ENVIRONMENTAL ENGINEER'S REPORT

An important duty of the Environmental Engineer is to administer and enforce the "Control of Toxic and Hazardous Materials" bylaw. This bylaw requires local businesses to register their hazardous materials annually with the Board of Health. During 2000, 103 facilities registered their chemical inventories with the Town. Of these facilities, 6 were found to maintain toxic or hazardous materials in excess of the minimum reporting requirements established by the federal Emergency Planning and Community Right to Know Act and were consequently identified as SARA Title III facilities. As part of these duties, I have also completed 108 compliance inspections in order to verify chemical inventories and to review on site storage and handling practices.

Additional related activities have included monitoring the assessment and remediation of local contamination sites. These efforts have involved the review of 177 environmental studies as well as numerous consultations with state and federal agencies and private consultants. I also responded to 5 incidents involving the release or discovery of hazardous materials.

During 2000, I reviewed 130 site plans, special permits, minor engineering changes, and storm water pollution prevention plans. The purpose of these reviews is to evaluate the proposals for environmental impact, to promote aquifer protection, and to ensure the proper storage of hazardous materials.

In 2000, the Board of Health celebrated the fifteenth anniversary of the Household Hazardous Waste Collection program by sponsoring two successful collections. A total of 785 households participated in these events. As part of this effort, the Board of Health also offers programs to assist municipal departments and local small businesses with the safe and proper disposal of their hazardous waste. The Board of Health also offers a Universal Waste Recycling Program to assist local businesses with the safe and proper disposal of fluorescent light, electronic ballast's, computer equipment, and batteries. This effort has helped to reduce the amount of toxic mercury and heavy metals entering the local solid waste stream. In conjunction with this effort, the Board of Health continued to offer a mercury thermometer exchange where mercury thermometers can be redeemed for a free non-mercury replacement. This effort has resulted in the collection of 1925 mercury thermometers, 55 mercury bearing devices, and 111 pounds of elemental mercury. In April 2000, the United States Environmental Protection Agency presented an Environment Merit Award to the Board of Health in recognition for the success and innovativeness of the local mercury recovery efforts.

In response to numerous requests, I have also enclosed a brief summary of the local commercial sites where chemical releases have occurred. This summary includes the name and location of the site, whether the site is located in the aquifer and water resource districts, contaminant(s) of concern, and a general description of where the site is in the evaluation and remediation process. All descriptions are of a general nature, please contact the Board of Health for a more technical information.

BURLINGTON ENVIRONMENTAL SITES:

1. Jerguson Gage & Valve, 15 Adams Street, located in aquifer district. Chlorinated solvents are the main contaminants of concern. Soil remediation completed. Groundwater remediation underway.
2. Property, 25 Adams Street, located in aquifer district. Impacted by petroleum contamination believed to have originated from a neighboring property. Groundwater contamination present. Additional assessment and possible remediation needed.
3. Mobil Station, 173 Bedford Street, outside Burlington protection districts. Located within Zone II for Bedford Well No. 3. Gasoline contamination in soil and groundwater. Soil and groundwater remediation underway.
4. Texaco Station, 161 Bedford Street, outside Burlington protection districts. Located within Zone II for Bedford Well No. 3. Gasoline contamination in soil and groundwater. Short term remedial efforts completed. Additional remediation needed.
5. Dobbins Auto Repair, 177 Bedford Street, outside Burlington protection districts. Located within Zone II for Bedford Well No 3. Gasoline contamination in groundwater. Additional assessment and possible remediation needed.
6. RCA/Lockheed Martin, 183 Bedford Street, partially located within water resource district. Contaminants located outside Burlington protection districts. Contaminants located within Zone II for Bedford Well No. 3. Chlorinated solvents present in groundwater. Heavy metal contamination present in stream

sediments present in Central Brook. Assessment phase complete. Proposing to monitor site conditions for up to five years. No additional remedial efforts planned at this time.

7. Intersection Network Drive and Bedford Street, located outside Burlington protection districts. Located within Zone II for Bedford Well No. 3. Petroleum contamination present in soil and groundwater. Additional assessment needed.
8. 175 Bedford Street, leaking underground storage tank. Located outside Burlington protection districts. Located within Zone II for Bedford Well No. 3. Petroleum contamination remediated.
9. Bellofram, 30 Blanchard Road, located within water resource district. Chlorinated solvents present in groundwater. Soil remediation completed. Groundwater remediation in progress.
10. DataCon, 60 Blanchard Road, located within water resource district. Chlorinated solvents present in groundwater. This site has been impacted by a release at a neighboring site. Additional assessment and remediation required.
11. Tech Weld Corporation, 70 Blanchard Road, located in aquifer district. Chlorinated solvents present in groundwater. Additional assessment and remediation required.
12. Varian, 78 Blanchard Road, located in aquifer district. Chlorinated solvents present in groundwater. Additional assessment and possible remediation needed.
13. Herb Chambers Honda, 33 Cambridge Street, outside protection district. Leaking underground storage tank removed from this location. Remediation completed.
14. State Equipment, 62 Cambridge Street, outside protection district. Petroleum release. Additional assessment required.
15. Burlington Centre property, 100 Cambridge Street, located in water resource district. Petroleum release. Remediation completed.
16. Polystructures, 101 Cambridge Street, partially located in water resource district. Petroleum release. Remediation completed.
17. Citgo Station, 108 Cambridge Street, located in water resource district. Gasoline contamination detected in groundwater. Additional assessment and remediation required.
18. Gibbs (Mobil) Station, 110 Cambridge Street, located in water resource district. Gasoline detected in groundwater. Groundwater remediation underway.
19. RJ Kelly, 116 Cambridge Street, located in water resource district. Gasoline detected in groundwater. Additional site assessment and remediation required.
20. Exxon Station, 118 Cambridge Street, located in water resource district. Gasoline detected in groundwater. Additional site assessment and remediation required.
21. 138 Cambridge Street, located in water resource district. Petroleum products detected in groundwater. Additional assessment required.
22. Shell Station, 140 Cambridge Street, located in water resource district. Gasoline release. Assessment continuing.
23. Exxon Station, 181 Cambridge Street, located in water resource district. Gasoline release. Additional remediation required.
24. Shell Station, 198 Cambridge Street, partially located in water resource district. Gasoline release. Assessment continuing.
25. Property, 7 Cypress Drive, located in aquifer district. Impacted by petroleum release occurring at a neighboring site. Additional assessment needed.
26. Middlesex Courier, 5 Cypress Drive, located in aquifer district. Leaking underground storage tank released gasoline. Additional assessment and remediation needed.
27. Atlantic Industrial, 11 Cypress Drive, located in aquifer district. Petroleum contamination detected in soil. Remedial efforts completed.
28. Property, 16 Garfield Circle, located in aquifer district. Petroleum release originating from a leaking underground storage tank. Remedial efforts have been completed.
29. Burlington Highway Garage, Meadow Road, located in aquifer district. Petroleum release originating from leaking underground storage tanks. Site assessment activities in progress.

30. Wang Labs, 20 South Avenue, located in aquifer district. Petroleum release. Remedial efforts have been completed.
31. General Cinema, 20 South Avenue, located in aquifer district. Chlorinated solvents detected in groundwater. Additional assessment required.
32. Former TRW facility, 1 Kimball Avenue, located in water resource district. Chlorinated solvents detected in groundwater. Site evaluation continuing.
33. Property, 43 Middlesex Turnpike, located in aquifer district. Chlorinated solvents detected in groundwater. Additional assessment required.
34. Property, 44 Middlesex Turnpike, located in aquifer district. Chlorinated solvents detected in groundwater. Site closure completed.
35. Ned's Towing, 49 Middlesex Turnpike, located in aquifer district. Gasoline release originating from leaking underground storage tanks. Additional assessment and possibly remediation required.
36. Amoco (Mobil) Station, 50 Middlesex Turnpike, located in aquifer district. Gasoline release. Site closure completed.
37. Strato Reprographics, 62 Middlesex Turnpike, aquifer district. Petroleum and metals contamination. Remedial efforts completed.
38. Hertz, 68 Middlesex Turnpike, located in aquifer district. Petroleum release. Additional site assessment and possibly remediation needed.
39. Burlington Dodge, 90 Middlesex Turnpike, located in aquifer district. Gasoline release from leaking underground storage tank. This site has also been impacted by chlorinated solvents originating from a neighboring site. The chlorinated solvents issue needs to be addressed by the neighboring site owner. A second gasoline release has also been detected at this location which requires additional assessment and remediation.
40. Semicon, 10 North Avenue, located in water resource district. Chlorinated solvent detected in groundwater. Groundwater remediation was initiated at this location in 1999.
41. Property, 3 0ld Concord Road, located in aquifer district. Petroleum release originating from a leaking underground storage tank. Remedial effort completed.
42. Property, 80R Cambridge Street, outside protection district. Petroleum release originating from a leaking underground storage tank. Remedial effort completed.
43. M/A Com, 63 South Avenue, located in aquifer district. Chlorinated solvents detected in groundwater. Groundwater remediation in progress.
44. Nike Missile site, 145 South Bedford Street, outside protection district. Petroleum release originating from leaking underground storage tank. Remedial efforts completed.
45. High Voltage Engineering, 101 South Bedford Street, partially located within water resource district. Chlorinated solvents detected in groundwater. Soil remediation completed. Groundwater remediation underway.
46. Itek Corporation, 53 Third Avenue, located in water resource district. Chlorinated solvents detected in groundwater. Additional remediation required.
47. Altotronics, 71 Third Avenue, located in water resource district. Chlorinated solvents detected in groundwater. A groundwater treatment system began operation in 1999.
48. Property, 1 Van de Graaff Drive, outside protection district. Chlorinated solvents detected in groundwater. Site closure has been completed.
49. Raytheon, 2 Wayside Road, outside protection district. Petroleum release, and limited chlorinated solvent contamination. Site closure has been achieved.
50. Former M/A Com facility, 52 Second Avenue, the site is located in the water resource district. Chlorinated solvents detected in soil and ground water. Additional assessment and remediation required.
51. US Windpower, 200 Wheeler Road, located in water resource district. Chlorinated solvents detected in groundwater. Soil remediation has been implemented. A groundwater remediation has been initiated at for this location.
52. Vine Brook and tributaries, near Great Meadow Road and Middlesex Turnpike. Chlorinated solvents detected in surface water. Additional assessment and possibly remediation or corrective measures required.

Please note that additional sites have been impacted by the migration of contaminants from these locations. This is especially true for sites located within the aquifer and water resource district where the operation of the public well field has caused contaminants to be drawn toward the wells. In 1999, I developed a comprehensive well data base which contains geological and water quality data for approximately 1300 wells known to exist in Burlington. This reference tool has enhanced our ability to monitor the impact of local hazardous waste sites on water quality. This resource also enables us to review development proposals for potential environmental impacts. This data base continues to be revised as new information becomes available. This information is available for review to all interested parties.

I would like to thank the members of the Board of Health for their continued support during the year. Anyone interested in learning more about environmental issues affecting Burlington is invited to contact me at 270-1956 or via e-mail at 'tdresser@burlmass.org'.

Respectfully submitted,

Todd H. Dresser
Environmental Engineer

REPORT OF THE EAST MIDDLESEX MOSQUITO CONTROL PROJECT

The East Middlesex Mosquito Control Project conducts a program in Burlington consisting of mosquito and wetland surveillance, larval and adult mosquito control, ditch maintenance and public education. The Project also participates in the State's West Nile Virus surveillance program and in the State's Vector Control Plan To Prevent Eastern Equine Encephalitis (EEE).

The spread of West Nile Virus from the metropolitan New York area into Massachusetts has raised new health concerns related to mosquitoes. In addition a case of Eastern Equine Encephalitis and the introduction of 2 new mosquito species to Massachusetts kept mosquitoes in the news throughout the summer and early fall.

Mosquito populations were generally average to below average in Burlington this year. Beginning in early July and continuing through September, the Project began using a specialized mosquito surveillance trap to monitor and tests species associated with West Nile Virus.

The larval mosquito control program relies on the biological larvicide, Bti (Bacillus thuringiensis var. israelensis). An April 2000 helicopter application applied Bti to 119 wetland acres. Field crews using a truck mounted hydraulic sprayer and portable sprayers applied Bti to 23.5 wetland acres when high densities of mosquito larvae were found breeding in stagnant water.

The adult mosquito control program involved the use of truck mounted aerosol sprayers at night to treat 2,111 acres when survey traps indicated high populations of nuisance mosquitoes. The Project uses a formulation of resmethrin to control adult mosquitoes. Advance notification of the spray program is done through newspaper notices in the Daily Times and notices on the Project's web site.

The Project's public education program is designed to develop awareness within the public and the private sectors as to their roles in mosquito control. The Project serves as a resource to residents, schools, municipal officials and the local media on controlling mosquitoes, breeding sites and mosquito borne diseases. A web page was developed to provide residents with information on mosquitoes, Project control programs and related topics. The website address is www.town.sudbury.ma.us/services/health/emmcp

Respectfully submitted,

David M. Henley, Superintendent