



CITY OF CAMBRIDGE
INTEROFFICE CORRESPONDENCE

To Robert Healy
City Manager

Date November 6, 1990

From Joseph J. Cellucci
Commissioner of Inspectional Services

Reference

Subject Council Order #40 (10-1-90)

In response to the memo dated October 4, 1990, and Council Order #40, 10-1-90, reference clean air standards, the Inspectional Services Department is in receipt of two letters, one dated July 17, 1990, and submitted to the Cambridge Health Department, and the other dated October 12, 1990, which was submitted to Mr. Paul DiPietro of the Metropolitan District Mission.

Both letters were submitted by Cedwyn Morgan, Senior Geologist of Hydro Environmental Technologies, Inc. in reference to measures taken by them on behalf of Mobil Oil Corporation to engage in remediation of contaminated ground water and soils at the above referenced site. Copies of both letters are attached for your convenience, and should serve to answer the Council's concern about the procedures that are being taken to eliminate the problem and ensure clean air standards are being met.

HYDR -
ENVIR NMENTAL
TECHN OLOGIES, INC.

54 Nonset Path Acton, MA 01720 • 508 263 4044 • Fax 508 635-0980
P.O. Box 9127 Albany, NY 12209 • 518 768-2021

October 12, 1990

Mr. Paul DiPietro
Metropolitan District Commission (MDC)
20 Somerset Street
Boston, Massachusetts 02108

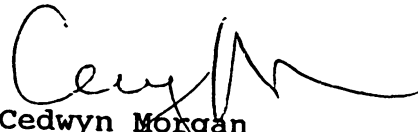
RE: Mobil Service Station 01-181
Alewife Brook Parkway and Massachusetts Avenue
Cambridge, Massachusetts

Dear Mr. DiPietro:

Hydro-Environmental Technologies, Inc., (HETI) acting on behalf of Mobil Oil Corporation, will be performing remediation of contaminated ground water and soils at the above-referenced site. This project has been described in previous correspondence. The purpose of this letter is to notify you that the a system test is scheduled for October 18, 1990, and that full-scale operations are expected to begin on October 19, 1990. By copy of this letter, HETI notifies or confirms our verbal notifications to the following individuals/agencies:

Mr. David Tordoff, EPA
Mr. Roger Chu, DEP
Mr. Kevin Doherty, Cambridge Department of Health
Mr. Mike Nicoloro, Cambridge Inspectional Services
Capt. A. LoConte, MDC, Middlesex Fells Division

Sincerely,
HYDRO-ENVIRONMENTAL TECHNOLOGIES, INC.


Cedwyn Morgan
Senior Geologist

cc: Mr. E.J. Perez, Mobil Oil Corporation
Mr. Paul Cole, Esq., Mobil Oil Corporation
Mr. Robert Gault, Esq., Mintz Levin

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July 17, 1990

Cambridge Health Department
1493 Cambridge Street
Cambridge, Massachusetts 02139 499-61000

RE: Short Term Measure
Mobil Service Station # 01-181
DEP Case # 3-1591
Massachusetts Avenue and Alewife Brook Parkway
Cambridge, Massachusetts

To Whom it May Concern:

Hydro-Environmental Technologies, Inc., acting on behalf of Mobil Oil Corporation, will be performing a Short Term Measure, as defined by Section 40.542 of 310 CMR 40, the Massachusetts Contingency Plan (MCP). This letter fulfills the notification requirements of Section 40.542(6) of the MCP. The Short Term Measure is being conducted under the supervision of the Massachusetts Department of Environmental Protection (DEP).

The objectives of the Short Term Measure are to collect and treat separate-phase gasoline floating on the water table, ground water contaminated by dissolved gasoline, and subsurface vapors contaminated by gasoline. The remediation system which will fulfill these objectives contains the following items:

1. A recovery (interceptor) trench approximately 11 feet deep was constructed around a portion of the site perimeter. The trench was partially backfilled with peastone, to allow more effective ground water recovery, and then backfilled to surface grade. The trench was installed along the approximate northern half of the western site perimeter (along Alewife Brook Parkway) and almost the entire northern site perimeter.
2. Two recovery wells were installed in the trench. A recovery well is located at the approximate midpoint of each leg of the trench. The well located along the northern site boundary contains a two-pump recovery system. One pump will pump contaminated ground water, and the other pump will pump phase-separated petroleum, should any appear in the well. A control probe in the well will prevent the water pump from pumping petroleum. The recovery well along the western site perimeter contains a ground water recovery pump only. Phase-separated petroleum has never been observed in this portion of the site.

3. The petroleum pump will pump petroleum into a petroleum recovery tank. The tank is equipped with a tank-full sensor which will shut down the system if the tank becomes full, preventing overfilling.
4. The ground water recovery pumps will pump water into an air stripping tower. Air forced up through the tower by a blower will remove the dissolve contaminants from the water. A pressure sensor in the tower will shut off the pumps in the event of blower failure, preventing untreated water from being discharged.
5. The air exiting the air stripping tower will be funnelled into a catalytic oxidation unit. This propane-fired device will burn the hydrocarbons in the air stream.
6. A vacuum blower will remove hydrocarbon-contaminated vapors from the recovery trench. These vapors will also be routed into the catalytic oxidation unit. The catalytic oxidation system is equipped with a flame arrestor and several temperature sensors which will shut down the system if temperatures increase above safe levels. These sensors are interconnected with the controls for the pumps and blowers, and all of these units will shut off if one is not functioning correctly.
7. The base of the air stripper and the pump controls and air stripper blower are housed in a shed. The shed and the catalytic unit are surrounded by a chain link fence.

It is not possible at this time to accurately estimate the duration of the Short Term Measure. It is anticipated that the system will be in operation for several years.

Please contact me if you have any questions.

Sincerely,
HYDRO-ENVIRONMENTAL TECHNOLOGIES, INC.


Cedwyn Morgan
Senior Geologist

cc: Mr. R. Chu, DEP
Mr. E. Perez, Mobil Oil Corporation
Mr. R. Gault, Esq., Mintz Levin
Mr. Paul Cole, Esq., Mobil Oil Corporation



CITY OF CAMBRIDGE

CAMBRIDGE, MASSACHUSETTS 02139
TEL. 498-9011

EXECUTIVE DEPARTMENT
ROBERT W. HEALY
City Manager

RICHARD C. ROSSI
Deputy City Manager

November 19, 1990

To The Honorable, The City Council:

In response to Awaiting Report Item No. 72, regarding clean air standard at the gas station at the corner of Massachusetts Avenue and Alewife Brook Parkway, please find attached a report from Joseph Cellucci, Commissioner of Inspectional Services, as well as two letters from Hydro Environmental Technologies in reference to measures taken on behalf of Mobil Oil Corporation.

Very truly yours,

Robert W. Healy
City Manager

RWH/mev
enclosure

Agenda # 5

S-1152

Awaiting Report Item Number 72, regarding
cleaning air standards at the gas station
at the corner of Mass. Ave. and Alewife
Brook Parkway.

In City Council,

November 19, 1990

Placed on file