

late order Born
all

8-24

that CM be - - - - request from
appropriate departments, including
Public Health Department, an
assessment of what steps city
should take to ensure safety of
our youth + area residents given new
information contained in communication
from Geo Insights, licensed Site
Professionals to US EPA regarding
asbestos sampling at WR Grace,
Russell Field, MBTA property in
North Cambridge.

VV8

Banker + Tradesman - March 19, 2001

Cambridge

MARKET STATISTICS THROUGH DECEMBER
 YTD 1999 YTD 2000
 Number of Sales 1,317 1,102
 Median Price \$280,000 \$325,112

THIS WEEK'S FILING DATES
 Registry of Deeds: 2/26/01-2/27/01
 Land Court: 2/5/01-2/9/01

► REAL ESTATE SALES

- 1-7 ARLINGTON ST U:5-6**\$300,000
 B: Kristin Stoklosa & Kevin Nguyen
 S: Christa T Jones
 Mtg: Harvard University CU \$240,000
 Use: 2 Bdrm Condo
- 6 ASHTON PL**\$980,000
 B: Cambridge Afford Hsng
 S: L William Sutherland, Tr for Astro RT
 Mtg: Cambridge Tr Co \$650,000
 Mtg2: Cambridge, City of \$376,500
 Use: 4-8 Unit-Apt, Lot: 4388sf
- 134 CAMBRIDGE ST**\$10,000,000
 B: One First St Prop LLC
 S: 134 Cambridge St LLC
- 146-160 CAMBRIDGE ST**\$1,500,000
 B: One 1st St Prop LLC
 S: Sultana RT Inc
- 6 CANAL PARK U:206**\$357,500
 Thomas Graves Landin Condo
 B: Phil Hansel
 S: Robert J Mccarthy & M Jean Mccarthy
 Mtg: Old Kent Mtg Co \$275,000
 Use: 1 Bdrm Condo
- 18 HOLLIS ST U:2**\$535,000
 B: Michael D Jacobson & Gina R Kuperberg
 S: Martin W Hill, Tr for Captiva T
 Mtg: First Financial Inc \$385,000
 Use: Condo
- 18 JAY ST**\$292,000
 B: Justin Bernold
 S: Leonard Izsak
 Mtg: Peoples Mortgage Corp \$233,600
 Mtg2: Peoples Mortgage Corp \$58,400
 Use: 2 Bdrm Townhouse, Lot: 938sf
- 19 LANCASTER ST**\$1,850,000
 B: David L Bowen & Wenken Ling
 S: Robert J Demillo & Katharine K Willrich
 Mtg: GMAC Mtg Co of PA \$850,000
 Use: 4 Bdrm Other, Lot: 4249sf
- 33 PARKER ST U:3**\$355,000
 B: Cynthia R Weinstein, Tr for Weinstein FT
 S: David L Bowen
 Use: 2 Bdrm Condo
- 177 PEMBERTON ST U:14**\$463,000
 B: Charles E Dennis & Lisa D Dennis
 S: Peter Woods & Kristina Wojcik
 Mtg: Old Colony Mtg Corp \$313,000
 Use: Condo
- 29 RINDGFIELD ST U:1**\$330,000
 B: Dirk H Renick & Naoko S Renick
 S: Martin W Hill, Tr for Captiva T
 Mtg: PHH US Mortgage Corp \$264,000
 Use: Condo

- 10 ROGERS ST U:501**\$503,500
 River Court Condo
 B: Karen M Sullivan
 S: Cynthia A Brox
 Use: 2 Bdrm Condo
- TECHNOLOGY SQ U:MULTI**\$278,785,412
 B: MIT
 S: Technology Sq LLC
 Use: Condo
- 54-58 TROWBRIDGE ST U:F**\$643,000
 Trowbridge Court Condo
 B: Nathaniel A Brown & Wilma L Brown
 S: Orlando Patterson & Anita Patterson
 Mtg: DeWolfe Mtg Svcs Inc \$343,000
 Use: Condo
- MORTGAGES**
- 60 BRATTLE ST**\$1,007,037
 Anna Berger T from Orr NT
- 20 CHESTNUT ST U:48**\$213,000
 Tarek E Fadel from Home Finance Assn
- 160 CHILTON ST**\$90,000
 David Bee from Chilton RT
- 11-13 CLEVELAND ST U:11**\$181,500
 Sally B Davis from First Financial Inc
- 136 COLUMBIA ST**\$265,500
 Charles W Henbry from ABN Amro Mtg Group
- 56 CREIGHTON ST**\$400,000
 56 Creighton St RT from Cambridge Svgs Bk
 Mtg2: Cambridge Svgs Bk \$75,000
- 28 FAIRMONT AVE**\$287,000
 Richard W Drost from Mortgage Elec Reg Sys
- 33 FENNO ST**\$475,000
 Kendall Green Luce from Option One Mtg Corp
- 95 FOSTER ST**\$175,000
 Bonnie Shershow from Washington Mutual Hm
- 423 FRANKLIN ST U:2**\$164,500
 Robert E Petersen from DeWolfe Mtg Svcs Inc
 Mtg2: DeWolfe Mtg Svcs Inc \$161,000
- 230 GARDEN ST**\$70,000
 Joyce London-alexander from Hanscomb FCU
- 30-32 GRISWOLD ST**\$330,000
 Carolyn Stevens from Washington Mutual Bk
- 55 HUBBARD AVE U:55**\$163,000
 Russell B Fearing from Chase Manhattan Bk
- 118 KINNAIRD ST U:1**\$50,000
 Jean Polgar from Fleet Natl Bk
- 1105 MASSACHUSETTS AVE U:12H**\$125,000
 June E Levitt from Maritime MortgageCorp
- 189-191 MOUNT AUBURN ST**\$75,000
 Richard W Monagle from Patrick Morris
- 77 PUTNAM AVE U:1**\$200,000
 Steven P Yang from HSBC Mtg Co
- 14-16 RICHARD AVE**\$600,000
 Victor R Himber from Washington Mutual Hm
- 10 ROGERS ST U:PH2**\$700,000
 Paul A Glazer from Chase Manhattan Mtg
- 152-154 VASSAL LN**\$644,000
 Scott Kenton from Washington Mutual Bk
- 29 WENDELL ST U:1**\$250,000
 Alexandra B Vandusen from Midamerica Bk
- NO STREET GIVEN**\$450,000
 Daniel P Toomey from Pacific Guar Mtg Corp

Boston
 more
 money

Ed. VC
 bottom 30% schools.

Children's Agenda.

Money attracts money

47% free

collab. w/
 business -
 no elected
 off or
 admin.

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GeoInsight, Inc.
75 Gilcrest Road, Suite 210
Londonderry, NH 03053-3564
TEL 603-434-3116
FAX 603-432-2445

GeoInsight, Inc.
319 Littleton Road, Suite 100
Westford, MA 01886
TEL 978-692-1114
FAX 978-692-1115

2001 MAR 15 P 2:00
OFFICE OF THE CITY CLERK
CAMBRIDGE, MASSACHUSETTS

March 13, 2001

Mary Ellen Stanton
United States Environmental Protection Agency
One Congress Street, Suite 1100
Boston, Massachusetts 02114-2023

Post-it® Fax Note	7671	Date	3/15	# of pages	4
To	Joe Joseph	From	[Signature]		
Co./Dept.		Co.			
Phone #		Phone #			
Fax #	0178644749	Fax #			

Re: Review of EPA Preliminary Assessment/Site Investigation Report
W.R. Grace Site
Cambridge, Massachusetts

Dear Ms. Stanton:

On behalf of Alewife Neighbors, Inc. (ANI), GeoInsight, Inc. (GeoInsight) reviewed the February 2001 Preliminary Assessment/Site Investigation Report (Report) prepared by Roy F. Weston, Inc. (Weston) for the United States Environmental Protection Agency (USEPA). The objective of the preliminary assessment was to evaluate suspected asbestos impacts in surface soil. The following activities were conducted as part of the preliminary assessment:

- Weston collected 52 grab soil samples from 0 to 3 inches below grade surface (bgs) for asbestos analysis by polarized light microscopy (PLM). Of the 52 soil samples, 39 samples were collected from the W.R. Grace property, 3 samples were collected near the MBTA Alewife Red Line Head House, 5 samples were collected from City of Cambridge property including Russell Field Park, and 5 samples were collected from the vicinity of the One Alewife Center building. Three samples of suspected asbestos-containing material (SACM) were collected from the W.R. Grace property. Samples were not collected from the vicinity of the "Former Ice Cream Factory" on the W.R. Grace property located on the north side of Whittemore Avenue.
- Trace (<1%) concentrations of asbestos were detected in 10 soil samples. These 10 samples were located in the Zone 2 and Zone 4 areas.
- A total of 28 of the samples collected for PLM analysis were analyzed by transmission electron microscopy (TEM). Only one soil sample (COC-01) collected from the City of Cambridge property near the intersection of Harvey Street and the Access Road was analyzed by TEM. Soil samples collected from Russell Field were not analyzed by TEM. Asbestos (mostly chrysotile) was detected in 27 of the 28 samples at concentrations ranging from 0.0002 to 0.0300% by weight. The highest asbestos concentrations detected in soil samples by TEM were to the west of the parking area (samples WRG-05 and WRG-06). Intermediate asbestos concentrations were reported in the soil samples collected from Zone 2 and the

central portion of Zone 4, and the lowest asbestos concentrations were reported in the samples collected from the southern portion of Zone 4 and Zone 5.

- Fragments of suspected asbestos-containing material (SACM) were encountered to the east of the bioremediation beds. Three samples of the SACM were collected for analysis by PLM. The SACM was identified as a concrete-like material with visible fibers; the field description of the material indicated that it was non-friable. Asbestos was reported in each sample at a concentration of 15% by volume.
- A pallet of Zonolite® attic insulation, a W.R. Grace product that is suspected to be asbestos-containing, was observed in one of the Grace buildings.
- Four personal air monitor samples were analyzed for asbestos by phase contrast microscopy (PCM). The analytical results for the PCM samples were not included in the Report. The Report indicated that one of the personal air monitor samples was analyzed by TEM because the PCM analysis indicated 0.068 fibers/cc. The text indicated that asbestos was not detected by the TEM analysis, but the TEM analytical results for this sample were not included in the Report. The Report did not include information regarding the type of air monitor or filters used, the air sampling flow rate, or the air sampling duration.
- Five separate soil samples were collected from the bioremediation beds for analysis of SVOCs, PCBs, and TPH. TPH concentrations ranged from 1,200 mg/kg to 2,040 mg/kg, PCBs (Aroclor-1254) were detected at concentrations ranging from 0.046 mg/kg to 0.26 mg/kg, and SVOCs were detected, primarily naphthalene.

Based upon GeoInsight's review of the Report, we provide the following comments:

- Weston collected grab soil samples from 0 to 3 inches bgs for asbestos analysis, and trace asbestos was detected in soil samples collected from zones 2 and 4. However, in most of the samples collected from Zones 2 and 4 by H&A in which asbestos was previously detected, asbestos was detected in the S-2 soil samples, which were collected from 0.5 to 4 feet bgs. The Weston soil samples were not collected at sufficient depths to evaluate the asbestos detected in the H&A samples.
- It does not appear that soil samples were collected below the root structures in the upper soil horizon, except for the five samples collected near the One Alewife Center building. It is our understanding that sampling protocols agreed to for the preliminary assessment included collecting soil samples from below the root mat.
- A comparison of the PLM and TEM analytical results indicate that the PLM method yielded false negative results (i.e., asbestos was confirmed to be present using the TEM method in samples that were not identified as containing asbestos via PLM).
- Soil samples collected from Russell Field were analyzed for asbestos using only the PLM methodology; the samples were not analyzed by TEM. Because of the PLM false negatives and the potential for direct contact with surficial soil is much greater at Russell Field, soil samples that were collected from Russell Field for analysis of asbestos by PLM methodology should be analyzed by TEM to evaluate asbestos in this area.
- The preliminary investigation did not characterize historical fill, located below the surficial

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soil. Previous investigations defined surficial soil as 0 to 6 inches bgs, as opposed to 0 to 3 inches bgs in this investigation. Therefore, it is difficult to compare previous data collected from surficial soil samples with the sampling results obtained during this investigation.

- The preliminary assessment did not evaluate the presence of asbestos in soil located greater than 3 inches bgs. The results of historical sampling indicated the presence of asbestos in subsurface soil at the property. The Report did not indicate why subsurface soil was not evaluated in the preliminary assessment. The presence of asbestos in subsurface soil may represent a potential health risk if this soil is disturbed or exposed in the future.
- The three SACM samples contained 15% asbestos (chrysotile) and were located in Zone 4. Suspected asbestos-containing material had not been previously identified during characterization activities at the Site. The observations made during EPA's Preliminary Assessment indicate the need for a more comprehensive survey of the Site for SACM located at the ground surface. In addition, a management plan should be developed for handling and disposing of this material.
- The asbestos analyses in Table 1, which appear to be the TEM results, are reported in "% by weight," instead of % by volume, as historical asbestos analyses for this site have been reported. It is therefore difficult to compare EPA's results to historical data. Asbestos is usually reported as fibers per volume (% volume), rather than mass per volume because conversion factors range widely to convert asbestos fibers to mass. Asbestos (mostly chrysotile) was detected in 96% of the TEM samples at concentrations less than 1%. However, since the results are presented in % by weight, the asbestos % by volume may be different. The laboratory results should be corrected or the original TEM analytical data should be reviewed to make a direct comparison to the % by volume analyses.
- The specific weather conditions (e.g. wind speed, wind direction) on the sampling dates were not included in the report, and therefore it is difficult to evaluate the results of the personal air monitor sampling. In addition, soil moisture content of the soil samples was not recorded.
- The results of the TEM analyses indicate that asbestos was consistently detected in surficial soil at the Site. The primary route for exposure to asbestos is through inhalation. The Report does not provide a discussion of how the TEM data for surficial soil were evaluated with regard to possible exposure via inhalation. It is our understanding that, based upon current risk assessment data, the unit risk for residential and sensitive population exposure to asbestos is very low and any amount of asbestos fibers present an unacceptable risk to residential receptors and children. Ambient air monitoring may be required to better characterize the potential mobility of asbestos identified in surface soil.
- Although Page 4 of the Removal Preliminary Assessment indicated that asbestos concentrations at the W.R. Grace property ranged up to 12%, a split soil sample (AB-6, 6'-8' bgs) collected by GeoInsight in May 1998 contained asbestos at a concentration of 20%.
- The soil sample descriptions from Weston seem to consistently indicate more gravel in the soil samples than the soil sample descriptions completed by the analytical laboratory.
- In the Asbestos Bulk Sample Analysis Table, sample SACM-01 is mislabeled as WRG-01.
- The EPA Press Release indicates a maximum asbestos concentration of 0.02% by weight; the actual maximum asbestos concentration is 0.03% by weight (sample WRG-06).

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GeoInsight, INC.

- The Description of Sampling Conducted section in the Report (page 4) indicates that the samples collected from the W.R. Grace property were labeled WRG-01 through WRG-38. The actual samples collected from the W.R. Grace property were WRG-01 through WRG-39.

SUMMARY

Asbestos was consistently detected in shallow soil samples collected from the W.R. Grace property by TEM methodology and asbestos was detected by TEM in soil samples in which asbestos was not detected by PLM. Because of the false negatives in the PLM analysis, the presence or absence of asbestos in Russell Field soil samples cannot be evaluated since the soil samples collected from Russell Field were analyzed only by PLM. Due to the low unit risk for residential and sensitive populations, any amount of asbestos fibers at Russell Field or in surficial soil near the residences may present an unacceptable risk. The Report did not include an evaluation of the implications or risk from asbestos consistently detected in surficial soil samples.

If you have any questions on the information summarized in this letter, please do not hesitate to contact either of us at (978) 692-1114.

Very truly yours,

Kevin D. Trainer, C.P.G.
Senior Project Geologist

Michael J. Webster, P.G., L.S.P.
Senior Associate

cc: Gretchen von Grossmann, ANI
John Bolduc, City of Cambridge
William Beck, Haley & Aldrich
Jack Miano, Massachusetts Department of Environmental Protection
Ira Leighton, Acting Regional Administrator, USEPA

2001 MAR 15 P 2:01
OFFICE OF THE CITY CLERK
CAMBRIDGE, MASSACHUSETTS



City of Cambridge

O-24.

IN CITY COUNCIL

March 19, 2001

COUNCILLOR BORN
COUNCILLOR DAVIS
COUNCILLOR DECKER
MAYOR GALLUCCIO
VICE MAYOR MAHER
COUNCILLOR REEVES
COUNCILLOR SULLIVAN
COUNCILLOR TOOMEY

ORDERED: That the City Manager be and hereby is requested to obtain from appropriate departments, including the Public Health Department, an assessment of what steps the city should take to ensure safety of our youth and area residents given new information contained in communication from GEO Insight, licensed site professionals to United States Environmental Protection Agency regarding asbestos sampling at WR Grace, Russell Field, and MBTA property in North Cambridge.

In City Council March 19, 2001.

Adopted by the affirmative vote of eight members.

Attest:- D. Margaret Drury, City Clerk.

A true copy;

ATTEST:-

A handwritten signature in cursive script that reads "D. Margaret Drury".

D. Margaret Drury
City Clerk



City of Cambridge

O-24.

IN CITY COUNCIL

March 19, 2001

COUNCILLOR BORN
COUNCILLOR DAVIS
COUNCILLOR DECKER
MAYOR GALLUCCIO
VICE MAYOR MAHER
COUNCILLOR REEVES
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In City Council March 19, 2001.
Adopted by the affirmative vote of eight members.
Attest:- D. Margaret Drury, City Clerk.

A true copy;

ATTEST:- *D. Margaret Drury*

D. Margaret Drury
City Clerk

72cm

Order #24

Assessment of what steps the city should take to ensure safety of our youth and area residents regarding asbestos sampling at WR Grace, Russell Field and MBTA property in North Cambridge.

Councillors Born, Davis, Decker, Mayor Galluccio, Vice Mayor Maher and Councillors Reeves, Sullivan and Toomey

In City Council March 19, 2001

ORDER ADOPTED