



CITY OF CAMBRIDGE • EXECUTIVE DEPARTMENT

Robert W. Healy, City Manager

Richard C. Rossi, Deputy City Manager

December 4, 2000

To The Honorable, The City Council:

In response to Awaiting Report Item No. 00-117, regarding a report on the air quality issues at the construction project at 364 Third Street, Chief Public Health Officer Harold Cox and Director of Environmental Health Sam Lipson report the following:

Regulatory History of Site

In late July, 2000 excavation of soils, heavily contaminated with petroleum waste material, began at the former Commonwealth Energy property on Third Street between Kendall Square and Binney Street. This large and contaminated site was the subject of much discussion in 1998 and 1999 between the Planning Board, the Community Development Department, the Public Health Department, the East Cambridge Planning Committee, the Conservation Commission, and other interested parties. Several offices of the State of Massachusetts have also expressed interest in this site as a prime example of the potential civic and economic benefits of Brownfield (urban hazardous waste site) rehabilitation. Before work began earlier this year the developers were obliged to submit plans for soil removal, stabilization, and clean-up to all local parties participating in the DEP-mandated Public Involvement Process (PIP). The original plans submitted to PIP participants by the developers were eventually altered to address some significant concerns, many resulting in a reduction of underground parking garage space originally proposed.

Odor Concerns

The limited portion of the property that has produced these strong odors lies within the northern third of the parcel nearer to Linsky Way. Other excavation work on the property (for garages) is not a major contributor to the odors that have been reported. Removal of buried foundations, storage structures and other debris necessary for auguring and stabilizing the contaminated soil is the activity primarily responsible for these odors and is difficult to characterize ahead of time. While some structures are easily removed and do not contain large



2000 Things 2 Do in 2000

amounts of the liquid waste-product, others can crumble during removal and may act as vessels to hold unexpectedly large amounts of this noxious mix. Once debris is eliminated the mixers can seal the chemicals from further release and can harmlessly capture large amounts of odorous chemicals while accomplishing this feat. This approach to safely sealing the worst material underground within a concrete-like mixture was devised in response to City and State criticisms that the sheer volume of highly contaminated soils was so onerous that the resulting exposure from moving this material off-site via Cambridge neighborhoods was not an acceptable option.

Negotiated Agreements

A variety of agreements were written into documents submitted to the DEP intended to guarantee that only safe concentrations of chemicals would be released during work on the site. Provisions were established to share hourly, daily, and weekly data with the public via the Public Health Department, a public repository, and an on-site information kiosk. Conservative trigger levels were set several times lower than OSHA levels. These "action levels" required all excavation work to be immediately halted once exceeded. Techniques intended to trap airborne chemicals during the mixing and stabilization of the dirtiest soil were adopted to limit the overall exposures. Measures were written into the site clean-up plan designed to suppress odors from the excavated soils by use of special foaming agents and sprinklers.

Complaints Received

Despite these efforts to limited the public impact of the excavation work, odors have escaped the site from the beginning of debris excavation in mid-summer 2000. The odors detected on and off the site have not resulted in a threat to the health of even the closest and most susceptible individuals (as determined by the DEP-mandated risk study that was commissioned in October, 2000), but this ongoing release has certainly had an impact on immediate comfort and quality-of-life for many individuals who do not have the option of leaving the vicinity during work hours. Furthermore, several nearby residents (mostly residing at Worthington Place) have encountered offensive odors from the site on a regular basis since at least mid-October. The Public Health Department had already registered concerns among several commercial tenants in buildings adjacent to this excavation on several occasions in August and September. As a result, efforts to improve soil-handling and odor-suppression methods were undertaken by the developer as proscribed by Public Health Department. Discussions between Cambridge Research Park, LLC and property managers, affected businesses and others near the site have been ongoing since the first concerns were registered.

Odors Worse; DEP Orders Corrective Action

In mid-October there was a notable increase in the intensity of odors coming from the site on several occasions. As they had earlier in the season, the individuals responsible for limiting airborne releases of the petroleum waste products did suspend work on the site on several occasions. Repeated incidences of noxious odors above simple annoyance levels were reported to the Public Health Department and the Massachusetts Department of Environmental Protection (DEP). Consultation between DEP and Public Health staff did allow the detailed history of odor releases to be shared to support further regulatory efforts. In the days that followed the escalating number of odor complaints Public Health staff did inspect the site with a consulting engineer and found the levels of airborne chemicals to be extremely uncomfortable to the nose and eyes. At the same time the DEP compelled Cambridge Research Park, LLC to detail and implement several activities intended to carefully estimate and systematically limit the degree of risk to public health caused by these airborne release of chemicals. This DEP Notice of Noncompliance was detailed and strict and addressed all of the most pressing health concerns present at the site:

- a need to characterize the health risk posed by the levels of chemicals release into the air at this site on the worst days (extrapolated over one year)
- a reexamination of the chemicals being tracked to insure the no major hazards were being underestimated or ignored altogether
- a plan outlining every feasible measure available to prevent odors from escaping the perimeter of the property during excavation, and
- a justification of the "action levels" being used at the perimeter as sufficiently safe for the public.

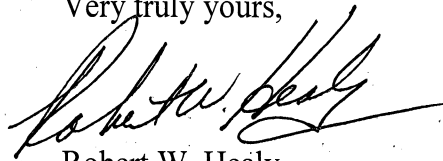
Current Status of Site

The responsible party, Cambridge Research Park, LLC has indicated that this work is at least 80% complete as of this week. There are thought to be several (3-4) remaining submerged structures that will need to be removed in early January. Odor-generating conditions appear to have improved and should remain within reason until this final removal is carried out. The full array of odor-controlling efforts to be used at that time is discussed in one the reports recently submitted to the DEP and the Cambridge Public Health Department. The responsible party has encouraged all individuals and companies that are being affected by odors from the site to notify them immediately. Once serious concerns are recorded all odor-generating excavation activities would be halted once a complaint was received and any of several mitigation methods be implemented before work recommenced. In the mean time, the Cambridge Public Health

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Department will continue to act as a representative for all residents and businesses being impacted by this work.

Very truly yours,

A handwritten signature in black ink, appearing to read "Robert W. Healy", with a stylized flourish at the end.

Robert W. Healy
City Manager

RWH/mec

Communication from Robert W. Healy,
City Manager relative to Awaiting
Report Item Number 00-117, regarding a
report on the air quality issues at
the construction project at 364
Third Street.

In City Council December 4, 2000

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City Manager
Coorcraft Public
Hearing with
Health Department
on this condition.
See Order #16