

EXHIBIT D-1

FDC SPCC Plan



The Commonwealth of Massachusetts

Executive Office of Health & Human Services

Department of Mental Retardation

Fernald Developmental Center

200 Trapelo Road

Waltham, MA 02452-6302

(781) 894-3600

Deval L. Patrick
Governor

Timothy P. Murray
Lieutenant Governor

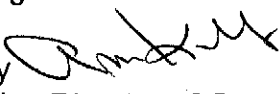
JudyAnn Bigby, M.D.
Secretary

Elin M. Howe
Commissioner

Diane Enochs
Assistant Commissioner
Facilities Management

Linda Montminy
Facility Director

To: ALL A.O.D.'s

FROM: Anne Kelley 
Administrative Director of Core Services

DATE: October 24, 2007

RE: Oil/Gasoline Spills

All oil or gasoline spills in excess of 10 gallons need to be reported immediately. Serious fines will be levied against the Fernald Center if all necessary parties are not contacted.

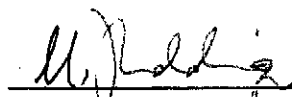
When, and if, the power plant, or Rich Granfield at the garage notifies the A.O.D. concerning an oil/gas spill, the A.O.C. should view the video (Spill Prevention/Containment and Counter Measure Plan) that is in the switchboard office, refer to the accompanying manual immediately and contact all parties.

cc: Linda Montminy
Ed Wong
Paul Bermingham
Rick Granfield
Susanne Kingston
John Hill

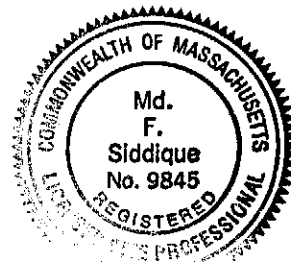
PLAN CERTIFICATION

I hereby certify that I have sufficient knowledge of the Facility and, being familiar with the provisions of 40 CFR Part 112 attest that this Spill Prevention Control and Countermeasures Plan (SPCC) has been prepared in accordance with good engineering practice and the requirements of 40 CFR 112. By means of this certification I attest the following:

- That I am familiar with the requirements of 40 CFR 112;
- That I or my agent has visited and examined the facility;
- That the Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with the requirements of this part;
- That procedures for required inspections and testing have been established; and
- That the Plan is adequate for the facility.


M. Farooq Siddique, PE, LSP

11/10/2004
Date



Stamp

State of Massachusetts Registration Number:

MANAGEMENT APPROVAL

In accordance with 40 CFR 112.7, this SPCC Plan has the full approval of the Department of Mental Retardation at a level of authority to fully implement the Plan as herein described.

Name:

Title:

Signature:

Date:

I certify that I have personally examined and understand the information presented in this document, and am knowledgeable of my obligations and responsibilities in the event of a release or spill of petroleum product at Fernald Developmental Center, located in Waltham, Massachusetts.


Signature

Joe Breen

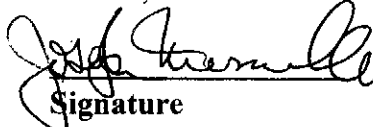
Name

Facility Director

Title

3-30-05

Date


Signature

Joseph Merrullo

Name

Chief Campus Police

Title

3/30/05

Date


Signature

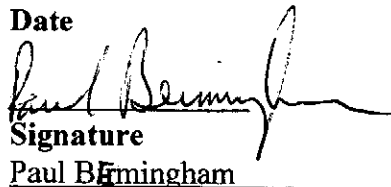
Jon Graves

Name

Director of Core Services

Title

Date


Signature

Paul Birmingham

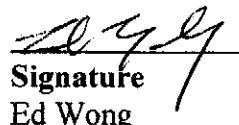
Name

Director of Campus Safety

Title

3/11/05

Date


Signature

Ed Wong

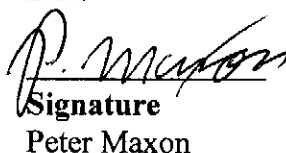
Name

Chief Power Plant Engineer

Title

3-11-05

Date


Signature

Peter Maxon

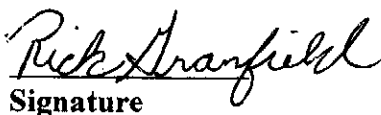
Name

Director of Farms and Grounds

Title

3/11/05

Date


Signature

Richard Grandfield

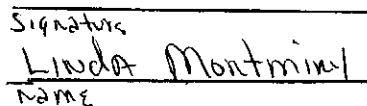
Name

Motor Equipment Mechanic

Title

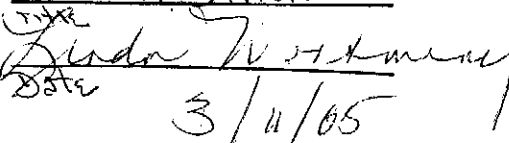
3-30-5

Date


Signature

Name

Facility Director


Signature

Date

3/11/05

SPCC PLAN REVIEW AND UPDATE

In accordance with 40 CFR 112.5, this SPCC Plan must be reviewed and evaluated at least every five years or whenever there is a change in Facility design, construction, operation, or maintenance that materially affects the Facility's potential for a discharge of oil into or upon the navigable waters of the United States or adjoining shorelines. In addition, whenever requested by the United States Environmental Protection Agency (USEPA) or by the Massachusetts Department of Environmental Protection (DEP). Such amendments shall be made within six months of the review/request and fully implemented as soon as possible, but not later than six months after such amendment is prepared. A Professional Engineer must certify any technical amendment to the SPCC Plan in accordance with 40 CFR 112.3 (d).

Review Dates:	Signature
1.	
2.	
3.	
4.	
5.	

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1.0 INTRODUCTION

FS Engineers, Inc., on behalf of the Department of Mental Retardation, has prepared the following Spill Prevention Control and Countermeasure Plan (Plan) for the Walter E. Fernald Developmental Center (Site) in Waltham, Massachusetts. This Plan has been prepared in accordance with sound engineering practices and the requirements of 40 CFR 112, "Oil Pollution Prevention," Section 112.7, "Guidelines for the Preparation and Implementation of Spill Prevention Control and Countermeasure Plan." The intent of this plan is to establish procedures, methods and equipment to prevent the discharge of petroleum products from the Site. Where the plan does not conform to 40 CFR 112, equivalent environmental protection has been provided in this Plan.

2.0 FACILITY DESCRIPTION

2.1 History

The Walter E. Fernald Developmental Center (FDC) located in Waltham, Massachusetts is the oldest publicly funded facility serving developmentally disabled individuals. The FDC is located on a tract of approximately 196 acres. Two hundred and twenty seven individuals presently reside at the facility. The FDC currently employs approximately 870 staff and is comprised of 81 buildings, 70 of which are currently occupied and serve in residential, program, administrative/office, support/service capacities. The ages of the buildings vary from the original dormitory occupied in 1890, to the most recent structure, the Food Service, constructed in 1993. Most buildings on the site are provided with high pressure steam for both hot water and heat supplied from a power plant. Water for consumptive use and fire protection is provided by MWRA, and sewer lines are connected to the City of Waltham system.

2.2 Type of Facility

FDC is a non-transportation-related on-shore facility engaged in storing, consumption, and distribution of gasoline, diesel, and fuel oil, for heat and emergency power generation and maintenance purposes. The facility is located on a 196-acre parcel and is comprised of 81 buildings for various uses including: residential buildings, a chapel, a therapeutic equipment center, maintenance garage, power plant, indoor/outdoor pool, administration building, etc.

2.3 Location of Facility

200 Trapelo Road
Waltham, Massachusetts 02154
617-894-3600

2.4 Owner or Operator

The Commonwealth of Massachusetts
Executive Office of Health and Human Services

Department of Mental Retardation
500 Harrison Avenue
Boston, Massachusetts 02118

Facility Emergency Coordinators and Emergency Contacts are presented below.

Contacts:

Gerald J. Morrissey, Commissioner	(617) 727-5608
Gail Gillespie, Regional Director	(781) 314-7501
George F. Atamian, P.E., Dir. of Engineering & Maintenance	(617) 624-7888

2.5 Facility Drainage

Stormwater discharge from roofs, parking lots and outdoor areas at the Site is generally directed to a series of catch basins which discharge to Clematis Brook and ultimately to Beaver Brook. Clematis Brook is located approximately 200 feet southwest of the Site at its closest point. According to FDC personnel, the discharge point of several catch basins observed during the Site inspection were either unknown or discharge directly to the subsurface soils.

2.6 Facility Oil Storage and Spill Prediction

The Site has twenty six "bulk" oil storage tanks (aboveground and underground) that are used to store various petroleum products. Non-bulk oil storage (oil filled electrical, operating, or manufacturing equipment) at the Site consists of eighty one transformers. Locations of oil containing structures are depicted on the Facility Site Plan in Appendix A. Tables 1 and 2 in Appendix B provides an inventory of the oil storage at the Site.

Oil and hazardous materials used for the boiler system and equipment maintenance are stored on the concrete floor of the Power Plant Building.

The table below contains possible spill scenarios which have the greatest potential for a significant release or spill of product. Possible spill scenarios include leaking ASTs or USTs and spillage during fuel delivery, loading or unloading. The potential for other incidents exists, however the existence and development of monitoring and containment procedures should provide the necessary fundamental procedures to address other incidents.

POTENTIAL SPILL SCENARIOS

Potential Spill Source	Type of Failure	Quantity (gal)	Direction of Flow	Secondary Containment
Power Plant USTs	Leak/Rupture	27,000	Southwest approx. 10' to Clematis Brook via groundwater	No
Fuel Delivery Tank	Tank overfill/rupture	Max. Delivery Truck Vol. = 8,000	Southwest approx. 10' to Clematis Brook via overland flow	No
Site 5/Site 7	Leak/rupture	10,000	West approx. 200' to unnamed stream via groundwater	No
Fuel Delivery Tank	Tank overfill/rupture	Max. Delivery Truck Vol. = 8,000	Potential discharge to Clematis Brook via storm drain system	No
Pearlman Building	Tank overfill/rupture	Max. Delivery Truck Vol. = 8,000	Potential discharge to Clematis Brook via storm drain system	No
Farm and Grounds and Daycare	Tank rupture	275	Potential Discharge to Clematis Brook via storm drain system	No
Volunteer Center	Tank rupture	550	Potential Discharge to Clematis Brook via storm drain system	No
Sequin/Wallace Generators	Tank rupture	100 each	Potential discharge to Clematis Brook after flowing over grass area	No
Cottage 17/Cottage 18	Tank rupture	100 each	Potential discharge to Clematis Brook via storm drain system	No

UST - Underground Storage Tank

AST - Aboveground Storage Tank

3.0 SPILL PREVENTION AND CONTROL

3.1 Spill Prevention

Operations at the Site are conducted in a manner that is preventative of potential oil discharges. Inspections and controls are implemented to ensure that spill prevention and control measures are working effectively at the Site.

3.1.1 Tank and Equipment Inspections

Routine inspections, equipment repairs and/or replacement, and spill events shall be recorded in a facility log book. Inspections should include verification of the following:

- Containers, piping, and appurtenances in good condition;
- Only containers compatible with the storage of oil are used;
- Visible discharges of oil from containers and associated piping and appurtenances are

- detected;
- Leaks are promptly dealt with and oil accumulated in containment is removed for proper disposal;
- Adequate supplies of spill response equipment are in stock.

Records shall be signed by the appropriate supervisor or the individual responsible for the facility SPCC procedures. Inspection records shall be maintained for a period of at least three years or until termination of operation, whichever comes first, and shall be kept on site. Aboveground storage tanks shall be tested for integrity on a regular schedule and when material repairs are done.

Daily Inspections

The volume of petroleum in most of the USTs (>1,000 gallons) is measured daily using a dipstick. The volumes of oil in the USTs at the Power Plant are measured twice each day. Pipe connections and valves should be visually checked by the engineer on a daily basis. Any leaking valves, fittings or pipes, surficial staining, oily sheens or other evidence of a release observed during daily operation of the facility shall be reported to the individual responsible for overseeing facility SPCC procedures.

Monthly Inspections

Routine monthly inspections shall consist of a visual inspection of all ASTs, aboveground piping, valves, fittings and pumps, excluding transformers. Any leaking valve, fitting or pipe should be repaired or replaced, as required. Any structurally unsound tank shall be replaced. Routine semi-annual inspections of transformers shall consist of a visual inspection of the tank. Any structurally unsound tank shall be replaced.

3.1.2 Underground Storage Tank Inspections

Due to the unknown age and conditions of the USTs, a tank tightness test should be periodically performed as required by 527 CMR 9.00, "Tanks and Containers." Tank and piping system tightness testing records shall be kept on record at the Site. A summary of the tightness testing requirements under 527 CMR 9.00 is as follows:

- New tanks shall be tested for tightness 12-24 months after installation.
- If the tank is not equipped with an acceptable form of leak detection, but does have a spill containment manhole, an overfill prevention device and cathodic protection, the tank shall be tested during the 5th, 10th and 15th year after installation at subsequent five year intervals.
- If the tank has a European style suction piping system (i.e., piping slopes back toward tank), which is not equipped with secondary containment and interstitial space monitors, the piping shall be tested during the 3rd, 6th and 9th years of operation and at subsequent 3 year intervals.

- If the tank is equipped with a pressurized piping system which is not monitored through the use of soil monitors, the piping shall be tested at the end of every calendar year.
- Pressurized piping systems equipped with secondary containment and interstitial space monitors are exempt from tightness testing.

3.1.3 Facility Transfer Operations, Pumping and In-Plant Processes

Buried Pipelines - Buried pipeline locations and materials can not be determined due to the ages of the tanks and/or the lack of available information. Fuel feed lines are buried and are exposed within the buildings' basements.

Pipeline Terminal Connections - Pipeline connections for USTs and ASTs are capped when not in use.

Pipe Supports - Aboveground vent and fill pipes appeared to be sufficiently supported.

Aboveground Pipeline Inspection - All exterior piping shall be inspected by facility personnel on a periodic basis at least monthly. Scheduled maintenance inspections shall be conducted in accordance with Section 3.1.1.

3.1.4 Oil Storage Deliveries

Department of Transportation Requirements - Delivery operations shall comply with applicable requirements of 527 CMR 8.00 and 527 CMR 9.04(G)(2) through (4) and 9.06(D). Tank filling shall not begin until the delivery truck operator has determined that the volume available in the tank is greater than the volume of product to be transferred.

Containment System - The unloading areas of the tanks are comprised of grass and/or gravel, bituminous asphalt or concrete. Drainage is by direct ground infiltration, overland sheet flow, or to the existing catch basin system. In most cases the storm water system discharges to Clematis Brook. The direction of drainage is inferred to be in the direction of downgradient topography. In general, topography on the Site slopes down in a southerly direction.

Premature Departure Prevention System - Tank truck unloading operations are continuously monitored by the driver and/or facility operator during fuel delivery. Drivers are required to notify personnel of their arrival and stay with their vehicles while unloading fuel to the USTs and ASTs.

Tank Truck Inspection - Tank truck valves, drains, and outlets are checked for leaks before unloading or departure by the vehicle operator. Leaks which occur as a result of tank truck hose disconnection are the responsibility of the vehicle operator and shall be cleaned up in an

appropriate manner. Hose connections and tank truck fittings are inspected with each delivery.

3.2 Spill Control

The following spill control measures are currently in place at the Site.

3.2.1 Bulk Storage Containment

Pearlman Building - The Pearlman building contains a 5,000-gallon diesel AST. Secondary containment for the AST consists of a concrete block structure surrounding the AST. The floor of the containment area is concrete. The containment capacity is approximately 100 percent.

Garage - Two 275-gallon waste oil ASTs and one 55-gallon drum containing waste oil are situated on a concrete pad within a concrete block secondary containment structure. The secondary containment appears capable of retaining greater than 100 percent of the volume of each AST and drum.

Volunteer Center and Day Care - 275-gallon fuel oil ASTs are located within the concrete basements of the Volunteer Center and Day Care Center. In the event of a rupture, petroleum product would appear to be contained within the buildings' respective basements.

Thom, Greene Unit - A 275-gallon double walled diesel AST is located outside each of these buildings.

ICF - Each of the four ICF buildings have a 330-gallon fuel oil AST which is located within a plastic secondary containment structure which appears capable of retaining greater than 100 percent of the volume of each tank. The containment structures are also located on top of a concrete slab.

Farrell - The Farrell building contains a 1000-gallon diesel AST, which is located within a secondary containment unit. The containment unit appears capable of containing 100 percent of the volume of the tank.

Howe Building - There is a 275-gallon diesel AST which is located within a plastic secondary containment structure which appears capable of retaining greater than 100 percent of the volume of the tank.

Cottage 11 - There is an 85-gallon diesel AST located within a concrete secondary containment structure.

The remaining USTs and ASTs are not provided with secondary containment or diversionary structures. In the event of a spill, the Oil Contingency Plan will be followed. Potential spills from refueling activities would be directed to the on-site catch basin system, bituminous asphalt or to gravel and grassy areas. Fuel entering the storm water drainage system would be

directed to Clematis Brook at the southwestern boundary of the site. There is a supply of absorbent booms, granular absorbent, and catchbasin covers at the Power Plant, and a spill kit at the Farm and Grounds building to contain and mitigate impacts from spill incidents.

3.2.2 Non Bulk Storage Control

Transformers - There are approximately 81 electrical transformers and/or electrical switches located on the Site. Electrical transformers located within Building #14 and the Power Plant are situated on concrete pads and enclosed by the masonry walls of the building. There are floor drains located in the vicinity of the transformers. The point of discharge of these floor drains is unknown. The remainder of the transformers and switches have no secondary containment or associated diversionary structures as they are either mounted on a telephone pole, a concrete pad or a building wall. According to facility records, all transformers have been retrofilled with non-PCB containing transformer oil.

3.2.3 Drainage System Controls

There are no diked storage areas at the Site. For undiked areas, the potential for a discharge exists to the Site drainage system via catch basins and drainage ditches. There are catchbasin covers located at the Power Plant for use during a spill.

4.0 OIL SPILL CONTINGENCY PLAN

The following is a summary of oil spill contingency measures to be followed in the event of a spill or release at any location throughout the facility, particularly those which affect or pose a threat to nearby waterways. Regulatory and site specific activities are discussed in the following sections.

4.1 Tank Division of Water Pollution Control Regulations

In accordance with 314 CMR 15.00, "No person shall pump, discharge, throw, drain or deposit, or cause to be deposited, oil or other matter containing oil into the waters of the Commonwealth." As such, immediate corrective action must be taken to mitigate any spills or releases of oil which affect, or may potentially affect, the waters of the Commonwealth. In accordance with 314 CMR 15.06, the Division of Water Pollution Control, hereinafter the "Division", Spills and Accidental Discharges, the following actions are required in the event of an accidental discharge of oil:

- Following an oil spill, the source of leakage or spillage shall be located and the person causing the spill shall be responsible for having immediate corrective action taken to stop the discharge of oil.
- Further, the person causing the spill shall be responsible for having immediate steps taken to prevent spilled oil from reaching any waters of the Commonwealth, the person causing the

spill shall be responsible for having immediate steps taken to contain the oil in as small an area as possible. The oil shall then be removed and disposed of in an appropriate manner so as to minimize pollution.

- Any oil spillage reaching, or causing a threat to, any waters of the Commonwealth shall be reported immediately to the Division through the Department of Environmental Protection by the person responsible for the occurrence or by anyone observing such occurrence by telephoning (617) 932-7600 during the work day, or the Central Commission Center for the State Police (508) 820-2121, after hours.
- A written report shall be submitted by the person responsible for an oil spill when so ordered. The report shall include, but not be limited to the following information:
 - Date, time and place of the oil spill or discharge;
 - Type and amount of oil lost;
 - Cause of spillage;
 - Action taken to prevent a recurrence of such spill or discharge;
 - Insofar as practical, removal of oil shall be accomplished by physical and mechanical means before resorting to dispersing chemicals. When requested by the Division, persons using chemicals to clean up oil spills shall use the chemicals submitted to standard tests established by the division. Test results must be made available to the division.
 - Oil spills greater than 10 gallons will trigger the requirements of 310 CMR 40.0000, the Massachusetts Contingency Plan, and will require the services of a Licensed Site Professional.

4.2 Site Specific Oil Spill Contingency Plan

All oil spills, regardless of the amount spilled or location are to be reported immediately or within two hours to the Department of Environmental Protection (DEP) by the Administrative Officer of the Day (A.O.D.) on duty. The A.O.D must notify the Waltham Fire Department. Power Plant staff have been instructed to notify the A.O.D if an oil spill occurs. The A.O.D. should contact:

Paul Birmingham, Director of Campus Safety
Work: (781) 894-3600, ext. 2213

The A.O.D. should contact the Grounds Department (if personnel are scheduled) and/or Campus Police to bring sand and absorbent booms (located at the Power Plant) to the affected area and initiate efforts to barricade the spill to prevent/contain additional spread of oil. When speaking to DEP, the A.O.D. should take direction in terms of clean-up and notify the Waltham Fire Department of same. The A.O.D. should take incident reports from all parties involved and submit them to Joe Breen, Director. The phone numbers to contact the DEP are:

During regular working hours: (617) 932-7600

Before 8:00 A.M./After 5:00 P.M./and on Weekends: (617) 566-4500

DEP is located at:

One Winter Street, Boston, MA 01801

If the DEP directs the A.O.D. to hire an environmental clean-up company, a Licensed Site Professional (LSP) must also be retained. During working hours, the Facility Director must also contact (1) Dept. of Capitol Planning and Operations (DCPO) at (617) 727-4030 and (2) George Atamian, P.E., Director of Engineering and Maintenance at (617) 624-7888.

Additional contact Phone numbers are as follows:

- Waltham Fire Department
911
- State Police
(617) 820-2121
- Emergency Response Contractor:

Clean Harbors
(781) 849-1800
24 Hr. 1-800-645-8265
- Massachusetts Division of Water Pollution Control:
Day: (617) 292-5673
Night: 1-800-424-8802
- If more than 1,000-gallons were released, or there have been two or more spill events of greater than 42 gallons within the preceding twelve months, the facility owner must notify the EPA Regional Administrator and the Massachusetts Division of Water Pollution Control in writing, no later than 60 days after the spill event, in accordance with 40 CFR 112.4.
- Once the spill event is over, measures should be implemented to insure that a similar spill or release does not occur at the facility in the future.

4.3 Written Commitment of Manpower, Equipment, and Materials

Emergency equipment available at the Power Plant on the date of inspection, October 27, 2004 consisted of absorbent pads, granular absorbent, and catch basin covers. Sufficient equipment, manpower and materials are available from the response agencies listed in the preceding section as

well as the Waltham Fire Department. These resources will be utilized to insure that the goals of Section 4.2 are effectively met.

5.0 SPILL PREVENTION TRAINING

The facility owner/operator shall schedule and conduct semi-annual briefings for all oil-handling employees on equipment operation, pollution control legislation and regulations, and spill prevention. Briefings should highlight and describe facility standard operating procedures in the event of a spill, known spill events or failures, malfunctioning components, and newly developed or implemented precautionary measures. Names and telephone numbers of key personnel to contact in the event of an emergency shall be updated, distributed, and posted in the office of the telephone operator, near the telephone. The following topics will be covered.

Equipment Operation & Maintenance - Personnel shall be instructed in the proper operation and maintenance of equipment to prevent the discharge of oil. All operating personnel must be thoroughly familiar with the system piping, valving, and control systems and shall be instructed in emergency spill containment procedures.

Pollution Control Laws & Regulations - Personnel shall be instructed in applicable pollution control laws and regulations regarding facility operation, spill prevention, and spill notification.

Spill Prevention/SPCC - The facility SPCC plan shall be presented and reviewed. All appropriate personnel shall be familiar with the SPCC Plan. Personnel shall be prepared to take appropriate actions during an emergency or spill situation.

6.0 SITE SECURITY

Fencing and Entrance Gate Guards - No fencing or entrance controls were observed at the Site. Security for the facility continues on a 24 hour a day basis, therefore there is continual oversight of all tanks.

Valves - Tank fill connections and fuel delivery valves for all ASTs and USTs do not permit direct outward flow due to their configurations. All valves are physically closed by facility operating personnel when in a non-operating or standby status.

Pump Starter Controls - Gasoline pumps and controls are accessible to authorized personnel only.

Lighting - Facility lighting is mainly adequate for the observation of potential night time spills and to reduce the likelihood of vandalism. Flood lights are mounted on the Site buildings and in the parking areas.

Security Cameras - No security cameras are present at the Site for monitoring the fuel truck unloading area.

Overfill Detection and Prevention - The two gasoline USTs at the Grounds Department are fitted with overfill buckets. There are no leak detection and prevention devices on any of the storage tanks. Overfill protection for the fuel oil USTs at the Power Plant includes an audible alarm.

7.0 LIMITATIONS

The findings are limited to the information available at the time of the investigation and the scope of services as defined. No other conclusions, interpretations, or recommendations are contained or implied in this report other than those expressed. Also, FSE makes no warranty, expressed or implied, on the accuracy of the work and information completed by others upon which FSE has relied to prepare this report. No other use of this report is warranted without the written consent of FS Engineers, Inc.

APPENDIX A

FIGURES



SITE LOCATION
MAP

FIGURE 1

FS ENGINEERS, INC.

289 GREAT ROAD
ACTON, MA 01720
TEL. (978) 263-9882
FAX. (978) 263-3709

FERNALD DEVELOPMENT CENTER

SPCC PLAN
200 TRAPELO ROAD
WALTHAM, MASSACHUSETTS

NO DATE REVISION

DATE 10/07/2004
DRAWN BY: MYS

200 KRAPELO ROAD
WALTHAM, MASSACHUSETTS

200 WEST 1000
ACTON, MA 01720
TEL: (508) 385-0862
FAX: (508) 385-5788

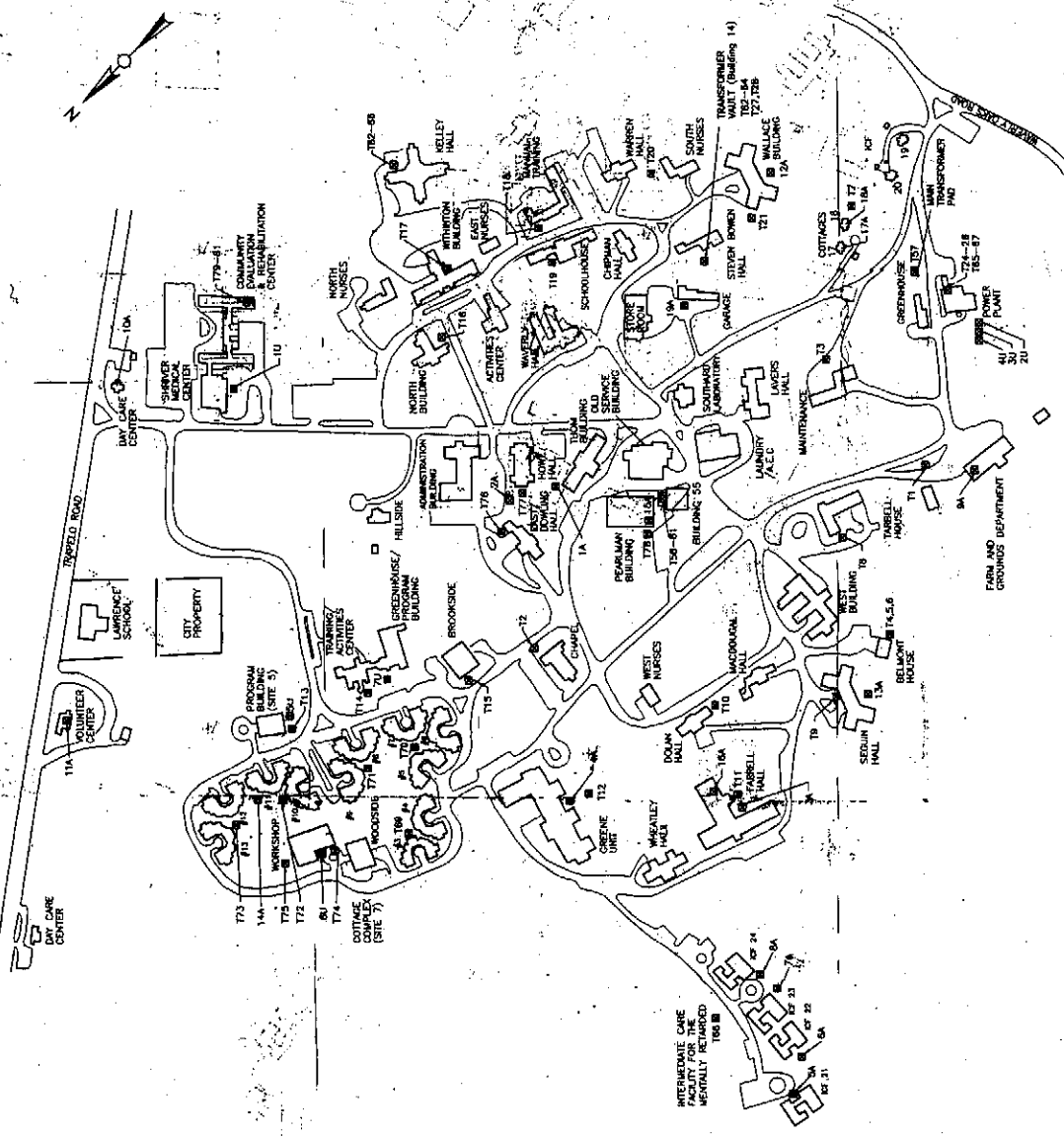
L-02

4-1073

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NOTES

6U UNDERGROUND STORAGE TANK #15
SA ABOVE GROUND STORAGE TANK #15
T1 TRANSFORMER #1



APPENDIX B

TABLES

TABLE 1 - TOTAL PETROLEUM PRODUCT BULK STORAGE

Tank Location	Tank No.	Cap. (gal.)	Content	Type	Material	Corrosion Protection	Secondary Contain.	Installed
Shriver Center	1U	750	Diesel	UST	Steel	No	No	1970
Power Plant	2U	22,000	No. 6	UST	Steel	No	No	Pre-1959
Power Plant	3U	24,000	No. 6	UST	Steel	No	No	Pre-1959
Power Plant	4U	27,000	No. 6	UST	Steel	No	No	Pre-1959
Site 7	5U	10,000	No. 2	UST	Fiberglass	No	No	1984
Site 5	6U	10,000	No. 2	UST	Fiberglass	No	No	1984
Activity Center	7U	4,000	No. 2	UST	Fiberglass	No	No	1981
Thom	1A	275	Diesel	AST	Steel	No	Yes	1999-2001
Howe Hall	2A	275	Diesel	AST	Steel	No	Yes	1999-2001
Farrell Hall	3A	1000	Diesel	AST	Steel	No	Yes	1999-2001
Greene Unit	4A	275	Diesel	AST	Steel	No	Yes	1999-2001
ICF 21	5A	330	No. 2	AST	Steel	No	Yes	1999-2001
ICF 22	6A	330	No. 2	AST	Steel	No	Yes	1999-2001
ICF 23	7A	330	No. 2	AST	Steel	No	Yes	1999-2001
ICF 24	8A	330	No. 2	AST	Steel	No	Yes	1999-2001
Farm & Grounds	9A	275	Diesel	AST	Steel	No	No	1975
Day Care	10A	275	No. 2	AST	Steel	No	No	1975
Volunteer Center	11A	550	No. 2	AST	Steel	No	No	1975
Wallace - Generator	12A	100	Diesel	AST	Steel	No	No	1984
Sequin - Generator	13A	100	Diesel	AST	Steel	No	No	1984
Cottage 11 - Generator	14A	85	Diesel	AST	Steel	No	Yes	1995
Pearlman Center	15A	5,000	Diesel	AST	Steel	No	Yes	1992
Winn - Generator	16A	30	Diesel	AST	Steel	No	No	1980
Cottage 17	17A	275	No. 2	AST	Steel	No	No	1975
Cottage 18	18A	275	No. 2	AST	Steel	No	No	1975
Garage	19A	2-275	Used Motor Oil	AST	Steel	No	Yes	1980

**TABLE 2 - TOTAL PETROLEUM PRODUCT BULK STORAGE
FDC TRANSFORMERS**

Transformer Location	Transformer No.	Cap. (gal.)	Content	Type	Material	Corrosion Protection	Secondary Contain.	Installed
Farm & Grounds	T1	15	Oil	Pole	Steel	Painted	No	NI
Chapel	T2	25	Oil	Pole	Steel	Painted	No	NI
Maintenance	T3	35	Oil	Pole	Steel	Painted	No	NI
Belmont	T4-T6	70	Oil	Pole	Steel	Painted	No	NI
Cottage 18	T7	25	Oil	Pole	Steel	Painted	No	NI
Tarbell	T8	219	Oil	Pad	Steel	Painted	No	NI
Sequin	T9	229	Oil	Pad	Steel	Painted	No	NI
Dolan	T10	219	Oil	Pad	Steel	Painted	No	NI
Farrell Hall	T11	229	Oil	Pad	Steel	Painted	No	NI
Greene	T12	401	Oil	Pad	Steel	Painted	No	NI
Site 5	T13	350	Oil	Pad	Steel	Painted	No	NI
Training/ Activity Center	T14	219	Oil	Pad	Steel	Painted	No	NI
Brookside	T15	300	Oil	Pad	Steel	Painted	No	NI
North Building	T16	0	Oil	Pad	Steel	Painted	No	NI
Withington	T17	370	Oil	Pad	Steel	Painted	No	NI
Manual	T18	300	Oil	Pad	Steel	Painted	No	NI
School House	T19	400	Oil	Pad	Steel	Painted	No	NI
South Nurse	T20	213	Oil	Pad	Steel	Painted	No	NI
Wallace	T21	213	Oil	Pad	Steel	Painted	No	NI
Power Plant	T24-T26	30	Oil	Pad	Steel	Painted	No	NI
Building 14	T27-T35	136	Oil	Pad	Steel	Painted	No	NI
Shriver	T36-T47	13	Oil	Wall	Steel	Painted	No	NI
Kelly Hall	T48-T50	3	Oil	Wall	Steel	Painted	No	NI
Waverly Hall	T51-T53	3	Oil	Wall	Steel	Painted	No	NI
Main Transformer Pad	T57	1,090	Oil	NI	Steel	Painted	No	NI
Building 55	T58-T61	220	Oil	Pad	Steel	Painted	No	NI
Building 14	T62-T64	NA	Oil	Pad	Steel	Painted	No	NI
Power Plant	T65-T67	NA	Oil	Pad	Steel	Painted	No	NI
Malone	T68	200	Oil	Pad	Steel	Painted	No	NI
Cottages 3-13	T69-T73	1,540	Oil	Pad	Steel	Painted	No	NI
Woodside	T74	NA	Oil	Pad	Steel	Painted	No	NI
Site 7	T75	NA	Oil	Pad	Steel	Painted	No	NI
East Dowling	T76	151	Oil	Pad	Steel	Painted	No	NI
Howe Hall	T77	NA	Oil	Pad	Steel	Painted	No	NI
New Service Bldg. (Pearlman)	T78	260	Oil	Pad	Steel	Painted	No	NI
Cerc	T79-T81	NA	Oil	Wall	Steel	Painted	No	NI
Kelly	T82-T86	855	Oil	NI	Steel	Painted	No	NI

APPENDIX C

SUBSTANTIAL HARM CRITERIA CHECKLIST

CERTIFICATION OF THE APPLICABILITY OF THE SUBSTANTIAL HARM CRITERIA

Facility Name: Fernald Developmental Center
Facility Address: 200 Trapelo Road
Waltham, Massachusetts 02154

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

Yes _____ No X _____

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest above-ground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?

Yes _____ No X _____

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments?

Yes _____ No X _____

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance such that a discharge from the facility would shut down a public drinking water intake?

Yes _____ No X _____

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?

Yes _____ No X _____

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Signature

Name

Title

Date

APPENDIX D

EMERGENCY CONTACTS

EMERGENCY CONTACTS

Name	Phone
Facility Director, Joe Breen	781-894-3600 ext. 2100
Chief of Campus Police, Joseph Merrullo	Radio 0
Chief Power Plant Engineer, Ed Wong	781-894-3600 ext. 2184
Director of Core Services, Jon Graves	781-894-3600 ext. 2450
Director of Campus Safety, Paul Birmingham	781-894-3600 ext. 2213
Motor Equipment Mechanic, Richard Grandfield	781-894-3600 ext. 2175
Director of Farm and Grounds, Peter Maxon	781-894-3600 ext. 2168