dept. personnel. At least one NYSDEC person must be present at all times at the site entrance gate.
5. Emergency coordinator will coordinate with the Fire and Police Departments in accordance with their Department's Standard Operating Procedures.

#### d. Final Cleanup and inspection

Approval will be obtained by the Fire Department prior to a site building entry. Upon approval, the emergency coordinator will conduct a thorough investigation of the building and establish a list of cleanup and inspection priorities.

## RUPTURE OF SLUDGE STORAGE TANKS

### a. Protective Clothing Required:

- 1) Level B protective gear.

### b. Equipment and materials required for cleanup:

- 1) A minimum of 3 persons, 2 of which must have completed required training. At least one NYSDEC person must supervise the cleanup.
- 2) Protective clothing, shovels, hard bristle brooms, absorbent pigs, used clothing drums and detergent are stored in the process area.
- 3) Floorsorb is located in the storage blockhouse.

### c. Action to be taken.

#### I. Pinhole Leaks

1. Suit up in protective clothing and supplied air.
2. If leak is continuing, take action to contain then stop the leak. For a leaking pipe, place pail under leak and close valve. For a tank leak, empty contents of tank to below the source of the leak.
3. Bleed pipe from valve to source of leak if necessary.
4. Take shovels full of floor sorb and apply to sludge perimeter and leak area.
5. Cover the spill with floorsorb until the sludge is not permeating the upper layer.
6. Shovel the spent floorsorb into drums. Position the drum so that drum moving equipment has access to it.
7. Scrub containment area with hard bristle brooms using hot water and detergent solution. Pump all water including rinse water into the chemical drain on the pad adjacent to the containment area.
8. Scrub containment area a second time using hot water and detergent solution. Pump all water including rinse water into the chemical floor drain.
9. Decontaminate all cleanup equipment and any equipment which became contaminated during leak.

SITE



## RUPTURE OF SLUDGE STORAGE TANKS (CONTINUED)

- c. II. Rupture
1. Evacuate treatment facility.
  2. Call NYSDEC SPILL NOTIFICATION (518) 457-7362 to request emergency cleanup contractor.
  3. If adequate manpower is available, suit up in protective clothing and supplied air to estimate damage and amount spilled.
  4. One NYSDEC person is to remain "clean" to be able to enter buildings.
  5. Restrict visitor access to the site
  6. Coordinate with cleanup contractor the transfer of sludge in secondary containment area to either sludge storage tanks or central sector leachate holding tank. Verify that sludge volume can be accepted into tank prior to pumping.
  7. Cleanup remaining sludge in containment area by following steps 4 thru 9 for Pinhole Leak Procedure, previous page.
  8. Cover ruptured area with polyethylene to minimize odor.

### Final cleanup and inspection:

All shovels, mop heads, brooms, and protective clothing should be placed in drums for final disposal. Immediate arrangements should be made through Albany to replace or repair tank and all affected pipes. Visually inspect the containment area. Air should be monitored with an HNu meter. If readings persist above background levels, the area is to be steam cleaned and rinsed until readings correspond to background levels.

SITE

## OVERFLOW - SOUTH SECTOR HOLDING TANK

- a. Protective clothing required:  
Level C protection  
Air purifying, full face mask respirator. Air must be monitored with photovac tip or HNu meter. Air readings above 5 ppm total organics will require supplied air protection.
- b. Equipment and materials required:  
50 lb. bags of floorsorb are available in the storage blockhouse along with shovels, rakes and plastic. 55 gallon drums are stored in the Drum/Decon Storage Facility. A worst case estimate would require 20 to 30 drums. At least 2 NYSDEC employees must be present during cleanup operations.
- c. Action to be taken.  
Both the North and South Sector leachate holding tanks are protected from surcharges by wastefeed cut-offs. However, if failure should occur proceed as follows:
1. Shut down pumps feeding the holding tank. This can be done from the MDCP control panel in the plant office and/or the power panels located at each storage feed pump station. Turn all switches to the "off" position. All other processes and pumps in the facility should also be shut down.
  2. Determine the extent of contamination. This should be done by visual observation. If leachate has reached the storm sewers, the City of Niagara Falls Wastewater Treatment Plant, and the New York State Oil and Hazardous Material Spill Notification Number should be called.
  3. Stop any flow at the spill's outer boundary by forming a dike with absorbent.
  4. Cover the affected area with a one-half inch layer of the absorbent material. Once the spill has been contained and there are no free liquids, the emergency coordinator must decide if the spill can be cleaned by hand or if a backhoe or other equipment is required.
  5. All absorbent and the top 6 inches of soil should be removed and placed in drums for storage. The area should then be covered with a plastic tarpaulin and roped off to discourage access.
  6. If leachate is present in the tank manway, process south sector at least until manway is empty.
- d. Final Cleanup and inspection  
Inspect pump chamber 2 for signs of leachate intrusions through chamber walls.  
Develop plan to further decontaminate affected areas and manway.

NOTE: The North/Central Sector Holding Tank has an overflow drain which sends all overflowed leachate into the south sector collecting system. If the overflow drain becomes clogged, and an uncontained overflow occurs, the action to be taken will follow the procedure for the overflow of the South Sector Holding Tank.

## DRUM RUPTURE

- a. Protective clothing required:  
Level C protection.  
Air-purifying full face mask respirator.  
Thick leather or suede work gloves worn under high elbow gloves and steel-toed shoes (worn under overboots). Tractor operator must have available all protective equipment in the tractor but may doff equipment as necessary to enable safe handling of the tractor. Air should be monitored with HNu Photoionizer.
- b. Equipment and materials required:  
50 lb bags of floorsorb, available in the blockhouse and Decon/Drum Bldg.  
Shovels, stored in the treatment plant.  
55 gallon and overpack drum(s), stored in the Decon/Drum Storage Building (DDSF)  
Pallets, stored in the DDSF  
Tractor, with forks and drum hooks  
Labels and paint pen, stored in administration bldg.  
At least 2 people must be present during cleanup operations.
- c. Action to be taken.
1. Move outer pallets, with tractor and fork attachment, surrounding the pallet supporting the ruptured drum to allow tractor access to ruptured drum.
  2. Place new pallet and overpack drum by pallet of ruptured drum.
  3. Place ruptured drum in overpack drum using tractor fork and drum hooks. STAND CLEAR OF THE DRUM IN CASE THE HOOKS SLIP.
  4. If drum hooks cannot be used; (possibly because the drum top is damaged), take the top of the ruptured drum off and hand shovel contents into new drum. Place ruptured drum in overpack drum.
  5. Place other drums that were on the same pallet as the ruptured drum on the new pallet.
  6. Break up pallet that was supporting ruptured drum and place wood into the new drum.
  7. If the drum was over soil, scrape off, using hand shovel, the top 2" of soil for an area large enough to pick up any spillage, and place it in an overpack drum. If ruptured drum was staged at the decontamination pad or in the Decon/Drum Building, flush the pad area or floor with soapy water.
  8. Fill any void spaces in overpack drum with absorbent.
  9. Secure tops on all drums.
  10. Label overpack and new drums appropriately.
  11. Place any moved pallets back into original position.
- d. Final Cleanup and inspection  
Visually inspect soil, pad, or floor. Also inspect pallets and other drums near area where drum ruptured for signs of contamination.  
Decontaminate all tools accordingly.

SITE

LIST OF EMERGENCY EQUIPMENT

A) Treatment Facility

ITEM (# of)	LOCATION	DESCRIPTION AND CAPABILITIES
Fire extinguishers (7)	See Floor Plan: Treatment Facility Emergency Equipment Locations.	Model 10H ABC Multiuse CB dry chemical fire extinguisher for use on A,B,C type fires  A - wood, paper B - flammable liquids C - electrical
Scott ska-pak emergency escape unit (4)	in cabinet #1 on the SW wall of the treatment plant area	The ska-pak is a full 5 min. escape SCBA. Its primary purpose is for use with an air line supply.
Half face and full respirators, cartridge type, (3)	on storage rack in hallway	For use in the presence of face organic vapors and acid gases, <u>only</u> when oxygen content is greater than 19.5%
Compressed air cylinder - breathing quality (2)	along east wall	Airlines are kept at the NW corner of the treatment room area. Supplies air suitable for breathing for a minimum 2 hours.
protective coveralls, gloves, boots, and hardhats (6 minimum)	in cabinet #2 SW wall of treatment room.	Coveralls, gloves and boots are used to protect against dermal contamination.

EQUIPMENT LIST

LIST OF EMERGENCY EQUIPMENT

A) Treatment Facility (continued)

<u>ITEM (# of)</u>	<u>LOCATION</u>	<u>DESCRIPTION AND CAPABILITIES</u>
50 lb. bags of absorbent (10 minimum)	in block house south of plant	Absorbent material used to contain-spills and increase solids content of sludges and slurries
First aid kits (3)	1 in plant office 2 in locker room	Two basic and one industrial first aid kits for treatment of accident victims
Shower/eyewash stations	2 at ends of clarifier 1 portable	Used to flush contaminants from body or eyes in the event of situation that is IDLH

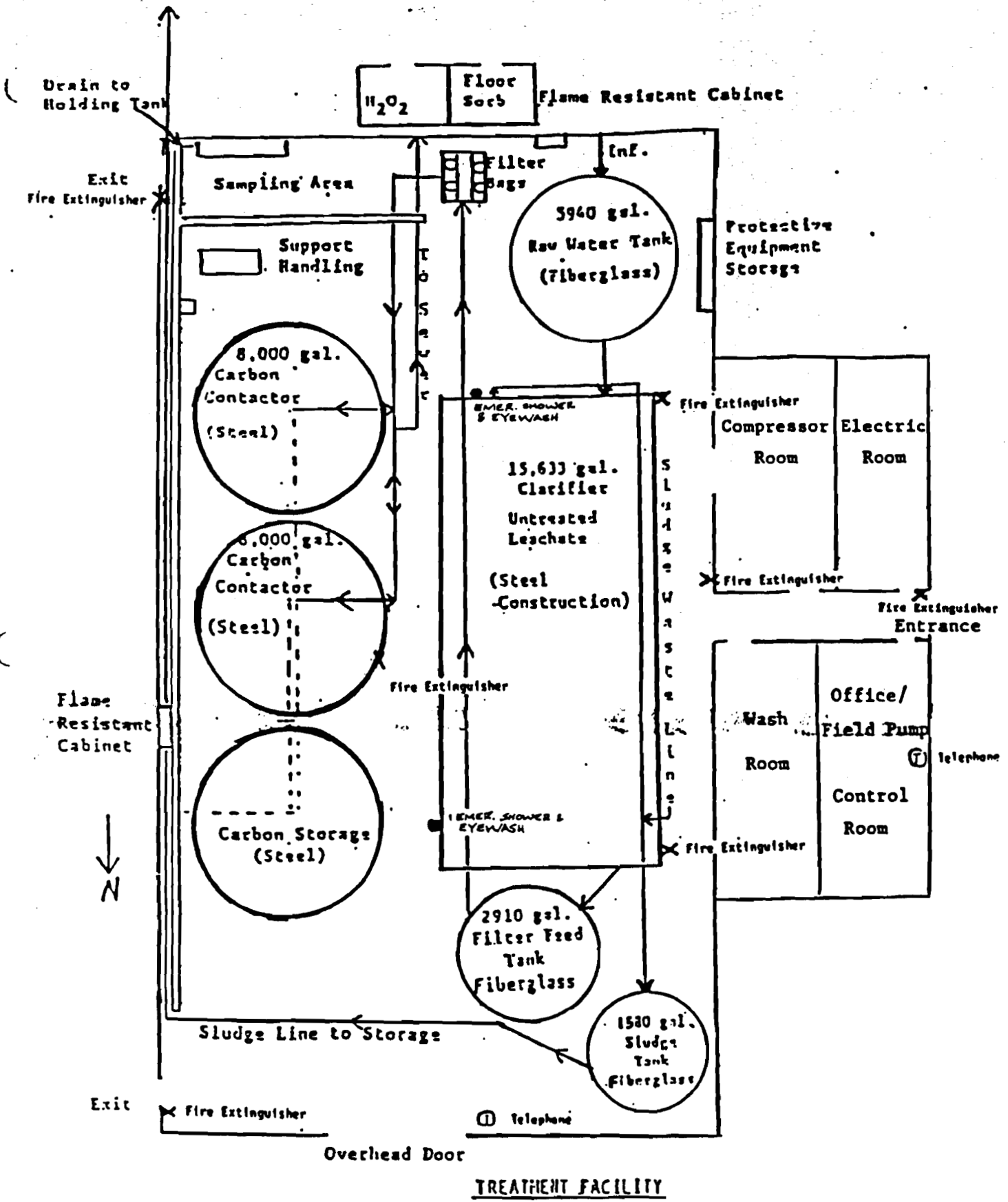
B) Administration Building

Scott air-packs (4)	4) located in the Adm. Bldg. storage room center row.	30 minute air supply with full face masks. Positive pressure self-contained breathing apparatus
Bellow and tank resuscitation units (1)	1) located in storage room, center row.	Used to resuscitate accident victims overcome by fumes and/or lack of oxygen
Fire extinguisher (7)	in each room	Dry chemical and CO2, 17 lb.
Protective coveralls, gloves, boots and hard hats	in storage room. Minimum 3 boots size 12 all other minimum quantity: 12	Coveralls, gloves and boots are used for dermal protection
Disposable half mask respirator (6)	in equip. storage room	For use in the presence of organic vapors and acid gas, only when oxygen content is greater than 19.5%.
Organic Vapor Respirator Cartridges; 4 minimum each make & model	in equipment storage room	For use in Scott, American Optical or MSA Air-Purifying Respirators
First Aid Kit (1)	in locker room	Small industrial
Air Horn (1)	in storage room	For signalling people in field

EQUIPMENT LIST

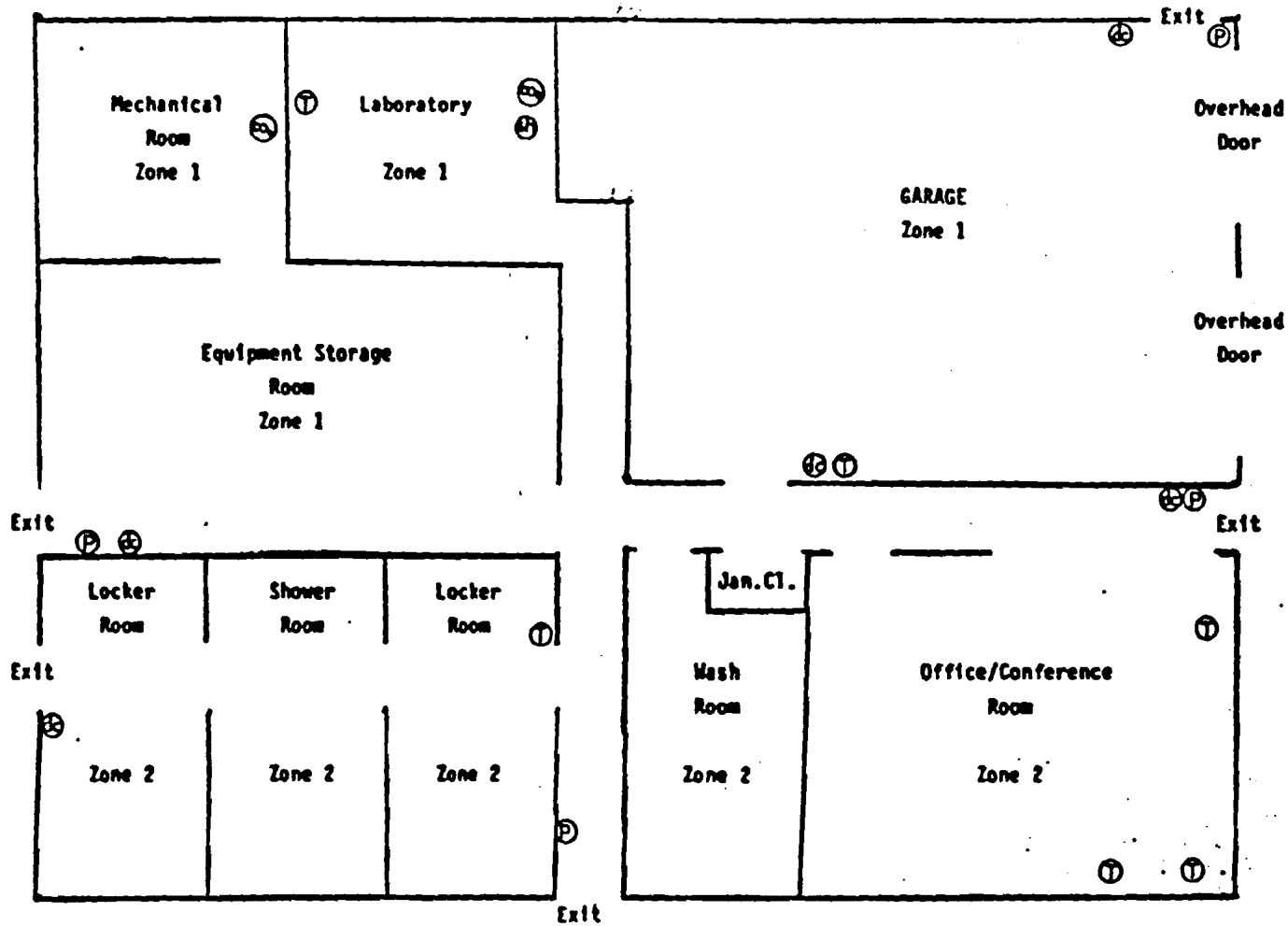
Administration Building (continued)

Combination Oxygen meter and Explosivemeter (1)	Laboratory	Measures percent of oxygen in the atmosphere; measures percent of lower and upper explosive limit of atmosphere.
HNu Photoionizer (1)	Laboratory	Capable of characterizing the general concentration of organic vapors in air.
C) Decontamination and Drum Storage Building		
Fire extinguisher (5)	See Drawing: Emergency Equipment Locations	Dry chemical, 10 lb.
50 lb. bags of absorbent (20 minimum)	Equipment Storage Area	Absorbent material used to contain spills and increase solids content of sludges and slurries
Shower/eyewash stations	In Decontamination Area	Used to flush contaminants from body or eyes in the event of situation that is IDLH.



FLOOR PLAN/EMERGENCY EQUIPMENT/COMMUNICATION LOCATIONS

EMERGENCY EQUIPMENT/ COMMUNICATION LOCATIONS  
 ADMINISTRATION BUILDING FLOOR PLAN -

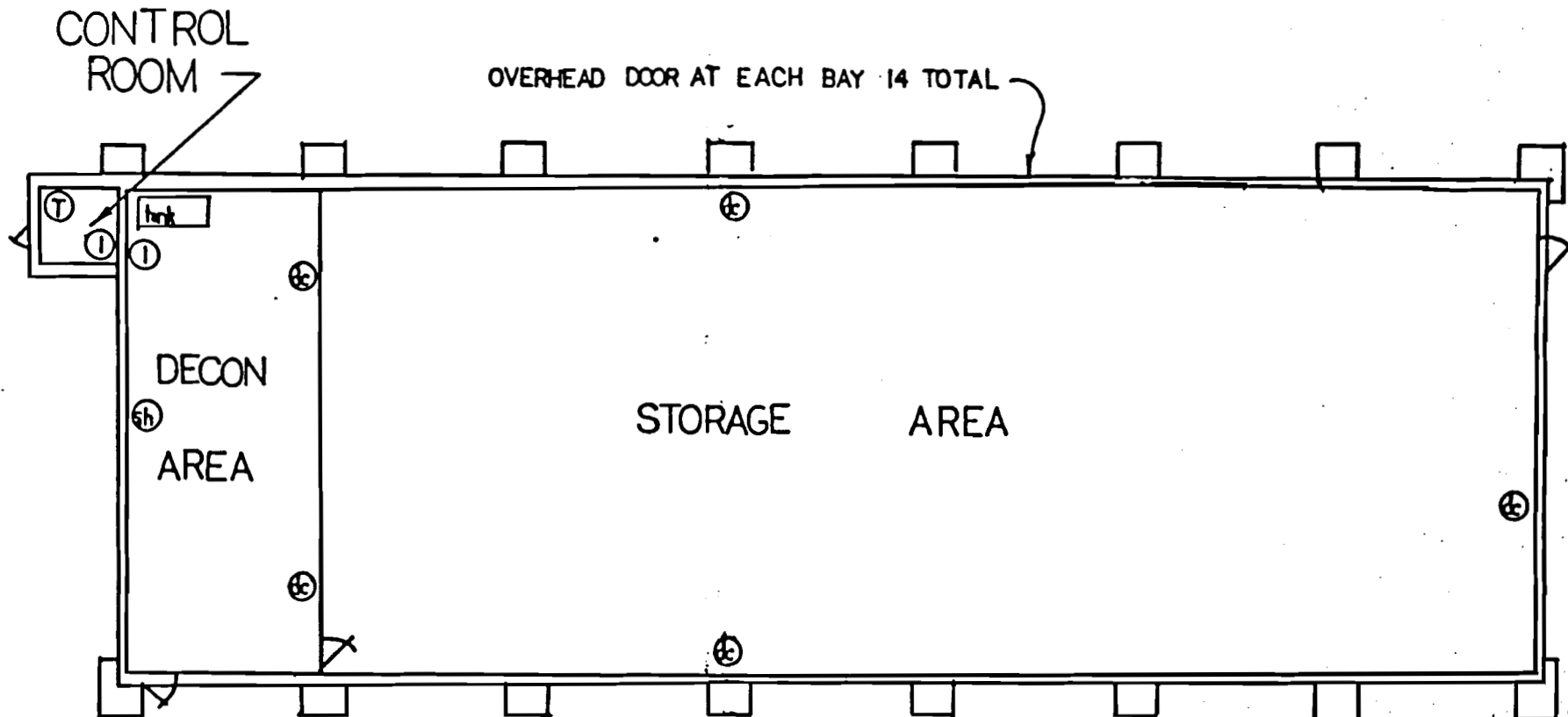


- Ⓟ PULL STATION FIRE ALARM
- Ⓣ TELEPHONE
- Ⓜ EWS EMERGENCY EYE WASH AND SHOWER
- Ⓢ CO<sub>2</sub> CARBON DIOXIDE FIRE EXTINGUISHER
- Ⓢ DC DRY CHEMICAL FIRE EXTINGUISHER





# EMERGENCY EQUIPMENT/COMMUNICATION LOCATIONS



TANK IS 275 GAL DIESEL OIL

- ① INTERCOM
- Ⓣ TELEPHONE
- ⊕ EMERGENCY EYE WASH AND SHOWER
- ⊕ DRY CHEMICAL FIRE EXTINGUISHER



BUILDING PLAN

DECONTAMINATION/DRUM STORAGE FACILITY

## EVACUATION PLAN

### A. EVACUATION OF TREATMENT FAC. ADMINISTRATION BLDG., DECON/DRUM BLDG.

#### 1. Responsibility.

The emergency coordinator will be responsible for the evacuation of all personnel from the building(s). The emergency coordinator will conduct the evacuation or appoint an individual to conduct the evacuation.

#### 2. Signal

The signal to evacuate the buildings will be the directive given by the emergency coordinator or his designee to evacuate. Either the telephone intercom or face to face communication will be used.

#### 3. Procedure

- a. Shut down all on-going operations
- b. Exit the nearest accessible exit. See Evacuation Routes.
- c. Assemble at meeting area

#### 4. Meeting Area

All persons evacuated will initially meet in 97th Street in front of the building. The emergency coordinator or his designee will count heads and verify that everyone has been evacuated.

The secondary meeting area will be at the main gate to the Love Canal Site - 97th Street at Read Avenue.

### B. FIELD OPERATIONS - DEPARTMENT LEAD

#### 1. Responsibility

The emergency coordinator will be responsible for signal to evacuate and designating the meeting area. The project leader will be responsible for procedure.

#### 2. Signal

The emergency coordinator or his designee will signal the project leader by radio or air horn communication. Three long (3-5 sec.) blasts of the air horn will signal an emergency situation with possible evacuation. The emergency coordinator will tell the project leader the meeting area.

#### 3. Procedure

- a. Shut down all ongoing operations.
- b. Pack-up or secure equipment so that it will not be windblown or weathered
- c. Decontaminate of person if necessary
- d. Evacuate to meeting area

## EVACUATION PLAN

## EVACUATION PLAN (CONTINUED)

### 4. Meeting Areas

The project leader will oversee that all in-the-field personnel meet first in front of the: 1) Treatment Facility; If conditions prohibit meeting in this area, the next meeting areas will be, in priority; 2) 97th Street at Read Avenue; 3) The gate at Frontier Avenue and 95th Street.

### 5. Evacuate site to Public Information Office

## C. FIELD OPERATIONS - CONTRACTOR OPERATIONS

### 1. Responsibility

The emergency coordinator will be responsible for signal to evacuate and designating the meeting area. The State Project Engineer will be responsible for overseeing the evacuation procedure.

### 2. Signal

The emergency coordinator or his designee will signal the Project Engineer by radio or air horn communication. Three long (3-5 sec.) blasts of the air horn will signal an emergency situation with possible evacuation. The emergency coordinator will tell the Project Engineer the meeting area.

### 3. Procedure

The evacuation procedure will be in accordance with the evacuation plan in the Contractor's approved Health and Safety Plan. In the absence of a Contractor Health and Safety Plan, the procedure will be:

- a. Shut down all ongoing operations
- b. Pack-up or secure equipment so that it will not be windblown or weathered
- c. Decontaminate of person if necessary
- d. Evacuate through nearest available exit to field trailer  
If there is no field trailer, assemble at 97th Street and Colvin Blvd.

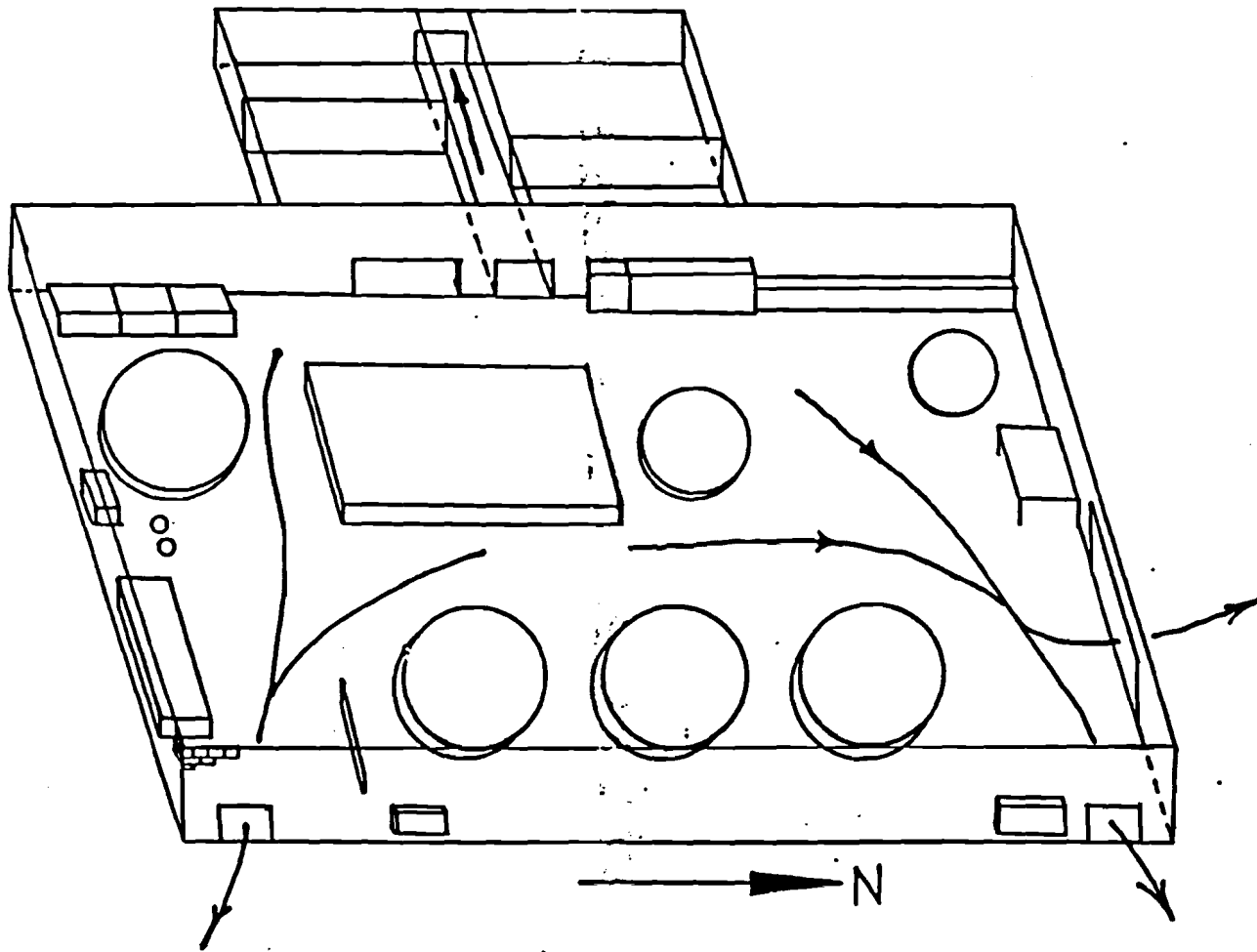
## E. RESIDENTIAL AREAS

Any hazardous material release or threat of release which will extend beyond the secure Love Canal Site will require notification of the Niagara Falls police Department - Dial 911.

It will be the responsibility of the emergency coordinator to be sure the appropriate authorities are notified.

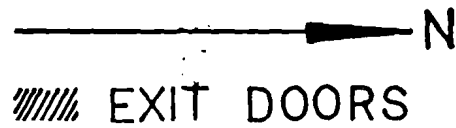
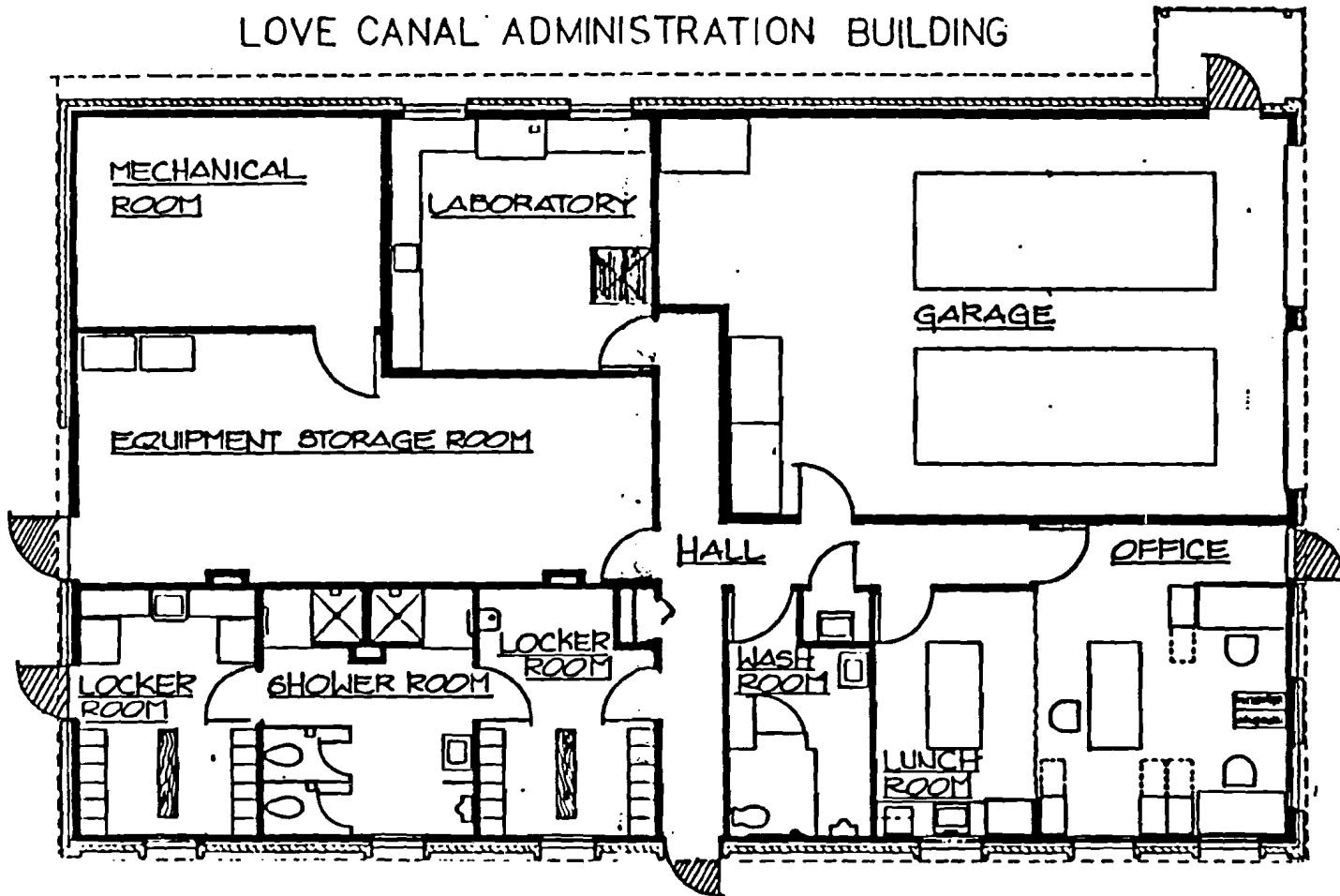
# EVACUATION ROUTES

## LOVE CANAL LEACHATE TREATMENT FACILITY

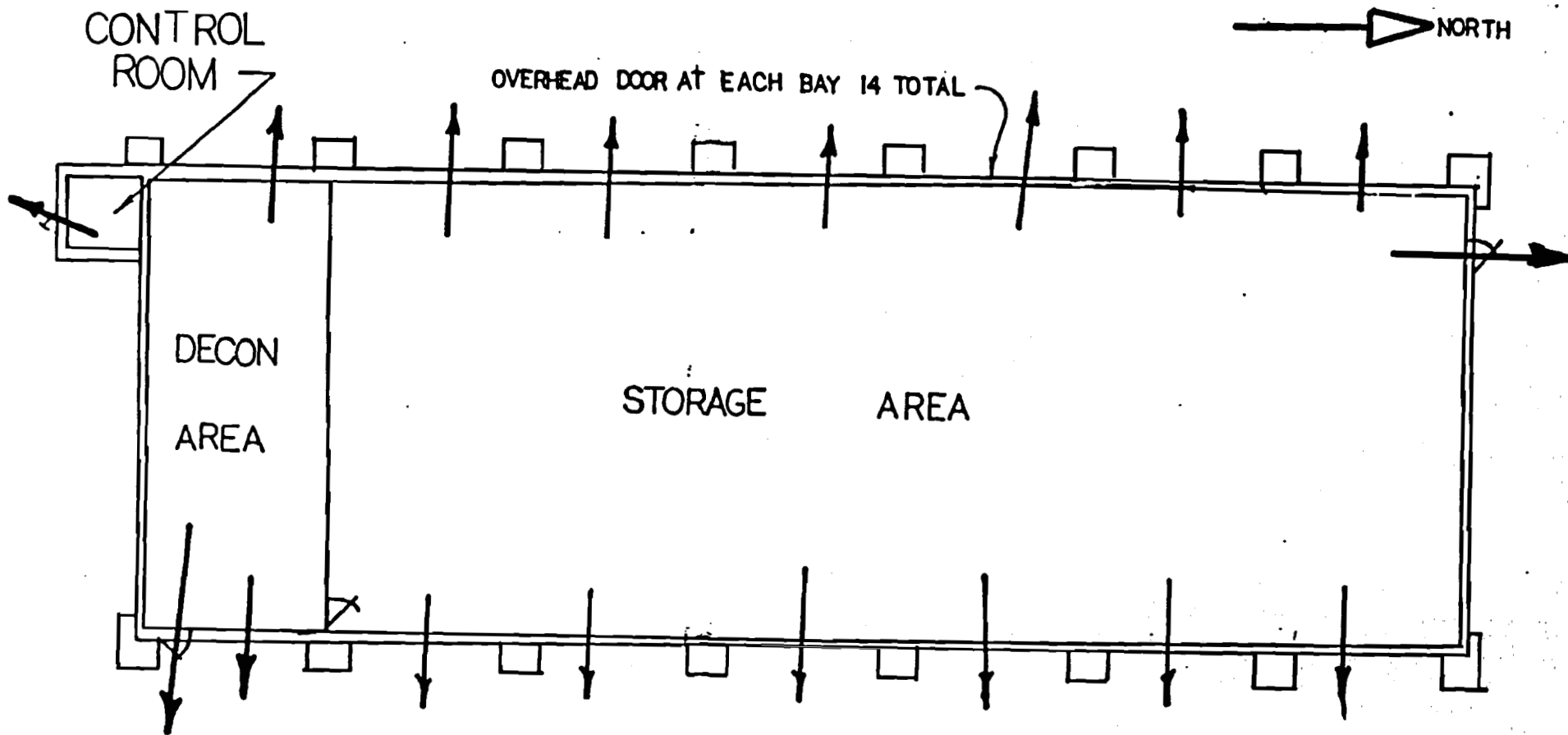


# EVACUATION ROUTES

## LOVE CANAL ADMINISTRATION BUILDING



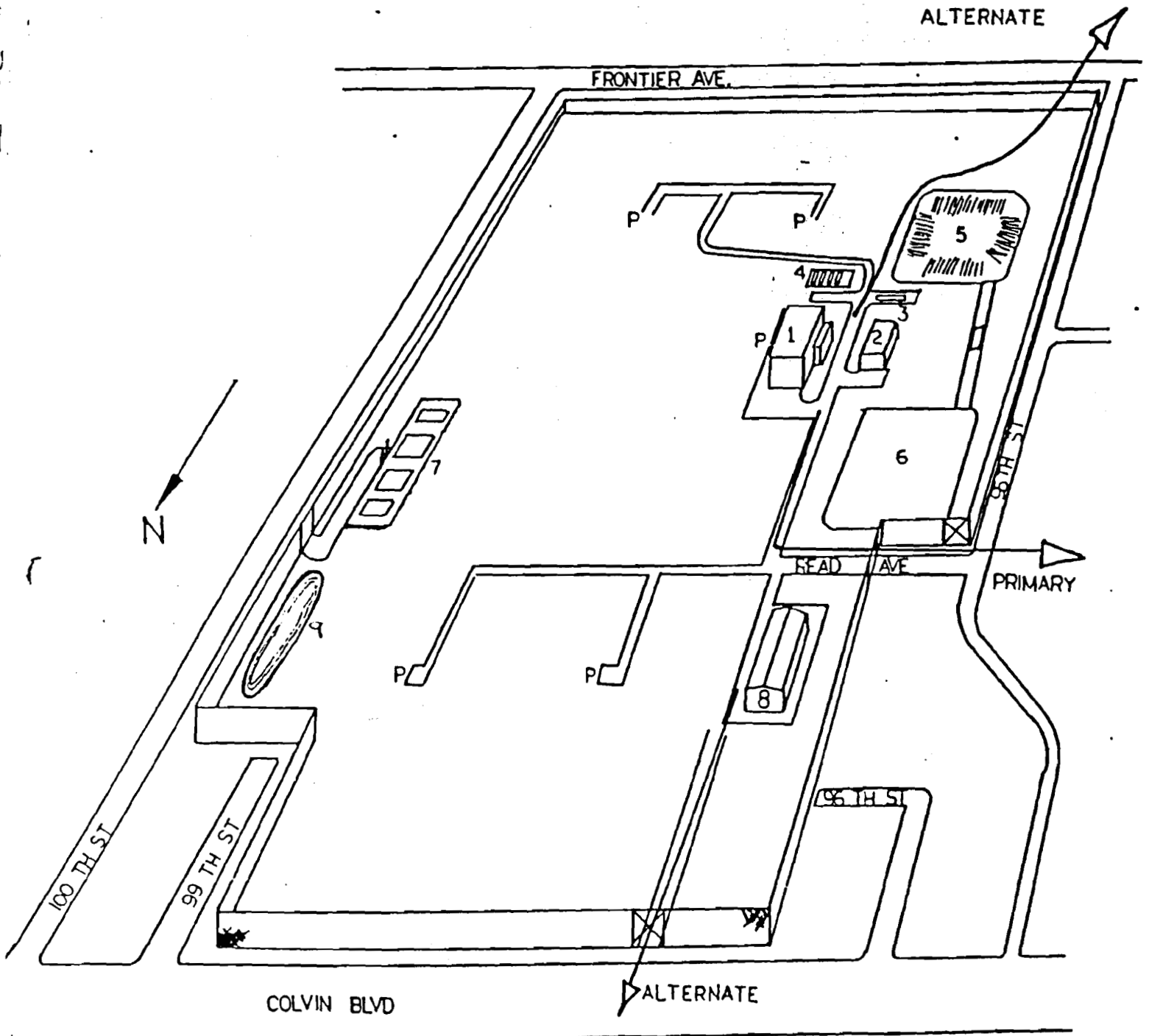
# EVACUATION ROUTES



BUILDING PLAN

DECONTAMINATION/DRUM STORAGE FACILITY

# SITE EVACUATION ROUTES



## LOVE CANAL SITE

JANUARY 1992  
APRIL 1993

- 1 LEACHATE TREATMENT FACILITY
- 2 ADMINISTRATION BUILDING
- 3 PLASMA ARC UNIT TRAILER
- 4 SLUDGE STORAGE TANKS
- 5 DEWATERING CONTAINMENT FACIL.

- 6 STAGING AREA
- 7 SEWER SEDIMENT FACILITY
- 8 DECONTAMINATION/DRUM FACILITY
- 9 EARTHEN BERM
- P PUMP STATION

BOMB THREATS, SEVERE WEATHER AND ACTS OF VANDALISM

A. BOMB THREATS

1. Get as much information from the caller as you can (where, time of detonation, type of bomb, who is calling, etc.)
2. Notify emergency coordinator
3. Phone emergency number, 911, or call the Niagara Falls Police Department
4. Evacuate area

B. SEVERE WEATHER OR ACTS OF VANDALISM

1. Determine extent of damage: identify what equipment items need repair/replacement, any hazardous material releases-material and quantity
2. Contain and stop any continuing releases
3. Report to the Niagara Falls Police Department and NYSDEC Operation & Maintenance Section Supervisor

BOMB THREATS, SEVERE WEATHER AND ACTS OF VANDALISM



## SUMMARY OF AGREEMENTS WITH EMERGENCY RESPONSE OFFICIALS

The following arrangements have been made through meetings, phone calls and correspondence with the Niagara Falls Police and Fire Departments and the Niagara Falls Memorial Hospital.

1. The Niagara Falls Police Department has agreed to the following:
  - To provide frequent patrols of the Love Canal Area.
  - To secure the area and restrict unauthorized entry during any emergency at the facility.
  - In case of forced entry at the facility, officers will not enter the building until a NYSDEC employee arrives. In addition, a security system will be centrally monitored by Security Today, Inc.
2. Officials from the Niagara Falls Fire Department were given a tour of the facility. The following agreements were made:
  - In case of fire, forced entry should be made into the site and any of the buildings rather than wait for a DEC employee.
  - If entry is made into the treatment plant during a fire, full protective clothing must be worn including a full face mask with SCBA. This also holds true for entry into pump chambers.
  - The sludge holding tank was identified as being a possible source of toxic fumes if ignited. Areas where flammable solvents are likely to be found were also pointed out. These areas are marked on the floor plan, located in the Equipment List.
3. Representatives of the Niagara Falls Memorial Medical Center were also given a tour of the facility. The following arrangements were made:
  - In case of medical emergency, the hospital will be contacted at 278-4000.
  - Hospital emergency room personnel will be equipped with isolation suits if needed. Emergency room procedures will be the same as those for the hospital's disaster preparedness program.
  - Arrangements for the use of an isolation room at the hospital have been made.
  - Any protective clothing contaminated during the medical operations will be placed in a drum and returned to the Love Canal.
4. In the event of a need for a cleanup contractor, either the New York State Spill Response Number (Buffalo: 851-7220, 7:30 a.m. - 4:30 p.m.; or (800) 452-7362 anytime) will be called or the Site's carbon removal contractor will be called.

## ARRANGEMENTS WITH AUTHORITIES

The Region 9 NYSDEC has contracts with two cleanup contractors which are obligated to respond to a spill within 2 hours.

#### ARRANGEMENTS WITH AUTHORITIES

## AMENDMENT OF CONTINGENCY PLAN

This contingency plan will be immediately amended whenever:

- 1) The plan fails in an emergency
- 2) The site changes in its design, construction, operation, maintenance, or other circumstances - in a way that materially increased the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency.
- 3) The list of emergency coordinators changes
- 4) The list of emergency equipment changes

AMENDMENT OF CONTINGENCY PLAN

# APPENDIX

## SITE DESCRIPTION AND OPERATION

The Love Canal leachate collection and treatment system was constructed to prevent the outward migration of chemical contamination from the abandoned hazardous waste landfill. The leachate collection system consists of approximately 7000 linear feet of perforated drain pipe with sand backfill. The depth of the pipe ranges from 15 to 18 feet and surrounds the sixteen acre landfill. Included in the system are four wet wells and two underground holding tanks of 25,000 and 30,000 gallon capacity.

The treatment plant system consists of mechanical clarification, filtration and carbon adsorption. There are also four 10,000 gallon holding tanks on site for sludge storage. Inside the treatment plant, there are two fiberglass leachate holding tanks of 5,940 and 2,910 gallon capacity. There is also a sludge holding tank with a capacity of 1,580 gallons.

The treatment plant has a floor trench designed to intercept any spills which may occur inside the treatment room. This trench drains to the 30,000 gallon holding tank for eventual treatment. Additionally, there is a concrete carbon loading pad in the back of the plant which can be used for equipment decontamination; this also drains to the 30,000 gallon leachate holding tank.

Ventilation in the plant area is provided by a Dravo-Hastings Blower, located on the roof, and two floor exhaust fans. Additionally six exhaust fans ventilate organic vapors from any de minimus losses in the process system and carbon vent sorbs.

Across the street from the treatment facility is the Administration Building. The Administration Building houses the office for the treatment plant operators, shower and locker facilities, a laboratory bench, and a garage area. On the eastern edge of the site, across the cap from the treatment plant, is the sewer dewatering facility consisting of settling tanks and a sand filter.

At 95th Street and Read Avenue is the Decontamination/Drum Storage Building. This building has a capacity for 2000 drums and facilities for decontaminating equipment. It has its own washwater collection system that can be pumped to the site's collection system. The building is constructed to NYSDEC's permit requirements for a hazardous waste facility.

The purpose of this plan is to establish procedures which must be followed in order to minimize hazards to human health and the environment. These hazards could occur as a result of unplanned release of hazardous waste into the environment during operation and maintenance of the Love Canal Treatment Facility. The provisions of this plan must be carried out whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents.

LOVE CANAL TREATMENT FACILITY  
95TH ST. + READ AVE.  
283-0111

THE LOVE CANAL TREATMENT FACILITY CONSISTS OF TWO BUILDINGS IN A FENCE ENCLOSED AREA. ONE BUILDING IS THE ADMINISTRATION BUILDING AND THE OTHER IS THE TREATMENT PLANT. THIS FACILITY IS MANNED BY TWO OPERATORS AND ONE MAINTENANCE ASSISTANT FROM 7:30 AM - 4:00 PM MONDAY-FRIDAY ONLY.

KEYS - ENGINES 7, 9, T2 and CAR 80 HAVE <sup>KEYS</sup> WHICH OPEN BOTH BLDGS.

EMERGENCY PHONE NO. - IN THE EVENT OF AN EMERGENCY AT THIS SITE ONE OF THE PLANT PERSONNEL LISTED BELOW SHOULD BE NOTIFIED AS SOON AS POSSIBLE.

BRIAN SADOWSKI  
731-5654  
MAURICE MOORE  
283-5230  
LOREN GREFNE  
283-2335

ENTRY GATE - THERE IS ONLY ONE VEHICLE ENTRY GATE TO THIS FACILITY. IT IS LOCATED ON 95TH ST. APPROX. 1,000 FEET NORTH OF READ AVE. THIS GATE IS MADE UP OF TWO SECTIONS. ONE SECTION IS REMOTELY CONTROLLED FROM THE ADMINISTRATION BLDG AND TREATMENT FACILITY AND THE OTHER WHICH IS PADLOCKED MAY BE OPENED MANUALLY BY CUTTING THE PADLOCK.

HYDRANTS - THERE IS ONLY ONE HYDRANT WITHIN THE FENCED AREA. IT IS LOCATED '150 NORTH OF THE TREATMENT PLANT ON THE ENTRANCE ROAD.

THE ADMINISTRATION BUILDING

THE ADMINISTRATION BUILDING IS A ONE STORY BRICK BUILDING CONTAINING OFFICES, STORAGE AND LOCKER ROOMS. THE ONLY AREA IN THIS BUILDING WHICH MAY CAUSE A PROBLEM IS THE GARAGE AREA WHICH IS LOCATED IN THE N/W CORNER OF THE BUILDING. THERE CAN BE UP TO TWO VEHICLES PARKED IN THIS AREA.

MAIN ELECTRIC: LOCATED IN THE S/W CORNER OF THE BUILDING  
(SEE DRAWING)

MAIN WATER SHUTOFF: LOCATED IN THE S/E CORNER OF THE BUILDING  
(SEE DRAWING)

ALARM PANEL IS LOCATED INSIDE THE MAIN DOOR ON THE NORTH END OF THE BUILDING. THERE ARE TWO ZONES. ZONE #1 IS THE EAST HALF OF THE BUILDING AND ZONE #2 IS THE WEST HALF OF THE BUILDING.

DETECTORS - THERE ARE SMOKE AND HEAT DETECTORS IN THIS BUILDING.

MAIN GAS SHUTOFF. THE MAIN GAS SHUTOFF IS LOCATED '50 S/W OF THE BUILDING (SEE DRAWING)

## THE TREATMENT PLANT

THE TREATMENT PLANT IS A ONE STORY BRICK BUILDING WHICH HOUSES THE LEACHATE TREATMENT EQUIPMENT.; THE TREATMENT AREA HAS A FLOOR TRENCH WHICH IS DESIGNED TO INTERCEPT ANY SPILLS WHICH MAY OCCUR. THIS TRENCH DRAINS INTO A 30,000 GAL. HOLDING TANK FOR EVENTUAL TREATMENT IN THE SYSTEM. IN THE EVENT OF A FIRE INVOLVING HAZARDOUS MATERIALS ANY FIREFIGHTING WATER RUNOFF SHOULD BE FLUSHED INTO THIS TRENCH IF POSSIBLE.

IT IS THE OPINION OF THE SENIOR TREATMENT PLANT OPERATOR THAT THE POSSIBILITY OF A FIRE IN OR OUTSIDE THE TREATMENT PLANT IS REMOTE, BUT IF THERE WERE A FIRE THE MOST LIKELY PLACE WOULD BE THE SLUDGE STORAGE TANKS. THERE IS A 1,500 GAL. SLUDGE STORAGE TANK LOCATED IN THE N/W CORNER OF THE BUILDING. THERE ARE FOUR 10,000 GAL. SLUDGE STORAGE TANKS LOCATED APPROX. '30 SOUTH OF THE TREATMENT PLANT. THESE TANKS ARE SURROUNDED BY A CONCRETE CONTAINMENT PAD AND WALLS WHICH ARE CAPABLE OF HOLDING 45,000 GAL. OF MATERIAL IN THE EVENT OF A SPILL OR LEAK.

MAIN ELECTRIC: LOCATED IN A SMALL ROOM ON THE RIGHT INSIDE THE MAIN DOOR ON THE CENTER OF THE WEST WALL (SEE DRAWING)

MAIN WATER SHUTOFF: LOCATED IN THE COMPRESSOR ROOM (SEE DRAWING)

MAIN GAS SHUTOFF LOCATED APPROX. '50 S/W OF THE ADMINISTRATION BLDG. (SEE DRAWING)

VENTILATION: THE TREATMENT AREA MAY BE VENTILATED BY USING TWO EXHAUST FANS WHICH ARE MOUNTED ON THE ROOF OR TWO EXHAUST FANS LOCATED AT THE FLOOR. THE CONTROLS FOR THESE FANS ARE LOCATED IN THE COMPRESSOR ROOM ON THE WEST WALL. (SEE DRAWING)

ALARM SYSTEM: THE TREATMENT AREA CONTAINS TWO SMOKE AND HEAT DETECTORS. THEY ARE CENTRALLY MONITORED BY SECURITY TODAY, INC.

BECAUSE OF THE HAZARDOUS NATURE OF THE MATERIALS IN THE TREATMENT PLANT, OFFICERS WILL INSURE THAT ALL PERSONNEL ARE PROPERLY EQUIPPED WITH FULL PROTECTIVE CLOTHING AND BREATHING APPARATUS BEFORE ENTERING THE GATE.

SOP

- FIRST ENGINE:** MASK UP AT THE GATE.  
HIT HYDRANT ON THE WAY IN OR CALL FOR THE  
SECOND DUE ENGINE TO LAY A SUPPLY LINE.  
PARK UPWIND AND ATTACK THE FIRE.
- SECOND ENGINE:** MASK UP AT THE GATE.  
LAY SUPPLY LINE TO THE FIRST ENGINE IF NECESSARY.  
PARK UPWIND AND ASSIST THE FIRST ENGINE IN  
FIGHTING THE FIRE.
- FIRST TRUCK:** MASK UP AT THE GATE.  
PROCEED TO THE FIRE AND PARK UPWIND.  
VENTILATE.

EVERY EFFORT SHOULD BE MADE BY ALL PERSONNEL TO AVOID CONTACT WITH SMOKE OR MATERIALS IF POSSIBLE WHEN FIGHTING A FIRE IN THE TREATMENT AREA. IN THE EVENT OF CONTAMINATION OF PERSONNEL OR EQUIPMENT THERE IS A CONCRETE PAD ON THE EAST SIDE OF THE TREATMENT PLANT KNOWN AS THE CARBON LOADING PAD WHICH MAY BE USED AS A DECONTAMINATION AREA. THIS PAD ALSO DRAINS INTO THE 30,000 GAL. HOLDING TANK FOR EVENTUAL TREATMENT IN THE SYSTEM.

B/C DENNIS D. LONG



95<sup>TH</sup> ST.

ROAD AVE

MANUAL GATE



HYDRANT

VENT. FAN SWITCHES

SLUDGE HOLDING TANK

GARAGE AREA

ADMINISTRATIVE BLDG.

TREATMENT PLANT

CARBON LOADING PAD

MAIN ELECTRIC

MAIN WATER SHUTOFF

MAIN WATER SHUTOFF

GAS SHUTOFF BOTH BLDGS.

SLUDGE STG. TANKS

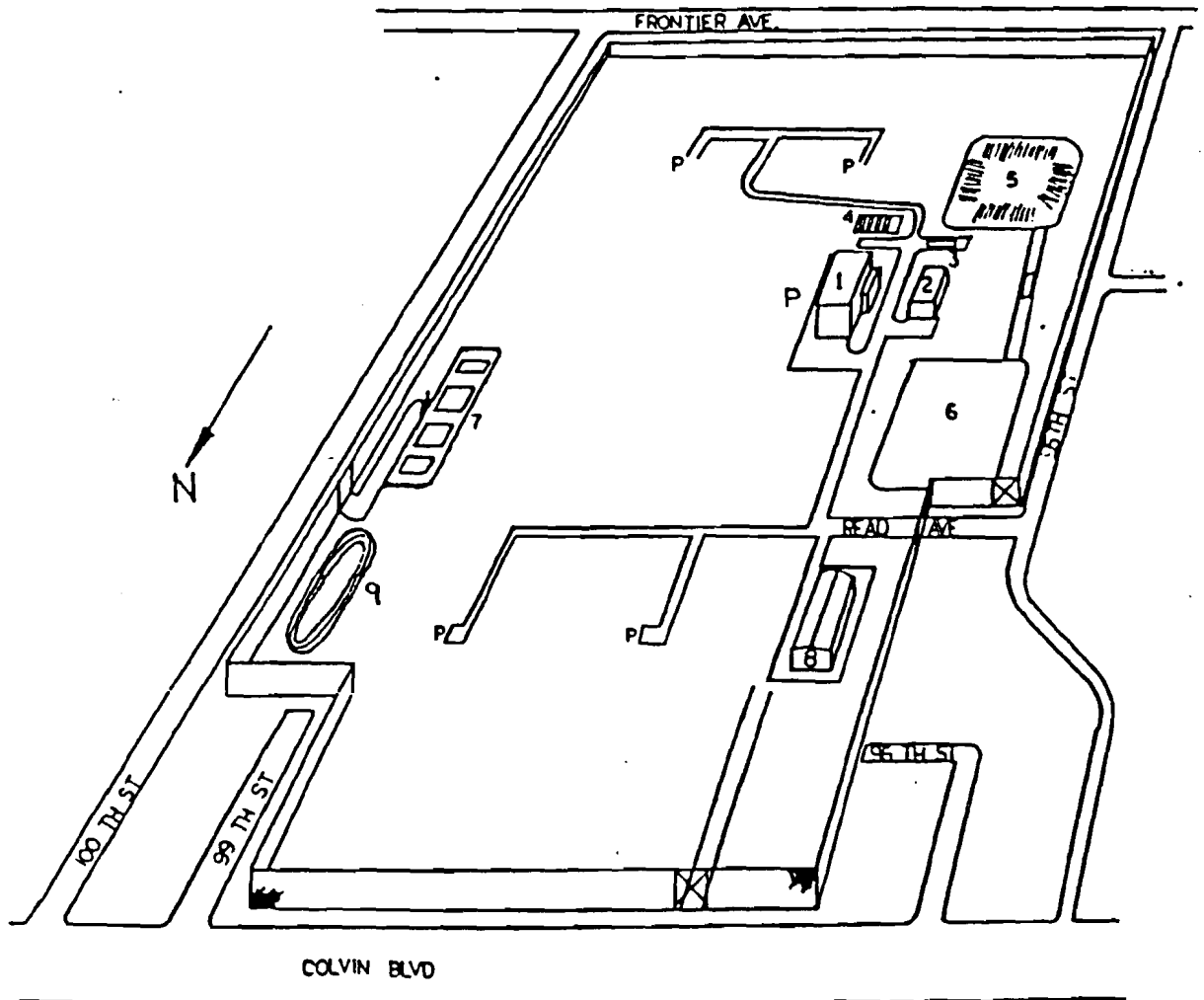
MAIN ELECTRIC



**KEY TO HAZARDOUS MATERIAL STORAGE**

**LOCATION**

- 1 See Treatment Facility Key
- 2 Maximum 10 gallons of flammable liquids in laboratory and garage
- 3 No hazardous materials present
- 4 22,356 gallons (approx.) of highly toxic sludge and incinerable organics at this location and outside number eight (8) in three mobile tank trailers. This liquid is considered flammable because of the presence of 2%-5% toluene.
- 5 Contains construction and demolition debris buried under approx. 3 feet of clay and soil
- 6 No hazardous materials stored
- 7 Currently empty. For wastewater storage only. Hypalon® lining.
- 8 Drums contain non-flammable solids only. 275 gallon diesel oil tank in southwest corner.



**LOVE CANAL SITE**

FEBRUARY 1990 APRIL 1993

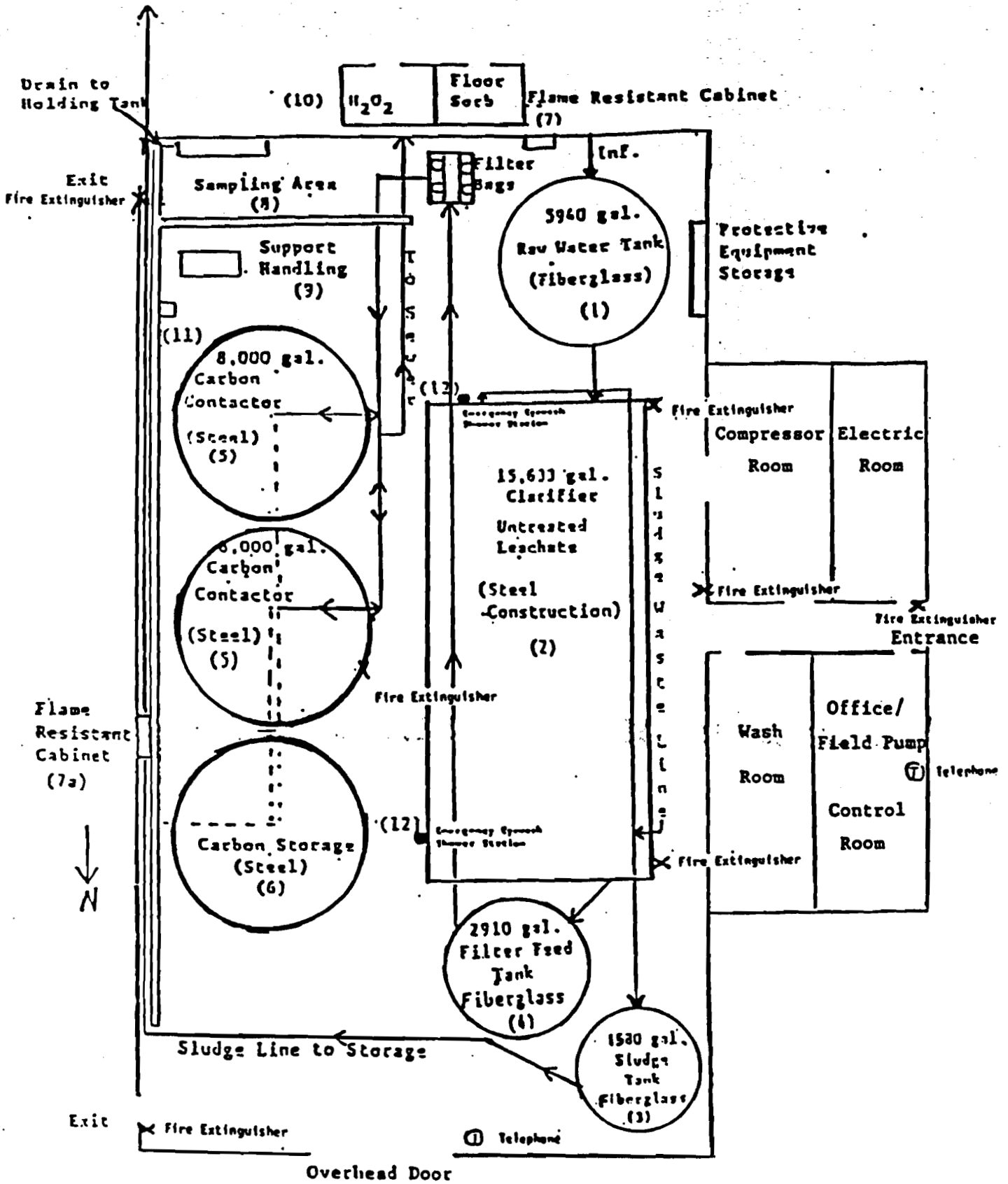
JANUARY 1992

- |                                 |                                 |
|---------------------------------|---------------------------------|
| 1 LEACHATE TREATMENT FACILITY   | 6 STAGING AREA                  |
| 2 ADMINISTRATION BUILDING       | 7 SEWER SEDIMENT FACILITY       |
| 3 PLASMA ARC UNIT TRAILER       | 8 DECONTAMINATION/DRUM FACILITY |
| 4 SLUDGE STORAGE TANKS          |                                 |
| 5 DEWATERING CONTAINMENT FACIL. | 9 Earthen Berm.                 |
|                                 | P - PUMP STATION                |

## HAZARDOUS MATERIAL STORAGE AREAS AND QUANTITY

### KEY - LEACHATE TREATMENT FACILITY

1. Contaminated water with 1% - 5% organic phase. During processing, this tank would contain between 1,000 and 4,000 gallons. -At all other times, it contains approximately 200 to 300 gallons. This material would most probably extinguish flames on contact.
2. Contains approximately 15,000 gallons of contaminated water at all times. Would most probably extinguish flames on contact.
3. Contains from 0 to 1500 gallons of highly toxic sludge. This material may burn if in contact with an ignition source, and would probably give off toxic fumes while burning.
4. Contains contaminated water which would most probably extinguish flames on contact. During processing this tank contains 700 to 2,500 gallons. At all other times contains 200 to 300 gallons.
5. Steel pressure vessels containing activated carbon saturated with leachate. May give off toxic flammable gases if heated. Protected from rupture by a pressure release system.
6. Steel storage vessel. Normally empty, but may contain same materials as in (5) above. When not empty, the date board on the tank will indicate a date.
7. Fire resistant cabinet contains highly flammable solvents - acetone, hexane, methylene chloride.
- 7a. Fire resistant cabinet contains flammable and combustible motor fuels.
8. Sampling area that includes sample ports under a fume hood with adjacent work space.
9. Support handling area with variable air and clean water pressures.
10. Hydrogen peroxide stored in this blockhouse is fed into the plant through a small plastic tube. This area contains up to 150 gallons of 50% hydrogen peroxide in drums. Peroxide is a strong oxidizer and can aid in combustion.
11. Small quantities of nitric acid in a cabinet designed specifically for acids.
12. Emergency Eyewash and Shower Stations
- X Fire Extinguishers



TREATMENT FACILITY

FLOOR PLAN/EMERGENCY EQUIPMENT/COMMUNICATION LOCATIONS

1/30, REVISION 1/12

Key on Following Page  
Drawing Not To Scale

## VENTILATION AND AIR MONITORING

During all cleanup operations inside the treatment plant all doors to the outside should be opened to assist in ventilation. During cleanup activity, both indoors and outdoors, the atmosphere will be monitored using an HNu Model PL101 or equivalent. When the reading on the HNu is between 0 and 5 ppm, respiratory protection must be a full face cartridge type respirator. If the reading exceeds 5 ppm, cleanup personnel must either leave the immediate area and wait for fumes to dissipate or resume operations using a self contained breathing apparatus (SCBA) or a positive pressure supplied air using either breathing air cylinders or a portable air compressor. The air compressor must be located in a clean atmosphere. Supplied air must be used in conjunction with a 5 minute escape bottle. If the HNu reading exceeds 300 ppm, cleanup activities must be abandoned until fumes are allowed to dissipate.

The emergency coordinator and cleanup personnel are to be thoroughly trained in the use of safety and monitoring equipment. The emergency coordinator and cleanup personnel are to be familiar with the USEPA's publication Standard Operating Safety Guides and USEPA's Field Standard Operating Procedures Numbers 4, 6, 7, 8. (Site Entry, Work Zone, Decontamination of Response Personnel, Air Surveillance).

## DECONTAMINATION OF EQUIPMENT AND TOOLS

All equipment and tools used during cleanup operations must be thoroughly decontaminated or stored as a hazardous waste with the intention of future disposal. All washwater used during decontamination must be returned to the leachate collection system for treatment. The liquids can be returned to the leachate collection system by disposing down the drain at the decontamination pad or through the sink located in the treatment room.

Small hand tools may be decontaminated by wiping clean with rags soaked in a solvent (i.e. methylene chloride, acetone) or in an industrial strength detergent (i.e. penetone). If this is not sufficient the tools may be cleaned with high pressure steam or water.

Larger tools and vehicles such as trucks and backhoes may be cleaned using high pressure water and steam upon the discretion of the emergency coordinator.

Additional decontamination procedures are described on the following pages.

**INCIDENT REPORT FORM**

**TO: Section Chief, Operations and Maintenance Section  
Bureau of Construction Services  
Division of Hazardous Waste Remediation**

1. Time incident discovered \_\_\_\_\_ Date \_\_\_\_\_
2. Time incident contained \_\_\_\_\_ Date \_\_\_\_\_
3. Approximate location and type of accident (e.g., fire, explosion, release) \_\_\_\_\_  
\_\_\_\_\_
4. Material released \_\_\_\_\_  
Approximate quantity \_\_\_\_\_
5. Extent of injuries (if any) \_\_\_\_\_  
\_\_\_\_\_
6. Assessment of actual or potential hazards to human health or the environment (if applicable) \_\_\_\_\_  
\_\_\_\_\_
7. Estimated quantity and disposition of material recovered from the incident \_\_\_\_\_  
\_\_\_\_\_
8. Corrective action to control the incident and prevent further incidents \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
9. Property and equipment damaged \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
10. Name of Emergency Coordinator \_\_\_\_\_  
Signature of Reporter \_\_\_\_\_  
Date \_\_\_\_\_

CONTINGENCY PLAN REVISION LOG

DATE	AREA REVISED	NEW ACTION
9/05/89	Evacuation Plan	Air horn (3 long blasts) added
9/05/89	Procedures for Explosion Written	
3/92	Emergency Coordinators	Revised List. New DEC Region 9 Office Added
3/92	General Response Overflow of Holding Tanks	Turn off field pumps at MDCP Panel or at pump chamber power panels
3/92	Equipment List	Equipment inventoried and list revised as necessary
3/92	Hazardous Material Storage	Quantities updated as needed
4/93	Hazardous Material Storage	Quantities and Locations
4/93	Emergency Coordinators	Revised Phone Number
4/93	Evacuation Plan	Removed A.5. Public Information Office
4/93	Site Diagrams	Added Earthen Berm and Removed Public Information Office