



City of Cambridge

Consent Comm. #16

IN CITY COUNCIL

October 19, 1998

COUNCILLOR TRIANTAFILLOU

ORDERED: That the City Manager be and hereby is requested to communicate to the Department of Environmental Protection the City Council's desire for the asbestos studies at Alewife to be as comprehensive as possible.

In City Council October 19, 1998.

Adopted by the affirmative vote of nine members.

Attest:- D. Margaret Drury, City Clerk.

A true copy;

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

ATTEST:-

D. Margaret Drury
City Clerk

DEAR MADAM CITY CLERK -

COULD YOU PLEASE SUBMIT THE
FOLLOWING COMMUNICATION AS
A ~~DE~~ CONSENT COMMUNICATION
ITEM TO THE OCTOBER 19th
AGENDA. THANK YOU.

Alewife Study Group
C/O Joseph Joseph
20 Kassul Park
Cambridge, MA
02140

October 6, 1998

David B. Struhs
Commissioner
Commonwealth of Massachusetts
Executive Office of Environmental Affairs
Department of Environmental Protection
Metropolitan Boston - Northeast Regional Office
One Winter Street
Boston, Massachusetts 02108

Re: Cambridge
62 Whittemore Ave.
RTN 3-17014
Associated RTN 3-277
Asbestos Sampling Plan

1998 OCT 15 P 1:14
OFFICE OF THE CITY CLERK
CAMBRIDGE, MASSACHUSETTS

Dear Commissioner Struhs:

We are writing to you to thank you for your support of the Public Meeting held last Thursday at the W.R. Grace cafeteria. The meeting was productive and was a good first step in discussing numerous issues relating to the 62 Whittemore Avenue site and specifically the issue of the recently reported release of asbestos.

As you know, Grace has drafted a sampling plan for the site to further characterize asbestos contamination. In this regard, we have several observations and recommendations which we would like to share with you.

- 1. We concur fully with the DEP that the Asbestos Sampling Plan does not provide sufficient justification to exclude additional sampling in Zone 1. Therefore we would request that Grace be required to revise the plan in consultation with the DEP and the Community so that this deficiency may be properly addressed. Grace's argument that this plan is merely a "snapshot" does not suffice when weighed against the requirements of the MCP, constraints and limitations of TAG resources and the uncertainty of Grace's development plans. Deferring testing in this zone until actual construction plans are made public does not suit the PIP process as it is currently conceived. There is no guarantee that TAG resources will be available when such decisions may be made. Therefore, the asbestos sampling plan issue is best addressed now comprehensively for the entire site.

- 2. All zones should have a spacing of 35' on center as is the case with Zone 4. In particular, Zones 2 and 3 should have a grid spacing similar to Zone 4. Without such a revision, rectangular areas approximating 4,600 square feet (1/12th the area of a football field) may be left unsampled. In general, there is no acceptable justification for segregating these areas by a historical record that is most remarkable in its deficiency. Movement of soils within and off-site has occurred. Since there is no credible account of the transplanted soils within the site, there can be no credible basis for such division. What may be helpful here would be an agreement of objective. The Community has declared its first objective to be an "accurate assessment". It is presumed that this objective is shared by all parties. Therefore, in the absence of conflicting information it should be assumed that all soils though by no means homogenous are significantly admixed and no original areas prevail. Specifically, high levels of asbestos were found in AB-14, located less than 50 ft. north of Zone 2, and in the north end of Russell Field, immediately south of Zone 2. The highest concentrations of asbestos in Russell Field were identified immediately adjacent to Zone 3. Clearly, the grid-sampling plan proposed for Zones 2 and 3 lack foundation and therefore are in need of revision.
- 3. Building #28, referred to as the ice cream factory on the odd-numbered side of Whittemore Avenue, has been eliminated from the map entirely. This building was utilized by both Dewey & Almy and W.R. Grace. Prior to this it may have been utilized as an insecticide manufacturing facility. It is important that the entire site including Building #28 be accounted for and included in the testing protocol. Since it is located on the opposite side of Whittemore Avenue and it abuts residential properties, it should be accounted for properly.
- 4. The boundary line between Alewife Center One and the Kennedy property should be tested. Any property line shared by Grace and a residential abutter should be tested.
- 5. The Alewife Study Group recommends that points 2 through 4 of the communication sent by the DEP to Grace (September 3, 1998) be included. Determination of actual and potential migration pathways should be a manifest feature of the Plan in fulfilling the requirements of the MCP. The lack of any thorough discussion and/or justification for the grid plan and the absence of a full public discussion specific to the sampling analysis methodology create unnecessary uncertainties.
- 6. The following former test pit locations taken from the boring logs submitted originally with Volume 1 of the *Environmental Data Report* should be re-utilized as sampling locations for asbestos testing. In each case, descriptive language referring to "trashy fill", "rubble", "trashy layer", etc. has been entered in the descriptive text accompanying the technical entries:

Site 4 - Test Pits 1,7,12,14,16

Site 6 - Test Pit 2

Site 7 - Test Pit 4
Test Pit 301
Test Pit 308

- 7. Any and all sites known to contain fill or other excavate emanating originally from this site should be declared. All such locations known to W.R. Grace should be identified publicly and included in the comment associated with this Plan.
- 8. The entire area subject to risk assessment and the method involved should be made known to the public at a fully advertised meeting prior to such assessment. A 20-day comment period should be required along with the aforementioned public meeting.
- 9. Grace should perform a passive soil gas survey with collectors placed at no less than 50-foot centers sitewide, left in the ground for an appropriate period of time (generally one to two weeks), then recovered and analyzed for volatiles, semi-volatiles, diisopropyl sulfide, binaphthyl sulfone isomers, and the first 30 TICs. The absence of analysis of TICs should be corrected.
- 10. Uniform sampling at regular aligned intervals on a grid, as proposed for most of the Grace site is not optimal for identifying contamination of the type expected. Such sampling is useful only if the site contamination is expected to be uniform. Initial sampling indicates non-uniform contamination of asbestos (perhaps indicative of "dumping", which could create regions of localized contamination adjacent to areas of undetectable levels). At the very least, Grace should be required to provide a discussion of the benefit of utilization of some form of unaligned plan, or combination. Additionally, there needs to be a thoughtful estimation of the smallest size of a region of localized contamination before the sampling interval can be determined. To aid this estimation, we should first characterize expected extent and distribution of contamination. The claim of a "99% confidence interval" is not substantiated by any plan or general discussion submitted thus far. In fact, statistical sampling must be preceded by a demonstrable estimation of confidence interval. Unless Grace can present evidence that contamination has been distributed evenly, we must assume that this is not the case. It would be helpful if Grace would calculate and report the confidence levels for locating contaminated areas of various assumed diameters (e.g., 10-foot, 20-foot, and 30-foot diameter waste piles) using the proposed sampling grid. In addition, configurations other than a square grid (e.g. equilateral triangles) would provide better coverage of the site and increase the potential for discovering such contaminated areas. The current sampling plan ignores known contamination and makes unstated assumptions which could later invalidate the entire test as insufficient.
- 11. Grace has proposed to analyze all samples using polarized light microscopy (PLM) and confirm the results of 5% of the samples taken (about 21 samples out of more than 400) using transmission electron microscopy (TEM). TEM analyses for asbestos are considerably more sensitive than PLM and TEM has much lower detection levels and can identify smaller asbestos fibers. Grace contends that the

fibers too small to be detected by PLM are non-toxic, and the sensitivity of PLM to larger fibers is sufficient for the evaluation of potential health risks at the site, so PLM is an adequate analytic method. However, Grace has provided no evidence of the alleged non-toxicity of small asbestos fibers, nor has Grace delineated a risk assessment protocol which would indicate that the 1% detection level of PLM is sensitive enough to be useful in risk evaluation. If the soils at the site are to be disturbed, it is imperative that the neighbors understand the asbestos exposure to which they may be subject, even if the fiber size is small and the asbestos concentrations in soil are less than 1%. Therefore, the neighbors would like to see a greater number of samples (a minimum of 20%) of the total samples analyzed using TEM.

- 12. Grace should clearly list all assumptions used in justifying the grid spacing of the sampling plan. The high degree of variability in contamination levels between adjacent boring locations from the previous test makes suspect an assumption of smooth distribution of contamination. Grace should outline the inferences that can be drawn from data obtained using uniform grid sampling, and the statistical confidence level of identifying contamination based on their assumptions. Additionally, since the proposed plan is subject to systematic errors, it should be compared with other (e.g. randomized or unaligned) sampling plans for robustness in case the assumptions are later found to be wrong, and a justification of the final proposed method should be made before testing begins.
- 13. Grace should formally revise and update its historical description of the site. In a January 13, 1998 letter to the DEP the concluding paragraph states:

"Grace has no information regarding a release or threat of release of asbestos in the area occupied by buildings 11 and 12."

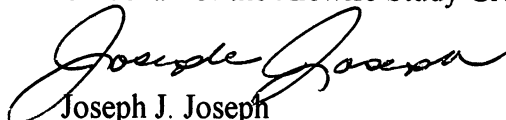
This statement is inaccurate, as is the general description of conditions regarding site contamination. It would be both logical and preferable for Grace to complete this before implementation of the Plan since it is purportedly based upon Site history.

- 14. It has come to the attention of the Alewife Study Group that a meeting preliminary to the Thursday Sampling Plan presentation meeting was held without official notification to either ANI or ASG. Since both ASG and ANI are substantially involved in monitoring compliance with the MCP, it is incumbent upon the PRP (Principal Responsible Party) to invite representatives from these and any other interested groups to attend. The proper method for this is to contact the chairs of all interested organizations. In so doing, the PRP fulfills its obligation of provision for Public Involvement and it allows these groups to fulfill their obligation of community outreach and communication.
- 15. ASG is encouraged by Grace's willingness to implement a program for air sampling and analysis. We would prefer that TEM be utilized rather than PLM.

Additionally, provision for public presentation and discussion of Grace's air monitoring program with a public comment opportunity should be provided for.

If you have any questions or comments concerning the issues raised here, please contact us. Once again thank you for your attention to this matter.

On behalf of the Alewife Study Group,



Joseph J. Joseph
20 Kassul Park
Cambridge, MA 02140

Cc Cambridge City Council
Wesley Stimpson, LSP
Amy Church
John Devillars, EPA
John Bolduc
Sam Lipsom
Jack Miano, DEP
Patricia Donahue, DEP
U.S. Senator Edward M. Kennedy
U.S. Senator John Kerry
U.S. Representative Joseph Kennedy
State Senator Lois Pines
State Representative Alice Wolf
State Representative James Marzilli
State Senator Warren Tolman
State Senator Robert Havern
Mayor Michael Capuano

Consent Communication #16

534CM

A communication was received from Joseph J. Joseph, on behalf of the Alewife Study Group, relative to the 62 Whittemore Avenue site and the issue of the recently reported release of asbestos.

In City Council October 19, 1998

Referred to the City Manager *for response.*

ORDER ADOPTED