## Report of the Subcommittee on Closure

Committee Members:

Joe Vizard, Chairman

Rep. Thomas Stanley

Councilor Thomas Curtin

**Nick Tsaparlis** 

Meetings Held:

August 12, 2009 - 5 PM at City Hall (Council Chamber, 2<sup>nd</sup> floor)

Overview

The Subcommittee on Closure was formed to monitor the closure process taking place on the Fernald campus and to review studies relating to the closure of the campus. Much of this work is still on going.

At the subcommittee meeting on August 12, 2009 members of the community expressed their concerns with regard to the closure of the property.

#### Recommendations

The subcommittee recommends that DECAM continues to present information relative to the closer of the Fernald Developmental Center to the full Re-use Committee at each committee meeting. The subcommittee also recommends that relevant reports studies and proposals be sent to members of the full Re-use Committee.

For the committee,

Chairman

## Scorzella, Nancy

Ferral

From:

mariedaly10@aol.com

Sent:

Tuesday, September 01, 2009 10:49 PM

To:

Mayor; gadiii@yahoo.com; Shannon\_Sweeney@mckinsey.com

Subject:

**Environmental Report** 

Attachments: Environmental\_Report.doc

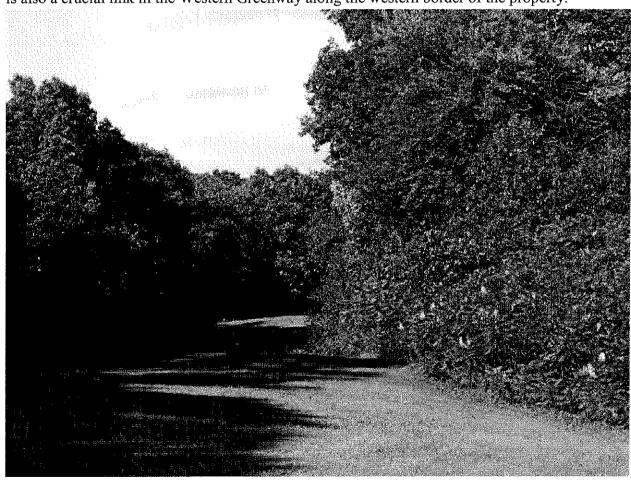
Here is my version of an Environmental Report for the Fernald Reuse Committee. Please feel free to comment or to use it.

Marie Daly

# **Environmental Report Marie E. Daly, Fernald Reuse Committee**

The 196-acre Fernald Center site has several environmental features that affect the planning process. The site runs north-south from Trapelo Road in the north to the University of Massachusetts Lawrence Meadow parcel and the Patriot Trail Girl Scout Outdoor Center on the south. The site ranges from the National Archives, City of Waltham Athletic Fields, Bentley College dormitories, and City of Waltham Forest Street Park on the west, to a residential neighborhood and Waverley Oaks Road on the east.

Several open space parcels abut the site, including Forest Street Park, the Patriot Trail Girl Scout Cedar Hill Reservation, and the University of Massachusetts Lawrence Meadow parcel. The site is also a crucial link in the Western Greenway along the western border of the property.



Western Greenway along West Border

#### **Elevations**

The site features a 250-foot elevation on Owl Hill, a varied terrain with some steep slopes, and an overall decline in elevation running from north to south. William Preston, the original architect, sought to preserve the natural, hilly landscape, but the 1970's developments greatly disturbed the terrain by blasting ledge, filling in wetlands, culverting streams and gouging out hillsides.

In general the elevation drops 150 feet from the northwest corner, where the elevation is 210 feet, to the southeast corner, where the elevation is 60 feet. From Owl Hill, the elevation drops by 180 feet to Waverley Oaks Road.

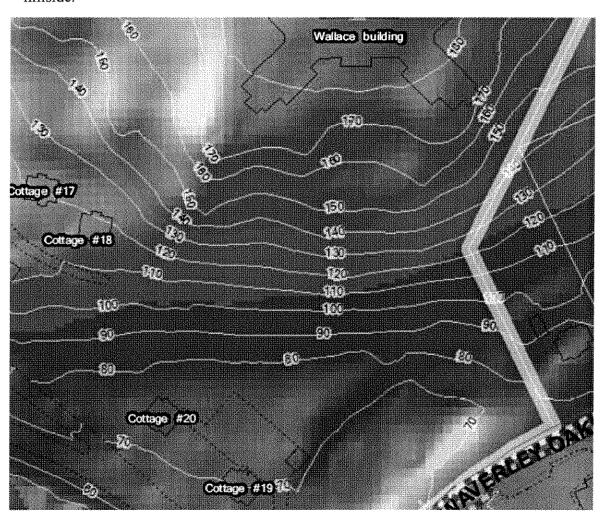


North side of Owl Hill from Trapelo Road

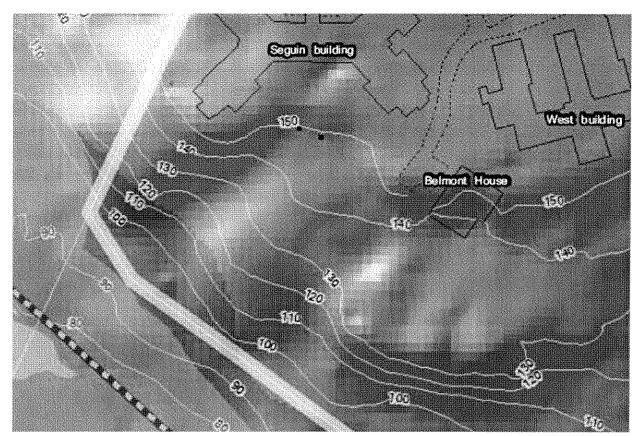
There are several places on the site where the elevation declines sharply, and may present problems if developed. Due to the steep slopes, the existing vegetation and trees serve to absorb runoff and hold the soil in place. Removal of the vegetation may cause increased runoff, flooding at the bottom of the hill, and soil erosion.

• In the northwest quadrant, the construction of the cottage complex cut into the existing hillside, creating a steep ridge that drops 30 feet over a span of less than 200 feet.

- On the south side near the Seguin Building, the terrain drops 50 feet in a span of less than 200 feet. This ridge overlooks the Girl Scout camp below.
- From the top of Owl Hill to the Shirley Road neighborhood on the northeast side, the elevation drops 100 feet over a span of 400 feet, causing flooding problems in this neighborhood.
- At the southeast corner, there is a 110 foot decline in elevation from the Wallace Building to Cottages 19 and 20, a span of about 400 feet. This is the southeast side of Owl Hill and is heavily wooded, thereby creating a natural barrier against runoff from the steep hillside.



Southeast Side of Owl Hill

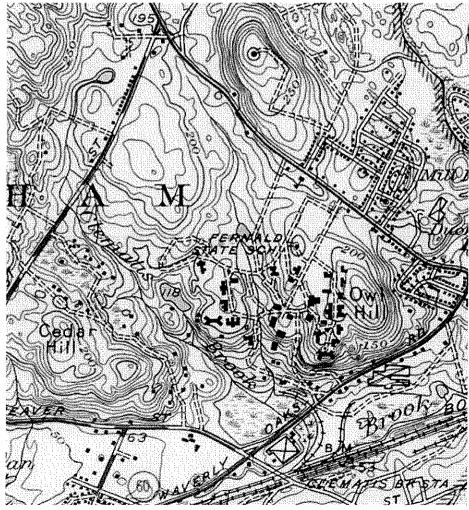


South Border above Girl Scout Camp

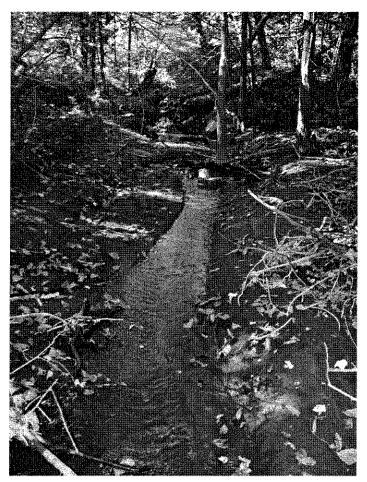
## Streams and Wetlands

The adjacent areas of Shirley Road, Waverley Oaks Road, Lawrence Meadow, and nearby Beaver Street and Linden Street have been the locations of severe flooding in the past twenty years. During one flood, the residents of a Waverley Oaks Road apartment building had to be rescued from 11 feet of water surrounding their building. The drop in elevation from the North Waltham hills, combined with hillside developments and the filling of wetlands have combined to make flooding during storms a non-infrequent occurrence (every five years or so). Since the Fernald Center has significant hillsides and some streams and wetlands, the reuse of the site must be planned carefully to prevent further downstream flooding.

Several brooks run through the Fernald Center site or run adjacent to the site. The longest stream [hereby dubbed Stream A] running through the site begins with a spring located under the National Archives, and fed by wetlands behind the National Archives. The stream courses from the northwest corner in a southeasterly direction and emerges next to the power plant and drains into Lawrence Meadow. The stream has been culverted for the northern half of its course through the Fernald Center, but its original path can be seen on the 1946 USGS map.



1946 USGS Topographical Map showing original path of Stream A



Stream A on National Archives site

Stream A enters a culvert that appears to be collapsing at the northwest border, and runs southeast to a 30 x 100 foot pond along the side of the road near Cottage #13 and the Woodside Building. A storm drain next to the pond appears to be draining water from the pond, but the culvert may be combined with the storm drains at this point. The stream is culverted through the cottage complex and daylights just beyond the Chapel.

Stream A emerges from the culvert near the Chapel at Magnolia Street and runs southeastward and under Pine Street. From Pine Street, the elevation drops about 50 feet, and the stream runs parallel to Chapel Street. In this section, the stream is heavily wooded. Also running parallel to the stream in this section are above-ground, asbestos-wrapped steam pipes. The pipes have been sealed in metal jackets, but there may have been some asbestos that crumbled into the soil before the pipes were sealed. The presence of asbestos in the soil next to the stream may present a challenge to clean up. Stream A merges with Stream B (see below) and runs under Chapel Street at the Power Plant. Here it runs down into Lawrence Meadow.

Another stream [hereby dubbed Stream B] begins on the west side of Oak Street in back of the Volunteer Center, runs under the driveway to the Maintenance Building, comes out of the culvert in back of the Old Greenhouse, and merges after this with Stream A, and the merged streams exit the culvert at the Power Plant. The stream then runs down to Lawrence Meadow.



Pond near Cottage #13 and Woodside Building in the Northwest Quadrant

A small stream [hereby dubbed Stream C] runs from a wetlands on the south side of the road across from Farrell Hall and the Wheatly Building. The stream runs downhill to the pond on the Girl Scout Cedar Hill Reservation. There is a small wetland area in back of the Day Care Center #65 along Trapelo Road.

Another more significant stream [hereby dubbed Stream D] begins at the border of Gann Academy and the City of Waltham Forest Street Park, and runs southeast to a small pond, about 30 x 30 feet in Forest Street Park. The stream then runs from the pond along the border of Forest Street Park and Malone Park, and in back of the buildings in Malone Park. From Malone Park Stream D then runs downhill to the pond on the Girl Scout Cedar Hill Reservation. Development

in the areas where Streams C and D run must be planned carefully to avoid negative impacts on the pond in the Girl Scout camp below.

## **Adjacent Wetlands and Waterways**

A large marsh, called Lawrence Meadow is situated adjacent to the southeast corner of the Fernald Center, and is located at the intersection of Waverley Oaks Road and Beaver Street. Lawrence Meadow is owned by the University of Massachusetts, and was part of the legacy of Cornelia Warren. There is a deed restriction on this parcel.

Stream A and Stream B from the Fernald Center empty into Lawrence Meadow next to the Power Plant. In addition, Clematis Brook runs into Lawrence Meadow. Clematis Brook begins on the west side of Forest Street, and runs through the Patriot Trail Girl Scout Cedar Hill Reservation. Clematis Brook is joined on the Girl Scout reservation by another brook that also begins on the west side of Forest Street and runs through the City of Waltham Forest Street Park. Clematis Brook exits Lawrence Meadow by running through a culvert under Waverley Oaks Road, and emptying into Beaver Brook. Beaver Brook is significant brook that originates west of Route 128 in Lexington, courses through the Beaver Brook Reservation, and eventually empties into the Charles River near the Newton Street Bridge in Waltham. Chester Brook is another major stream that originates at Hardy Pond and runs south along Lexington Street. It too merges with Beaver Brook near the intersection of Waverley Oaks Road and Linden Street. Therefore, three brooks merge within ½ mile of the Fernald Center's southeast corner.

## Recommendations

Due to a number of steep slopes that are currently covered with vegetation, and due to severe flooding problems in the area, development on these slopes must be restricted, so that runoff and erosion are minimized. Structures such as the Wallace Building, Kelley Building or Seguin Building that sit on top of hills and ridges with steep slopes should be renovated or, if torn down, rebuilt to the existing footprints of the buildings.

Development along the south border with the Girl Scout Reservation and the University of Massachusetts parcel should also be set back away from the border, not only to preserve the function of the Girl Scout Reservation as an outdoor center, but also the protect the wetland areas below.

Many of the lawn areas between the buildings on Owl Hill may end up as parking lots. Parking and road surfaces must be constructed to allow runoff to seep back into the ground on site, and therefore not add to downstream flooding. Water retention basins should be incorporated into the planning to reduce runoff from buildings and roads.

Wetlands areas in the northwest quadrant that were filled in by the Commonwealth in the 1970s and 1980s should be restored, and the culverted sections of Stream A daylighted. A request for determination should be made as to whether Stream A, which runs through the site from the northwest corner to the southeast corner, is a permanent or intermittent stream. This determination will significantly impact plans for this site, and may affect whether the stream can be daylighted for its entire length. If it is determined that Stream A is a permanent stream, it will be subject to the Rivers Protection Act, and development within 200 feet of the stream will be prohibited. A determination as a permanent stream would actually be a disincentive to daylighting the stream.



CIVIL DESIGN & LAND PLANNING
SURVEYING
GEOTECHNICAL ENGINEERING
ENVIRONMENTAL CONSULTING
REGULATORY COMPLIANCE & PLANNING

ian F. Klingler, PG, LSP

Principal Geologist

August 1, 2005 Project No. 4701.a

The Honorable Mayor Jeannette A. McCarthy City of Waltham Mayor's Office City Hall Second Floor 610 Main Street Waltham, Massachusetts 02452 Mecenyed AUG 3 2005

Mayoro Otto

**RE:** Public Involvement Notification

Response Action Outcome Statement Fernald Center - Malone Park Building No. 23 200 Trapelo Road Waltham, Massachusetts Release Tracking Number 3-21893

## Dear Mayor McCarthy:

Pursuant to 310 CMR 40.1403 of the Massachusetts Contingency Plan (MCP), the following serves as written notification for the submittal of a Class A-2 Response Action Outcome Statement for the release of petroleum at Malone Park Building No. 23 of the Fernald Center at 200 Trapelo Road in Waltham, Massachusetts. The Department of Environmental Protection – Northeast Regional Office (DEP-SERO) was first notified of the release on June 27, 2002 and the Disposal Site was assigned Release Tracking Number 3-21893. The Response Action Outcome Statement was issued to the DEP-NERO on August 1, 2005. A copy of this report is available for review at the DEP-NERO. If you have any questions, please contact the undersigned.

Sincerely,

Coneco Engineers and Scientists, Incorporated

Jedd S. Steinglass Project Manager

JSS:BFK;jd jss/4701.a.municipal.doc

cc: DEP-NERO

Walter Sweder, Board of Health



March 19, 2008 Project No. 4953

Mayor Jeannette A. McCarthy Waltham City Hall, Second Floor 610 Main Street Waltham, Massachusetts 02452 CIVIL DESIGN & LAND PLANNING
SURVEYING
GEOTECHNICAL ENGINEERING
ENVIRONMENTAL CONSULTING
REGULATORY COMPLIANCE & PLANNING

Received MAR 2 4 2008

RE: Public Involvement Notification

Class A-3 Response Action Outcome Report The Fernald Center - Power Plant 200 Trapelo Road Waltham, Massachusetts Release Tracking Number 3-13467

Dear Mayor McCarthy

Pursuant to 310 CMR 40.1403 of the Massachusetts Contingency Plan (MCP), the following serves as written notification for the submittal of a Class A-3 Response Action Outcome and Activity and Use Limitation (AUL) for the release of No. 6 fuel oil from three underground storage tanks formerly located at the Fernald Center Power Plant located at 200 Trapelo Road in Waltham, Massachusetts, hereinafter, the "Site." The Department of Environmental Protection - Northeast Regional Office (DEP-NERO) was first notified of the release on February 20, 1996 and the Site was assigned Release Tracking Number (RTN) 3-13467. The Response Action Outcome Statement was issued to the DEP-NERO on March 19, 2008. Please find a copy of a Registry of Deeds-certified copy of the above mentioned AUL enclosed with this letter. A copy of the referenced report is available for review at the DEP-NERO. If you have any questions, please contact the undersigned.

Sincerely, Coneco Engineers & Scientists, Incorporated

Bran F Klingler, PG, LSP Principal Geologist

FJC:BFK;jd Z://4953 - AUL Public Involvement Notices.doc

cc: DEP-NERO

Ms. Ellen M. Howe, DMR

Mr. Walter S. Sweder, Board of Health Mr. Ronald G. Vokey, Planning Department





Bk: 60880 Pg: 306 Doc: NOT Page: 1 of 20 03/14/2008 08:56 AM

### Form 1075

## NOTICE OF ACTIVITY AND USE LIMITATION M.G.L. c. 21E, § 6 and 310 CMR 40.0000

Disposal Site Name: The Fernald Center Power Plant

200 Trapelo Road

Waltham, Massachusetts

DEP Release Tracking No.(s): 3-13467

This Notice of Activity and Use Limitation ("Notice") is made as of this <u>i 4"</u> day of <u>March</u>, 2008, by the Commonwealth of Massachusetts, Executive Office of Health and Human Services, Department of Mental Retardation at 500 Harrison Avenue in Boston, Massachusetts 02118, together with its successors and assigns (collectively "Owner").

## WITNESSETH:

WHEREAS, the Commonwealth of Massachusetts, Executive Office of Health and Human Services, Department of Mental Retardation at 500 Harrison Avenue in Boston, Massachusetts, is the owner in fee simple of that certain parcel of land located at 200 Trapelo Road in Waltham, Middlesex County, Massachusetts with the buildings and improvements thereon, pursuant, in part, to a deed recorded with the Middlesex County Registry of Deeds in Book 5600, Page 550, with the remaining portion of the property being unrecorded land;

WHEREAS, said parcel of land, which is partially described in Exhibit A, attached hereto and made a part hereof ("Property") is subject to this Notice of Activity and Use Limitation. The Property is shown, in part, on two plans recorded with the Middlesex County Registry of Deeds in Plan Book 2008, Page 104, and in a plan dated December 26, 1903 and revised in 1922, with the remaining portion of the Property being unrecorded land;

WHEREAS, a portion of the Property ("Portion of the Property") is subject to this Notice of Activity and Use Limitation. The Portion of the Property is more particularly bounded and described in Exhibit A-I, attached hereto and made a part hereof. The Portion of the Property is shown on a plan recorded with the Middlesex County Registry of Deeds in Plan Book 2008, Page 104, and on a sketch plan attached hereto;

WHEREAS, the Portion of the Property comprises all of a disposal site as the result of a release of oil and/or hazardous material. Exhibit B is a sketch plan showing the relationship of the Portion of the Property subject to this Notice of Activity and Use Limitation to the boundaries of said disposal site existing within the limits of the Property and to the extent such boundaries have been established. Exhibit B is attached hereto and made a part hereof; and

WHEREAS, one or more response actions have been selected for the Disposal Site in accordance with M.G.L. c. 21E ("Chapter 21E") and the Massachusetts Contingency Plan, 310 CMR 40.0000 ("MCP"). Said response actions are based upon (a) the restriction of human access to and contact with oil and/or hazardous material in soil and/or (b) the restriction of

T. Ref.: 5600-550

Coneco Environmental 4 First Street Bridgewater, MA 02324 certain activities occurring in, on, through, over or under the Portion of the Property. The basis for such restrictions is set forth in an Activity and Use Limitation Opinion ("AUL Opinion"), dated March 6, 2008 (which is attached hereto as Exhibit C and made a part hereof);

NOW, THEREFORE, notice is hereby given that the activity and use limitations set forth in said AUL Opinion are as follows:

- 1. Activities and Uses Consistent with the AUL Opinion. The AUL Opinion provides that a condition of No Significant Risk to health, safety, public welfare or the environment exists for any foreseeable period of time (pursuant to 310 CMR 40.0000) so long as any of the following activities and uses occur on the Portion of the Property:
  - (i) Any activities and uses consistent with the current use of the Portion of the Property as a power plant facility and parking area;
  - (ii) Activities and uses including, but not limited to, maintenance of the asphalt-paved driveway and parking area within the designated AUL Area which do not cause direct contact with, disturbance, or relocation of, the contaminated soil within the designated AUL Area;
  - (iii) Excavation associated with limited short term utility work which may be deemed necessary within the designated AUL Area, provided that it is conducted in accordance with the performance standards for Utility Related Abatement Measures (URAMs) set forth by the MCP at 310 CMR 40.0030, and all applicable worker health and safety practices pursuant to 310 CMR 40.0018;
  - (iii) Subsurface activities and/or construction, including but not limited to excavation associated with future construction of buildings and other improvements to support permitted uses on the property which may disturb contaminated soils, provided that such work is conducted in accordance with a Soil Management Plan developed in accordance with Obligation (ii) as set forth in Notice of AUL Item 3;
  - (v) Activities and uses not expressly prohibited by the Notice of AUL;
  - (vi) Such other activities or uses which, in the Opinion of an LSP, shall present no greater risk of harm to health, safety, public welfare or the environment than the activities and uses set forth in this Paragraph; and
  - (vii) Such other activities and uses not identified in Paragraph 2 as being Activities and Uses Inconsistent with the AUL.
- 2. Activities and Uses Inconsistent with the AUL Opinion. Activities and uses which are inconsistent with the objectives of this Notice of Activity and Use Limitation, and which, if implemented at the Portion of the Property, may result in a

significant risk of harm to health, safety, public welfare or the environment or in a substantial hazard, are as follows:

- (i) The use of buildings located with the Portion of the Property as an office, store, residence, school, or daycare facility;
- (ii) The cultivation of fruits and vegetables destined for human consumption (e.g., gardening);
- (iii) Recreational activities, such as playing baseball, swimming, fishing and hiking;
- (iv) Leisure activities, such as picnicking, sunbathing and entertaining;
- (v) Relocation of the contaminated soils within the designated AUL Area unless an LSP Opinion is rendered which attests that a condition of "No Significant Risk" is maintained, consistent with the provisions of the MCP; and
- (vi) Any subsurface activity or excavation which may result in direct contact with, disturbance, or relocation of contaminated soils between 2 and 15 feet which is not conducted in accordance with Obligations of the Notice of AUL.
- 3. Obligations and Conditions Set Forth in the AUL Opinion. If applicable, obligations and/or conditions to be undertaken and/or maintained at the Portion of the Property to maintain a condition of No Significant Risk as set forth in the AUL Opinion shall include the following:
  - (i) Prior to the performance of major excavation work which may encounter impacted soils known to exist at depth, or in the event that evidence of petroleum contamination is encountered during shallow excavation work, a Health and Safety Plan must be prepared by a Certified Industrial Hygienist or other qualified professional familiar with worker health and safety procedures and requirements. The Health and Safety Plan must specify the level of personal protection and engineering controls, dust mitigative procedures, and perimeter monitoring necessary to prevent both worker and other receptor exposures to contaminated soils below current site grading. The Health and Safety Plan must also detail the type of protective clothing (i.e. gloves, Tyvek clothing, etc.), respiratory protection, environmental monitoring, and mechanical equipment necessary to prevent exposures to petroleum products via inhalation, ingestion and/or direct dermal contact;
  - (ii) Prior to the performance of major excavation work which may encounter impacted soils known to exist at depth, or in the event that evidence of petroleum contamination is encountered during shallow excavation work, a Soil Management Plan must be prepared by a LSP and must describe soil

excavation, handling, storage, on-site reuse, transport, and disposal procedures. Petroleum-impacted soils excavated below currently existing surface grades must either be reused within the Portion of the Property at the same depths or greater below final grades, or must be transported off-site for appropriate disposal. The Soil Management Plan must also include a description of the engineering controls and air monitoring procedures necessary at the site to ensure that receptors in the vicinity of the site are not impacted by petroleum products, fugitive dust, particulates, or exposures to contaminated soil via inhalation, dermal contact and/or ingestion; and

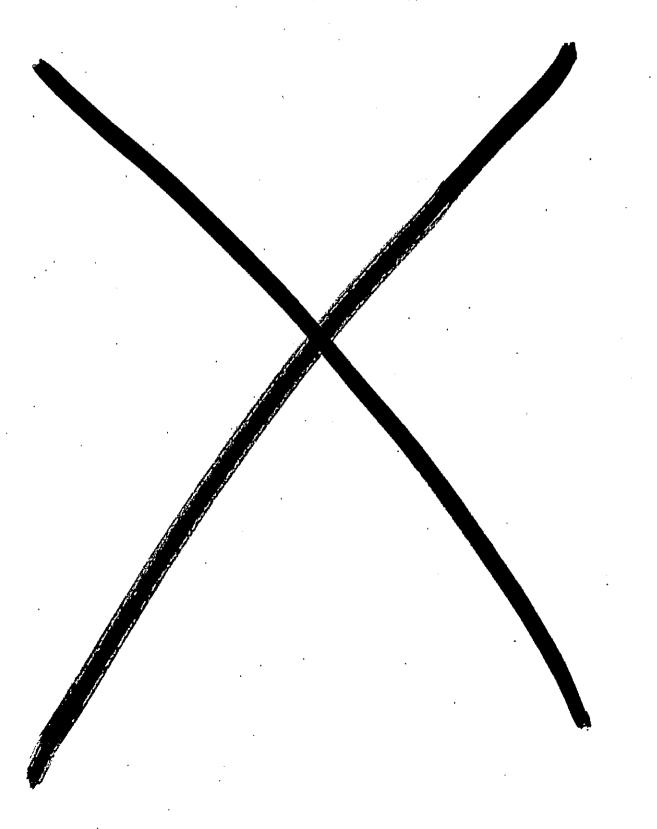
- (iii) Full and immediate repair/replacement of the asphalt following the completion of excavation activities associated with limited short term utility work performed in accordance with Obligations (i) and (ii) above.
- 4. Proposed Changes in Activities and Uses. Any proposed changes in activities and uses at the Portion of the Property which may result in higher levels of exposure to oil and/or hazardous material than currently exist shall be evaluated by an LSP who shall render an Opinion, in accordance with 310 CMR 40.1080 et seq., as to whether the proposed changes will present a significant risk of harm to health, safety, public welfare or the environment. Any and all requirements set forth in the Opinion to meet the objective of this Notice shall be satisfied before any such activity or use is commenced.
- 5. Violation of a Response Action Outcome. The activities, uses and/or exposures upon which this Notice is based shall not change at any time to cause a significant risk of harm to health, safety, public welfare, or the environment or to create substantial hazards due to exposure to oil and/or hazardous material without the prior evaluation by an LSP in accordance with 310 CMR 40.1080 et seq., and without additional response actions, if necessary, to achieve or maintain a condition of No Significant Risk or to eliminate substantial hazards.

If the activities, uses, and/or exposures upon which this Notice is based change without the prior evaluation and additional response actions determined to be necessary by an LSP in accordance with 310 CMR 40.1080 et seq., the owner or operator of the Portion of the Property subject to this Notice at the time that the activities, uses and/or exposures change, shall comply with the requirements set forth in 310 CMR 40.0020.

6. <u>Incorporation Into Deeds, Mortgages, Leases, and Instruments of Transfer.</u> This Notice shall be incorporated either in full or by reference into all future deeds, easements, mortgages, leases, licenses, occupancy agreements or any other instrument of transfer, whereby an interest in and/or a right to use the Property or a portion thereof is conveyed.

Owner hereby authorizes and consents to the filing and recordation and/or registration of this Notice, said Notice to become effective when executed under seal

by the undersigned LSP, and recorded and/or registered with the appropriate Registry(ies) of Deeds and/or Land Registration Office(s).



2008.	WITNESS the execution hereof under seal this $\frac{11-61}{2008}$ day of $\frac{1}{2008}$ .
	By: Commonwealth of Massachusetts  Executive Office of Health and Human Services  Department of Mental Retardation
	Elin M. Howe
	Elin M. Howe Commissioner
	COMMONWEALTH OF MASSACHUSETTS
Suf	<u>Mach 11, 2008</u>
Execut me thr be the to me t	On this 11 day of Neach, 2008, before me, the undersigned notary public, ally appeared Elin M. Howe, Commissioner of the Commonwealth of Massachusetts, live Office of Health and Human Services, Department of Mental Retardation, proved to ough satisfactory evidence of identification, which were personally Know to me to person whose name is signed on the preceding or attached document, and acknowledged hat he signed it voluntarily for its stated purpose.  Howe is the Commissioner of the Commission Expires: 12/21/2012 My Commission Expires: 12/21/
this No and Us	The undersigned LSP hereby certifies that he executed the aforesaid Activity and Use ion Opinion attached hereto as Exhibit C and made a part hereof and that in his Opinion of Activity and Use Limitation is consistent with the terms set forth in said Activity to Elimitation Opinion.  Brian F. Kingler, P.G., L.S.P.  LSP Seal:  BRIAN KUNGLER No. 8493 KUNGLER No. 8493

## COMMONWEALTH OF MASSACHUSETTS

PLYMOUSH COUNTY, SS

MARCL 13, 2008

On this 13th day of march, 2008, before me, the undersigned notary public, personally appeared Brian F. Klingler, P.G., L.S.P., proved to me through satisfactory evidence of identification, which were <u>MA Licinsa</u>, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he signed it voluntarily for its stated purpose.

Novary Public:
My Commission Expires: Sept. 22, 2011

Upon recording, return to:

Paul Beaton, P.E. Project Engineer Massachusetts Department of Mental Retardation 500 Harrison Avenue Boston, Massachusetts 02118



## Exhibit A

A metes and bounds description of a portion of recorded land located within the larger property which contains the Site is as follows:

COMMENCING Commencing at a point in the dividing line between land of the City of Waltham and land of the Roman Catholic Archbishop of Boston, said bound lying N 37° 49' 30" E a distance of 615.60 feet southerly from its intersection with the southerly line of Trapelo Road;

THENCE S 52° 10' 30" E for a distance of 264,99 feet;

THENCE S 36° 26' 40" W a distance of 51.26 feet;

THENCE S 38° 16' 40" W a distance of 203.22 feet;

THENCE . N 48° 33' 50" W a distance of 265.15 feet;

THENCE N 37° 49' 30" E a distance of 237.76 feet to the point of beginning.

Containing 65,340 Square Feet.

The remaining area of the property is composed of unrecorded land owned by the Commonwealth of Massachusetts. No further legal descriptions or title deed is available for the remainder of the property.

## Exhibit A-1

A metes and bounds description of the area subject to the AUL is as follows:

COMMENCING Commencing at a drill hole in a stone bound on the southeasterly line of Waverley

Oaks Road, said bound lying N 51° 29' 49" E a distance of 1051.13 feet from the center of a stone bound also on the southeasterly line of Waverley Oaks Road which marks the point of curvature at the intersection of the northeasterly line of

Beaver Street with the southeasterly line of Waverly Oaks Road;

THENCE N 47°27'49" W for a distance of 579.87 feet to the point of beginning of the

herein described AUL area;

THENCE S 10°40'10" W a distance of 123.00 feet;

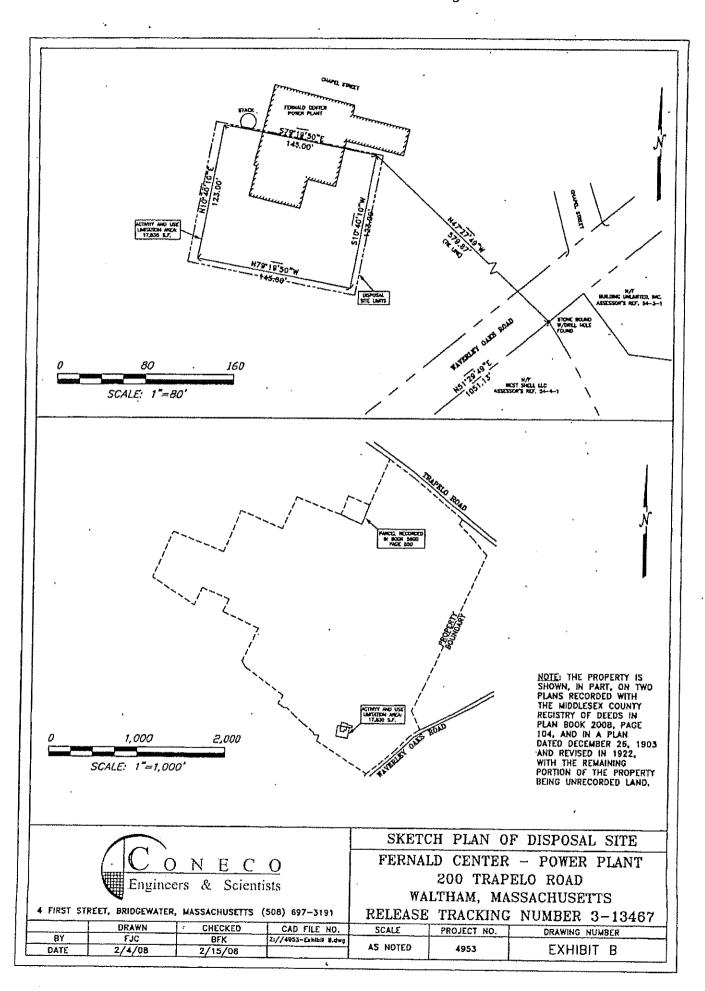
THENCE N 79°19'50" W a distance of 145.00 feet;

THENCE N 10°40'10" E a distance of 123.00 feet;

THENCE S 79°19'50"E a distance of 145.00 feet to the point of beginning.

Containing 17,835 Square Feet and bounded on all sides by other land of the Commonwealth of Massachusetts.

The depth of the area subject to the AUL begins at a depth of approximately 2 feet below surface grade within this area, which comprises an approximate 17,835 square feet and extends 15 feet below the existing surface grade.



#### EXHIBIT "C"

March 6, 2008 Project No. 4953

Bureau of Waste Site Cleanup Department of Environmental Protection Northeast Regional Office 205B Lowell Street Wilmington, Massachusetts 01887

RE: Activity and Use Limitation Opinion

The Fernald Center - Power Plant 200 Trapelo Road Waltham, Massachusetts Release Tracking Number 3-13467

#### Dear Sir or Madam:

In accordance with the specifications of 310 CMR 40,1074, on behalf of the Commonwealth of Massachusetts, Executive Office of Health and Human Services, Department of Mental Retardation (DMR), Coneco Engineers and Scientists (Coneco) has prepared the following Activity and Use Limitation (AUL) Opinion regarding the implementation of an AUL at the above-referenced property, hereinafter, the "Site."

Based upon the Method 1 Risk Characterization performed at the Site, a condition of "No Significant Risk" exists for all current uses of the Site; however, a condition of "No Significant Risk" does not exist for all potential future uses of the Site due to residual petroleum-impacted soil at the Site. To ensure that current and future risk is mitigated at the Site, an AUL is required in the Area of Concern which will limit soil exposure.

## HISTORICAL BACKGROUND

### Release Identification and Notification

Three No. 6 fuel oil underground storage tanks (USTs) were installed at the Site in 1954, with volumes ranging from 23,000 to 28,000 gallons. On February 20, 1996, personnel of the Fernald Center Power Plant reported that No. 6 fuel oil had released from these USTs and was seeping beneath a concrete retaining wall at the Site. This release reportedly impacted surficial and subsurface soil, an unnamed stream, and a pipe trench associated with the USTs. On this day, this release was reported to the Department of Environmental Protection - Northeast Regional Office (DEP-NERO). This release was assigned release tracking number (RTN) 3-13467.

### Immediate Response Actions

At the request of DMR, Vertex Engineering Services, Incorporated (Vertex) of Weymouth, Massachusetts provided oversight for Immediate Response Action (IRA) activities including the deployment of oil absorbent pads and booms at the base of the retaining wall and in the adjacent stream to manually remove oil from the stream area.

An Immediate Response Action Plan (IRAP) was prepared by Vertex and submitted to the DEP-NERO on April 19, 1996. The IRAP consisted of the removal and replacement of the three USTs at the Site. These activities occurred between July and December of 1996. Approximately 1,000 cubic yards of soil and 15,000 gallons of groundwater were reportedly removed from the Site during IRA activities. The excavation was backfilled with clean fill and partially repaved after the completion of excavation activities. An IRA Completion Report was issued by Vertex on May 7, 1997.

Soil samples collected from the sidewalls and bottom of the excavation were submitted by Vertex for laboratory analysis of total petroleum hydrocarbons (TPH) by Environmental Protection Agency (EPA) Method 8100M. Laboratory analytical results of the soil samples indicated that elevated TPH concentrations remained in soil at the Site. As such, additional investigation activities were warranted.

## Phase I - Initial Site Investigation / Tier Classification

A Phase I - Initial Site Investigation Report and Tier Classification Submittal were issued by Vertex on February 20, 1997. This investigation included a review of records available at state, federal, and local agencies, the performance of test borings, and the installation of seven groundwater monitoring wells at the Site. Four monitoring wells, designated MW-I through MW-4, were installed outside the Fernald Power Plant building situated hydraulically upgradient and downgradient from the former USTs. Three monitoring wells, designated MW-B1 through MW-B3, were installed in the basement of the Fernald Power Plant building situated hydraulically crossgradient and downgradient from the former USTs. Soil samples colleted during these subsurface investigation activities were submitted for laboratory analysis of TPH by EPA Method 8100M, polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8270, and benzene, toluene, ethyl benzene, and xylenes (BTEX) by EPA Method 8020. Laboratory analytical results of the soil samples indicated that elevated TPH concentrations remained in soil at the Site.

On February 6, 1997, Vertex assessed groundwater conditions at the Site, including gauging and sampling of the monitoring wells. Observations regarding the presence of non-aqueous phase liquid (NAPL) were made at each viable on-Site groundwater monitoring well. NAPL thickness was measured in monitoring wells MW-B1 and MW-B2 at a thickness exceeding 0.5 inches. No evidence of NAPL was detected in monitoring wells at the Site that included MW-1 through MW-4, and MW-B3. As such, Vertex collected groundwater samples from these monitoring wells and submitted them for laboratory analysis of TPH by EPA Method 8100M. Based upon these observations and laboratory analysis of soil and groundwater at the Site, a condition of "No Significant Risk" did not exist at the Site.

In addition, the Site was evaluated using the Numerical Ranking System for scoring Disposal Sites for purposes of Tier Classification and permitting. The Site received a score of 270 points, classifying it as a Tier II Site having low priority regulatory status.

### Phase II Scope of Work and Comprehensive Site Assessment

A Scope of Work for a Phase II - Comprehensive Site Assessment was prepared by Vertex and submitted to the DEP on June 13, 1997. The Scope of Work detailed activities to be conducted as part of the Phase II Investigation, in accordance with the Massachusetts Contingency Plan (MCP).

In August 1998, Vertex conducted a Phase II - Comprehensive Site Assessment at the Site which included additional sampling and analysis of the existing groundwater monitoring wells, and additional evaluation of the stream adjacent to the Site. On August 5, 1998, Vertex noted that an immiscible layer of NAPL was present in monitoring wells MW-B1 and MW-B2 in excess of 0.5 inches.

No evidence of NAPL was detected in monitoring wells MW-1 through MW-4, and MW-B3. As such, Vertex collected groundwater samples from these monitoring wells and submitted them for laboratory analysis of extractable petroleum hydrocarbons (EPH) by the DEP Method. Analytical results obtained from groundwater samples collected from MW-1 through MW-4, and MW-B3 did not indicate concentrations of EPH carbon fraction ranges exceeding the applicable DEP Method 1 Risk Characterization Standards.

Vertex evaluated environmental conditions within the stream adjacent to the Site and concluded that IRA activities had reduced concentrations of oil and/or hazardous materials to levels below the applicable DEP Method 1 Risk Characterization Standards.

In addition, the Phase II Report included an Exposure Assessment which concluded the extent of the contamination associated with RTN 3-13467 remaining at the Site was confined to a localized area completely covered by the concrete slab floor of the Power Plant building and an area under the north retaining wall of the UST location. Consequently, impacted soil remaining at the Site was categorized as "Isolated Sub-Surface Soils."

A Method 1 Risk Characterization was conducted to determine whether a condition of "No Significant Risk" existed at the Site. The results of the assessment were that no significant migration of the release had occurred at the Site either as a dissolved phase in groundwater, as separate phase in the soil, or through volatilization into indoor air at the Site. The results of the Risk Characterization concluded that a condition of "No Significant Risk" did not exist at the Site due to the presence of NAPL in monitoring wells MW-B1 and MW-B2 at a thickness greater than the applicable Upper Concentration Limit (UCL).

## Phase III - Evaluation of Comprehensive Response Action Alternatives, and Class C · Response Action Outcome

On June 25, 2002, Vertex completed a Phase III - Remedial Action Plan, and Class C Response Action Outcome for the Site. The Phase III Report identified and evaluated Remedial Action Alternatives which are reasonably feasible to achieve a level of "No Significant Risk" for the release. The Phase III Report also demonstrated that a Permanent Solution is not feasible and that any substantial hazards associated with the Site have been eliminated allowing the implementation of a Class C - Temporary Solution Response Action Outcome.

## Quarterly Groundwater Monitoring

On August 1, 2003, Coneco initiated investigatory activities to assess groundwater conditions at the Site and determine if a condition of "No Significant Risk" was present at the Site. These activities included the collection of groundwater samples from viable monitoring wells at the Site between August 2003 and May 2007. Observations regarding the presence of NAPL and the depth to groundwater measurements were made by Coneco personnel at each viable on-Site groundwater monitoring well. On October 6, 2005, Coneco measured NAPL in MW-B2 at a thickness of 0.63 feet. During subsequent sampling events from January 20, 2006 to May 24, 2007, Coneco continued to measure NAPL thickness in monitoring wells at the Site, and NAPL thickness was never measured greater than 0.1 inches in any of the monitoring wells. Therefore, NAPL thickness present within monitoring wells at the Site, specifically MW-B2, has been reduced below the applicable UCL of 0.5 inches.

## Stage I Environmental Screening

Based on the reported release of No. 6 fuel oil to the stream adjacent to the Site, a Stage I Environmental Screening was conducted by Coneco to characterize potential exposure to Site biota and habitats. Although the release of No. 6 fuel oil had reportedly impacted the stream adjacent to the Site, subsequent field observations by Coneco between August 2003 and May 2007 did not identify any residual persistent contamination. As such, Coneco is of the opinion that the results of this Screening indicate that no current or future exposure exists at the Site in relation to this release, and a condition of "No Significant Risk of Harm" to Site biota and habitats exists.

#### METHOD I RISK CHARACTERIZATION

Using the soil and groundwater classifications derived for the Site, Method 1 threshold concentrations for the compounds reported at the Site are listed in the MCP. The most stringent Risk Characterization concentration from each soil and groundwater classification is considered to be the threshold under which a condition of "No Significant Risk" exists at the Disposal Site.

The concentration of oil or hazardous material in a specific medium which a human or environmental receptor may contact at the Site is defined as the "Exposure Point Concentration" (EPC). Under the provisions of the MCP, the EPC for an area of contaminated soil and groundwater can be determined by taking an average of all the concentrations detected within a contiguous area, which in this case, constitutes the area impacted by the release of No. 6 fuel oil at the Site. For the purposes of this investigation, the horizontal limits of the Disposal Site are conservatively defined as an approximately 14,000 square-foot area encompassing the location of the former USTs and identified impacted soil and groundwater at the Power Plant, as depicted on Exhibit B. Vertically, the Disposal Site includes soil from approximately 2 feet below grade to 15 feet below grade.

#### Soil Risk Characterization

Analytical results obtained from soil samples collected by Vertex at the conclusion of excavation activities, and Geoprobe® test boring samples collected by Coneco during monitoring well installation at the Disposal Site were used to calculate the current EPCs. For EPH fraction ranges detected within the limits of the Disposal Site, the EPCs have been defined as the average concentration of the respective EPH fraction ranges detected within

the soil samples collected from the Disposal Site. In soil samples from which the specific fractionation ranges were not detected above the laboratory quantification limits, one-half of the laboratory quantification limit was used to calculate the EPC. In accordance with 310 CMR 40.0902(3) and 310 CMR 40.1020(2), a level of "No Significant Risk" exists for concentrations of oil and/or hazardous materials which have been reduced to "Background." As no concentrations of polycyclic aromatic hydrocarbons (PAHs) or C<sub>11</sub>-C<sub>22</sub> Aromatic Hydrocarbons were identified in soil samples collected from the Site, these analytes were excluded from this Method 1 Risk Characterization. Soil analytical results, calculated EPCs, and the currently applicable Method 1 Risk Characterization Standards are presented below in Table 1.

Table 1 - Soil Exposure Point Concentrations							
Sample ID (depth)	Date Collected	C <sub>9</sub> -C <sub>18</sub> Aliphatic Hydrocarbons	C <sub>19</sub> -C <sub>36</sub> Aliphatic Hydrocarbons	C <sub>11</sub> -C <sub>22</sub> Aromatic Hydrocarbons			
Sidewall-West (12')	10/29/1996	170 <sup>(1)</sup>	380	NT <sup>(2)</sup>			
Sidewall-East (12')	10/29/1996	96	480	NT			
Sidewall-North (12')	10/28/1996	10,000	15,000	NT			
Bottom #1 (17')	10/28/1996	1,900	4,500	NT			
Bottom #2 (17')	10/29/1996	730	1,200	NT			
Pipeline (31)	11/1/1996	870	2,000	NT			
MW-1 (5-7')	2/3/1997	53	450	NT			
MW-2 (5-7')	2/3/1997	3	31	NT			
MW-3 (5-7')	2/3/1997	13	74	NT			
MW-4 (5-7')	2/3/1997	8	26	NT			
MW-2B (2-4')	2/3/1997	7,200	12,000	NT			
MW-3B (2-4')	2/3/1997	2	12	NT			
GP-01/S2 (3-5')	5/17/2007	. <40.0	<40.0	<40.0			
GP-02/S6 (13-15')	5/17/2007	<30.4	<30.4	<30.4			
EPC Value		1,438.7	2,412.6	15.2			
DEP Method I S-1/GW-2/3 Risk Characterization Standards (3)		1,000	2,500	800			
DEP Method 1 S-3/GW Characterization Stand		5,000	5,000	5,000			

1) Analytical results and Method 1 Risk Characterization Standards are presented in mg/kg.

Notes: 2) NT denotes sample not tested for specified analyte

3) DEP Method 1 Risk Characterization standards are listed in 310 CMR 40.0974 and derived in Section 5.1

Although the Method 1 S-3 GW-2/3 Risk Characterization Standards are currently applicable for the Disposal Site, the more conservative Method 1 S-1 GW-2/3 Risk Characterization Standards are used to protect potential future Site uses. Therefore, a condition of "No Significant Risk" exists at the Disposal Site for current uses; however, a condition of "No Significant Risk" does not exist for potential future uses. The more stringent S-1 GW-2/3

Risk Characterization Standards will be achieved by implementing an Activity and Use Limitation.

#### Groundwater Risk Characterization

Pursuant to Policy WSC-02-411 Characterizing Risks Posed by Petroleum Contaminated Sites: Implementation of the MADEP VPH/EPH Approach, Coneco obtained data from Site monitoring wells on a quarterly basis to determine if a condition of "No Significant Risk" exists at the Disposal Site. On October 6, 2005, Coneco measured NAPL in MW-B2 at a thickness of 0.63 feet exceeding the applicable UCL of 0.5 inches presented in 310 CMR 40.0996(6). During the subsequent sampling events from January 20, 2006 to May 24, 2007, Coneco continued to measure NAPL thickness in monitoring wells at the Site, and NAPL thickness was never measured greater than 0.1 inches in any of the monitoring wells. Therefore, NAPL thickness present within monitoring wells at the Site, specifically MW-B2, have been reduced below the applicable UCL of 0.5 inches as presented in 310 CMR 40.0996(6).

Analytical results obtained from groundwater samples collected from viable on-Site monitoring wells by Coneco during sampling event between January 20, 2006 and May 24, 2007 were used to calculate the current EPCs. For EPH fraction ranges detected within the limits of the Disposal Site, the EPCs have been defined as the average concentration of the respective EPH fraction ranges detected within the groundwater samples collected from viable groundwater monitoring wells at the Site. In groundwater samples from which the specific fractionation ranges were not detected above the laboratory quantification limits, one-half of the laboratory quantification limit was used to calculate the EPC.

In accordance with 310 CMR 40.0902(3) and 310 CMR 40.1020(2), a level of "No Significant Risk" exists for concentrations of oil and/or hazardous materials which have been reduced to "Background." As no concentrations of PAHs were identified in groundwater samples collected from monitoring wells at the Site between January 20, 2006 and May 24, 2007, these analytes were excluded from this Method 1 Risk Characterization. The calculated EPCs for groundwater analytes and the currently applicable Method 1 Risk Characterization Standards are presented below in Table 2.

Table 2 - Groundwater Exposure Point Concentration Values – January 20, 2006 through May 24, 2007

Monitoring Well	C <sub>9</sub> -C <sub>18</sub> Aliphatic Hydrocarbon EPC	C <sub>19</sub> -C <sub>36</sub> Aliphatic Hydrocarbon EPC	C <sub>11</sub> -C <sub>22</sub> Aromatic Hydrocarbon EPC		
MW-I	100.00(1)	266.67	100.00		
MW-2	100.00	100.00	100.00		
MW-3	100.00	100,00	100.00		
MW-4	100.00	100.00	100.00		
MW-BI	300.00	566.67	800.00		
MW-B2	100.00	100.00	233.33		
MW-B3	100.00	100.00	100.00		
CMW-I	100.00	100.00	100.00		
CMW-2	100.00	100.00	100.00		
DEP Method 1 GW-2 Risk Characterization Standards (2)	1,000	NA <sup>(3)</sup>	50,000		
DEP Method I GW-3 Risk Characterization Standards	20,000	20,000	30,000		

Notes:

- 4) Analytical results and Method 1 Risk Characterization Standards are presented in µg/l.
- DEP Method 1 Risk Characterization standards are listed in 310 CMR 40.0974 and derived in Section 5.1.
- 6) NA denotes no standards have been promulgated.

The calculated EPCs for groundwater samples collected from monitoring wells at the Site on a quarterly basis between January 20, 2006 and May 24, 2007 are below the currently applicable Method 1 Risk Characterization Standards. Therefore, a condition of "No Significant Risk" exists for groundwater at the Disposal Site.

#### **ACTIVITY AND USE LIMITATION**

Based upon analytical data collected during Coneco's investigations, the area subject to the AUL is depicted in plan view in Exhibit B and is registered at the Middlesex County Registry of Deeds in Plan Book 2008, Page 104. The description of the soil subject to the Activity and Use Limitation is provided below. Prohibited activities include the following:

- The use of buildings located with the Portion of the Property as an office, store, residence, school, or daycare;
- The cultivation of fruits and vegetables destined for human consumption (e.g., gardening);
- Recreational activities, such as playing baseball, swimming, fishing and hiking;
- Leisure activities, such as picnicking, sunbathing and entertaining;
- Relocation of the contaminated soils within the designated AUL Area unless an LSP
  Opinion is rendered which attests that a condition of "No Significant Risk" is maintained,
  consistent with the provisions of the MCP;

Any subsurface activity or excavation which may result in direct contact with, disturbance, or relocation of contaminated soils between 2 and 15 feet which is not conducted in accordance with Obligations of the Notice of AUL.

The AUL Opinion provides that a condition of No Significant Risk to health, safety; public welfare or the environment exists for any foreseeable period of time (pursuant to 310 CMR 40.0000) so long as any of the following activities and uses occur within the designated AUL Area:

- Any activities and uses consistent with the current use of the Portion of the Property as a Power Plant facility and parking area;
- Activities and uses including, but not limited to, maintenance of the asphalt-paved driveway and parking area within the designated AUL Area which do not cause direct contact with, disturbance, or relocation of, the contaminated soil within the designated AUL Area;
- Excavation associated with limited short term utility work which may be deemed necessary within the designated AUL Area, provided that it is conducted in accordance with the performance standards for Utility Related Abatement Measures (URAMs) set forth by the MCP at 310 CMR 40.0030, and all applicable worker health and safety practices pursuant to 310 CMR 40.0018;
- Subsurface activities and/or construction, including but not limited to excavation associated with future construction of buildings and other improvements to support permitted uses on the property which may disturb contaminated soils, provided that such work is conducted in accordance with a Soil Management Plan developed in accordance with Obligation (ii) as set forth in Notice of AUL Item 3.
- Activities and uses not expressly prohibited by the Notice of AUL;
- Such other activities and uses which, in the Opinion of a LSP, as defined in 310 CMR 40.0006, shall present no greater risk of harm to health, safety, public welfare, or the environment than the activities and uses set forth in this paragraph.

A metes and bounds description of the area subject to the AUL is as follows:

COMMENCING Commencing at a drill hole in a stone bound on the southeasterly line of Waverley Oaks Road, said bound lying N 51° 29' 49" E a distance of 1051.13 feet from the center of a stone bound also on the southeasterly line of Waverley Oaks Road which marks the point of curvature at the intersection of the northeasterly line of Beaver Street with the southeasterly line of Waverly Oaks Road:

THENCE

N 47°27'49" W for a distance of 579.87 feet to the point of beginning of the herein described AUL area;

THENCE

S 10°40'10" W a distance of 123.00 feet:

THENCE

N 79°19'50" W a distance of 145,00 feet:

**THENCE** 

N 10°40'10" E a distance of 123.00 feet;

THENCE

S 79°19'50"E a distance of 140.00 feet to the point of beginning.

Containing 17,835 Square Feet and bounded on all sides by other land of the Commonwealth of Massachusetts. The depth of the area subject to the AUL begins at a depth of approximately 2 feet below surface grade and extends 15 feet below the existing surface grade.

Notifications to the Chief Municipal Officer, Health Department, Zoning Official, and Building Department, as well as a published legal notice have been made within 30 days of the AUL submittal.

If there are any questions, please contact the undersigned at (508) 697-3191, extension 103.

Sincerely,

Coneco Engineers & Scientists, Incorporated

Brian F. Klingler, P.G., L.S.P.

Principal Géologist

## Exhibit E

I, Elin M. Howe, do hereby certify that the property identified as "The Fernald Center" located at 200 Trapelo Road in Waltham, Massachusetts is owned by the Commonwealth of Massachusetts. In addition, the Commonwealth of Massachusetts, Executive Office of Health and Human Services, Department of Mental Retardation conducts operations at the above mentioned property. As Commissioner of the Department of Mental Retardation, I have the authority to sign legal documents on behalf of the Commonwealth.

Elin M. Howe

Attent Middleser S. Register

## **UPDATE FOR LAND REUSE - 9-10-2009**

We must understand the historical significance of the Fernald Campus, its past, present, and future. If we forget the historical past we deny future generations knowledge of the past.

The Walter E. Fernald Development Center is distinguished as the western hemisphere's oldest publicly funded institution serving people with mental retardation. It began through the extraordinary efforts of Dr. Samuel Gridley Howe in 1848.

This all means that before we start demolishing buildings, we step back for a moment. In the last 20 years, by design, DMR has let this campus deteriote. The campus has suffered chronic neglect, and a lack of proactive mothballing.

We have a major task before us. Our goal is to have all buildings put into categories. This will give us guidelines to their fate. First will be buildings that directly tell the historical journey that was taken by the Fernald School. These buildings must be preserved and restored. Second, there are buildings with little or no historical significance, they have been rehabed and are in "move-in" condition. If possible they should be incorporated into the re-use proposal. Why would you demolish a perfectly good

building? And third there are buildings that have no historical significance and can be demolished if necessary. Any buildings demolished on campus will fall under Ordinance 29687, whichever quadrant that is looked at it is likely to have buildings in all these categories.

We have a list of every building with its complete nomenclature. Some are historically and architecturally important. The Reuse Committee should seek independent consultants to determine the outcome of each building.

Founded in 1848 by Samuel Gidley Howe, the Fernald Development Center is the oldest institution that serves people with developmental disabilities in the Western Hemisphere. Plans for the reuse of the site should include the preservation of historically and architecturally significant buildings and site features. Buildings should be renovated and adaptively reused, and landscape features that were designed by the architect, William Preston, such as the lawn area in front of Waverley Hall and the Administration Building should also be preserved. Ancillary buildings that were not central to the education and treatment of the residents may be razed. Many of the modern buildings are not architecturally significant, not central to the history of the institution, and can be razed. Several buildings had been classified as unusable by DCAM, such as Waverley Hall and the West Building. These are some of the oldest buildings on the site, and were woefully neglected by the Commonwealth. They are historically and architecturally important, and the Reuse Committee should seek independent consultants to determine if anything of these buildings can be salvaged.

Fernald Map	Name	Architect	Year	GSF	Renovated ? Y/N	Asbestos?	Conditio n	Style	Preserve ? Yes/No
1	Administration Building East Dowling/Can	Hoyt	1933	26,856	no	yes	good	Colonial Revival	Yes
2	Redemption	Preston	1906	24,107	no	yes	poor	Queen Anne	No
15	Lavers	Calderwood	1914	12,036	no	yes	good	Craftsman	Yes
32	Greenhouse (Old)		1940	3,855	no	yes	fair		No
43	Food Service/Parkman		1983	27,712	new	no	good	Modem	No
47	Hillside Cottage/Garage	Preston	1904	8,115	yes	no	good	Queen Anne	Yes
50	Laundry/Therapeutic Equip	Ctr	1928	27,192	yes	yes	good	Utilitarian	No
52	Maintenance		1930	14,322	no	yes	fair	Utilitarian	No
53	Power Plant Food Service		1921	19,440	по	yes	fair	Utilitarian Colonial	No
54	(Old)/Stockroom	Hoyt Kendall,	1931	36,836	no	yes	fair	Revival	No
57	Howe Library Tarbell Hall (Sandra's	Taylor	1921	8,030	no	yes	good	Craftsman	Yes
61	Lodge)		1934	38,924	no	yes	good	Tudor Revival Colonial	Yes
69	Marquardt Nursing Ctr/Thon	n Building	1952	32,116	yes	no	good	Revival Colonial	NA
74/75	Howe Hall/Canteen -		1933	17,362	yes	no	fair	Revival	Yes
14	East Nurses	Preston	1906	8,640	no	yes	fair	Queen Anne	Yes
16	North Nurses Home	Preston	1904	17,190	yes	no	good	Queen Anne	Yes
29	Warren Hall	Preston	1906	16,296	yes	no	good	Queen Anne	Yes
30	South Nurses Home	Preston	1907	17,172	yes	no	good	Queen Anne	Yes
31	CERC Building	CBT	1969	32,369	yes	yes	good	Modern	No
33	Greenhouse Sales		1975	100	no	no	good		No
34	Manual Training	Preston	1904	34,851	yes	yes	good	Queen Anne	Yes
35	North Building Schoolhouse/Gymnasiu	Preston	1897	24,834	yes	no	good	Queen Anne	Yes
36	m	Preston	1891	37,325	yes	no	good	Queen Anne	Yes
40	Chipman	Preston	1892	10,704	no	yes	unusable	Queen Anne	No
42	Hospital/S. Bowen	Preston	1893	12,000	กด	yes	unusable	Queen Anne	No
44	Activity Center (Old)	Preston	1891	21,785	no	yes	unusable	Queen Anne	No
51	Kelley Hall/Copy Center		1969	43,740	no	yes	poor	Modem	No
55	Storeroom		1891	23,940	no	yes	fair	Queen Anne Colonial	Yes
62	Wallace Hall		1936	29,560	yes	no	good	Revival	Yes
64	Withington/Tufts Dental	-	1979	40,428	yes	yes	good	Modem	No
65	Trapelo Cottage/Day Care/O	Caolo&Benic	1860	2,877 48.757	no	yes	good	Greek Revival Modern	Yes NA
70	Shriver Center		1967	48,757	no	yes	unusable	Queen Anne	No
71	Waverley Hall		1891	32,298	no	yes		Queen Anne	No
25	West Nurses	Preston	1906	6,912	no	yes	poor	Waccus Wille	INC

26	Training Activity Center		1963	18,130	new	no	good	Modem	No
27	Belmont House	Preston	1890	6,416	yes	yes	good	Queen Anne	Yes
28	Brookside		1981	11,520	new	no	good	Modern	No
37	Site 5		1985	12,000	new	no	fair	Modem	No
38	Site 7/Flow Incorporated		1985	20,064	new	по	fair	Modern	No
39	Woodside		1981	11,520	new	no	good	Modern	No
41	Chapel		1960	17,112	no	yes	good	Modem	Yes
45	Farrell Hall		1960	49,940	yes	по	good	Modern	No
46	Greene Unit	Main	1953	113,000	yes	no	good	Modem	Yes
56	West Building	Preston	1890	49,041	no	yes	unusable	Queen Anne	No
58	Dolan Hall	Preston	1906	15,252	yes	по	good	Queen Anne	Yes
59	McDougall Hall	Preston	1898	23,376	yes	no	good	Queen Anne Colonial	Yes
60	Seguin Hall	Hoyt	1934	21,521	yes	no	good	Revival	Yes
66	Baldwin Cottage/Day Care Wheatly Hall/Furniture		1875	3,422	no	yes	good	Vemacular Colonial	Yes
72	Repair		1933	11,640 8,827	по	yes	poor	Revival	No
3-13	Cottages 3-13		1979	each	no	RO	fair	Modem	No
18a	Cardinal Cottage/Garage	Sanger	1849	4,354	no	yes	good	Greek Revival	Yes
21-24	Malone Park 21-24		1986	4,123	new	no	good	Modern	NA

## Fernald Development Center Infrastructure/Traffic

To:

Fernald Development Center

Land Reuse Committee

From:

Ralph P. Zampitella, Chairman

Infrastructure/Traffic Subcommittee

Date:

September 7, 2009

The infrastructure of The Fernald Center is going to be one of the most important and complicated developments that our City will encounter in the next several years. As Reuse Committee Member, Councilor Thomas Curtin, recently stated, "As the reuse of The Fernald Center goes, so goes the City."

The draft prepared by The Department of Capital Asset Management (DACM) dated April 21, 2009 titled Project Overview barely describes as intended the enormity of the task required for the development to reach fruition. The study also indicates that no substantial site study has been completed since 2001.

- It appears from visual inspection that every street, road, pathway and country road will require replacement or rebuilding. Most parking lots are in disrepair and would require replacement and installation of storm water collection and drainage systems. Although we can't observe the sanitary drains, the storm water drains and water mains beneath streets, we should assume most require replacement because of their advanced age.
- Oak Street, the road that exits the Center to Waverly Oaks Road, is another major problem. Probably constructed at the end of the

nineteenth century, it no longer conforms to State requirements relative to width, grade, and access for pedestrian use. This road will undoubtedly be rebuilt in another area. A second egress from the development to Waverly Oaks Road is essential.

- 3. Once use of the water tower located on the north side of Trapelo Road is discontinued, an elaborate water pumping system for the entire Center will be required. The newer condominium development on the north side of Trapelo Road had a serious water pressure problem before it was seventy percent completed. The solution was to install individual water booster pumps in each building. Sounds good, however this remedy would at times lower the water pressure in the water mains on Trapelo Road. Remember it has been suggested that the source of water for The Fernald Center would be from Trapelo Road and other water outlet mains in the area. The cost of razing the water tower and disposal of its scrap will be excessively high.
- 4. Another costly procedure will be the removal of asbestos and other hazardous and contaminated materials on site. This not only includes obvious materials but those that are hidden below grade. Most underground hazards have yet to be determined, but the amount of accumulation after 150 years could be enormous. I often wonder how much of the sulfur contaminated coal ash was buried on site while most heating plants were using coal to fire the heating plant for approximately 50 years.
- 5. Obviously newer methods to transmit and distribute electrical power throughout the complex will be devised once the power plant and transmission tunnels are discontinued.

I have personally viewed the exterior of every building on the Fernald site and feel strongly that there is not one that doesn't require some type of

repair, maintenance, or replacement. The previously mentioned draft implies that every building needs repair, maintenance, total rehabilitation, or otherwise should be razed.

My comments relative to what is required to complete The Fernald Development are brief and are suggested to give some insight to what lies in the future. I point to the fact that City officials and those responsible for success must proceed with caution prior to making commitments to any group or entity interested in purchasing any part of the site.

From a positive view, the Fernald property is an outstanding parcel of land. Located approximately 8 miles west of Boston, it gives easy access to all major highways and public transportation. The Fernald site with many and various sloping hills, abundance of vegetation and acres of open space situated on one of the highest elevation in Waltham could not be better suited for some of the uses suggested and proposed. It took a millennium for nature to create such a beautiful vista, a century to create what it is now. Hopefully, we can restore it to become an asset in every way in less than a decade.

As indicated in my statements, funding is going to be essential. City Councilor Logan recently stated that soon the City might have an increase in hotel use taxes and/or meal taxes. I suspect that even Waltham, a City with an enormous revenue or tax base, will have a cash flow problem.

Respectfully submitted,

Ralph P. Zampitella, Chairman, Infrastructure/Traffic Subcommittee

## Scorzella, Nancy

From: Charlie Brophy [charlie@federaloffice.com]

Sent: Thursday, September 10, 2009 4:18 PM

To: Mayor

Subject: Report on the Subcommittee on Recreation

Report on the Subcommittee on Recreation, Cemetery and Solar and Wind Power

Hon. Co-Chairman Councilor Thomas Curtin Hon Co-Chairwoman Mayor Jeannette McCarthy

Members of the Subcommittee:

Chairman Charles Brophy Councilor Tom Curtin Peter Marron

We were not able to have a meeting due to conflicts and illnesses; nevertheless I was asked to participate in the "intake' subcommittee meetings, as, effectively, the recreation usage and intake overlapped. I was present at all meetings except the September 2 meetings. I also met with the Waltham Park and Recreation Dept to find their specific program needs and desires, as well as a site visit to the Greene Bldg at Fernald to see the facility. There were several contacts by the public to submit their options and requests.

As a Committee chairman, there are several recommendations for the Re Use Committee.

First, the Greene building is arguably the finest facility remaining at the Fernald complex, due in large part to the quality of the staff working to assist the residents remaining in their rehabilitative lives, as well as hundreds of other developmentally disabled from surrounding communities. Currently, the Fernald population served is 200 monthly visits; the total DD served is app. 2000. The work performed by the staff at Greene is second to none in terms of care to the residents. However, we are here to discuss the future of the facility.

I is our recommendation the City do all possible to assume control of the Greene facility; hopefully the care of the residents can be outsourced to assist in their lives. Regardless, the facility can be adapted to multiple re use activities, including possibilities such as bowling, gymnasium rentals, dancing, arts & crafts, a learning/teaching center for sports such as baseball, basketball, soccer, lacrosse and golf and other possible options. The building is the largest in use at Fernald at 133,000 Square feet and is in reasonably decent shape for a facility built in app 1953.

Above and beyond Greene, the surveys taken by the P & R Dept showed specific needs for increased needs for Baseball, Basketball, soccer/lacrosse, gym time, golf, among. A community pool was high on the list, but the current usage is for rehab purposes only. We have found there is an existing inground pool located due South of the Greens building, but it has apparently deteriorated badly and cannot be fixed or saved. That area directly abutting Greens should be reserved as a recreation area, with applications to be determined.

Second, the entire property is currently zoned for conservation and recreation. We feel the best re use of

the property is a strong recreation component that would include walking trails, a Waltham Greenway, a soccer/lacrosse complex, a golf component if there is land available, a baseball field(s) complex, as well as a new home for the Waltham Park and Recreation Dept.

The discussions have also included items such as skateboard parks, disc frisbee, golf driving ranges and baseball schools/hitting cages. It is our committee's opinion and that of the P & R Dept the North side of Waltham is badly underserved by passive and active recreation activities and a commitment to that community is important to the City of Waltham. By development of recreation themed activities, it would limit development and growth of heavy traffic usage activity, such as major business or housing development. There can be some economic component via baseball academies, gymnasium rentals, golf schools, driving ranges, etc.

Third, there is a golf component. I presented several formats from a 18 hole complex to a 9 hole pitch and putt with a driving range/golf school component. We feel there is room for a golf component; one which benefits Waltham with open space, golf school and driving range opportunities, and a teaching school to benefit Waltham residents specifically.

Lastly, it is our Committee's recommendation for full support of a recreation facility as comprehensive as possible, for it will be the cornerstone of the future use of the Fernald property, the gateway to Waltham from the East and could be the base of recreation related activities for the citizens of Waltham, especially those of the North side.

The cemetery usage was also delegated to this committee. We heard from several parties, specifically 2 councilors. At this time, the cemetery committee is asking for 40 acres, contiguous or not. It has been reviewed by Sasaki and there are several options, all of which include 20-30 acres of cemetery land.

There also was an option to review Wind and Solar Power. The wind information was reviewed as to placing a turbine atop Owl Hill. Studies showed a wind factor too low to be feasible. The payback time was some 98 years. We also did some simple math on Solar power, using the south side of Owl Hill as the base area and the payback time was only 90+ years. I suggest if there is a desire to study the issue further, a professional firm be retained to do a feasibility study.

I have been pleased and honored to have served as the Chairman of this subcommittee and thank you for all your time in listening to these recommendations.

Respectfully submitted,

Charles Brophy

#### Report of the Subcommittee on Re-use Intake

Committee Members:

Joe Vizard, Chairman

Mayor Jeannette McCarthy

Councilor Thomas Curtin

Nick Tsaparlis

Dana Harrell

Meetings Held:

July 08, 2009 –7 PM at City Hall (Council Chamber, 2<sup>nd</sup> floor)

July 22, 2009 –6 PM at City Hall (Council Chamber, 2<sup>nd</sup> floor)

August 5, 2009 –6 PM at City Hall (Council Chamber, 2<sup>nd</sup> floor)

August 12, 2009 -6 PM at City Hall (Council Chamber, 2<sup>nd</sup> floor)

August 19, 2009 –6 PM at City Hall (Council Chamber, 2<sup>nd</sup> floor)

August 26, 2009 –6 PM at City Hall (Council Chamber, 2<sup>nd</sup> floor)

August 31, 2009 - 6 PM at City Hall (Council Chamber, 2nd floor)

September 2, 2009 –6 PM at City Hall (Council Chamber, 2<sup>nd</sup> floor)

### Overview

The Subcommittee on Re-use Intake held several meetings where we began the process of evaluating ideas that had been submitted to the Re-use Committee and soliciting new ideas from the public. We received written proposals and invited people to testify before our subcommittee. Along with this report committee members will receive copies of the written proposals our committee received and written copies of testimony provided to the subcommittee. Subcommittee meetings where the public testified continue to be run on WCAC and you can consult their website for future airings. We were assisted in this process by Sasaki Associates. Sasaki conducted a topographical study of the parcel and presented the committee with their analysis. Sasaki was then asked to locate on a map several of the proposals which the committee felt were most compelling. Four renditions of these maps are included with this report. We are presenting these maps as options for the full committee and not as a recommendation of this subcommittee. After listening to individuals from the city of Waltham, we are prepared to issue the following recommendations.

#### Recommendations

- Portions of the Fernald land be used for recreation and open space including but not limited to areas around the property near existing neighborhoods where green space can serve as a buffer between residents and potential development.
  - o Recreation- fields, golf, farming, community gardens, walking trails, open space.
- A portion of the Fernald land be used for a new city cemetery.
- Any development of land not used for recreation or open space is developed in a manner consistent with what currently exists on site which is either health care related or residential.
- Any new development would be low impact and low density in order to avoid traffic and other adverse impacts for the residents of Waltham.
- The city of Waltham will reserve its right of first refusal to purchase the entire parcel or any subdivision thereof.
- The subcommittee does not make a recommendation with regard to zoning as it is outside our purview.

## Issues remaining unresolved

- The subcommittee has asked Sasaki to conduct a study taking into account what an economically viable housing development would be on this site.
  - o This report will be presented to the full committee.
- It was felt that only after this study is undertaken could there be a real discussion of the housing uses on site.
- DECAM was asked to conduct an appraisal of the value of the property for presentation to the full committee.

For the committee,

Chairman

Chairman