

SUPREME COURT OF THE STATE OF NEW YORK  
COUNTY OF NEW YORK

In the Matter of the Application of NEW YORK CITY  
COALITION TO END LEAD POISONING, *et al.*

Petitioners-Plaintiffs

for a Judgment pursuant to Article 78 and § 3001 of the  
Civil Practice Law and Rules

-against-

PETER VALLONE, as Speaker of the New York City  
Council; *et al.*

Respondents-Defendants.

Index No. 120911/99

**AFFIDAVIT OF CHARLES E. GILBERT, PH.D., M.SC., IN SUPPORT OF  
PETITION AND MOTION FOR PRELIMINARY INJUNCTION**

STATE OF NEW YORK )  
 ) SS.  
COUNTY OF SUFFOLK )

CHARLES E. GILBERT, Ph.D., M.Sc., being sworn, states as follows under oath:

PROFESSIONAL BACKGROUND AND QUALIFICATIONS

1. I am a toxicologist and epidemiologist, Vice President and Director of Environmental and Occupational Health Services, Enviroscience Consultants, Ronkonkoma, New York.

2. A significant portion of my professional career for the last 21 years has been devoted to lead poisoning prevention. I have continuously conducted research into the sources, routes, and prevention of childhood lead exposure.

3. Before my present position, I conceptualized, developed, and was the first Director of the Northeast Regional Lead Training Center at the University of Massachusetts School of Public Health, Amherst, Massachusetts. This Lead Center was one of the six U.S. Environmental Protection Agency Lead Centers in the country. I was also Scientific Advisor for a Lead Hazard Education and Abatement Project funded by the United States Department of Housing and Urban Development ("HUD") and I have served on numerous national, state and local lead advisory committees including as Subject Matter Expert for the United States Environmental Protection Agency ("EPA") National Lead Certification Examination System.

4. Before that, I was Assistant Director, Chief of Field Operations, Inspector, and Research Analyst at the Massachusetts Childhood Lead Poisoning Prevention Program, long a

leader in lead poisoning prevention policy, procedures, and practices. In my various capacities for the State of Massachusetts, I developed the first statewide systems for both environmental and clinical case management and lead inspection procedures. I was Senior Editor of the first lead program standard operating procedures manual.

5. I was associated with the University of Massachusetts School of Public Health from 1985 until 1997. From 1978 up to the present I developed and taught lead inspection, abatement, and education courses. I drafted lead poisoning prevention regulations and bills for the States of Massachusetts and Connecticut.

6. I attach my entire curriculum vitae as Exhibit A.

#### THRESHOLD ISSUES CONCERNING LOCAL LAW # 38 of 1999

7. I have reviewed the contents of Local Law # 38 of 1999 of the City of New York ("LL # 38"), which will become effective November 12, 1999. I have compared it to the state-of-the-art lead safe renovation practices recognized by many health professionals who understand lead safe practices, and the safety standards for lead paint activities set out in New York City Health Code § 173.14, and I am familiar with those sections as currently written and in effect, as well as Local Law # 1 of 1982 (Admin. Code § 27-2013(h)). I make this affidavit to comment on the content of LL # 38 and to support the Petition to enjoin this new law, insofar as respondents violated state law, as I understand it, by failing to prepare an Environmental Impact Statement ("EIS") before enacting Local Law # 38. It is clear to me that LL # 38 will cause numerous adverse impacts on the health of children in New York City by severely weakening the

protections provided by existing laws. The statements in this affidavit are based on my own personal knowledge founded on scientific data and scientific experience.

8. At the outset, LL # 38 appears to demonstrate a remarkable lack of attention by the City Council and the Mayor to proper measures for addressing lead paint and dust. This is especially chilling since a study conducted by New York State Public Health Department investigators found a large proportion of New York State children who were poisoned and those whose lead levels were elevated were exposed during home renovation activities. [Franko, et al 1998]. If children's lead levels rise because of poor renovation approaches in their own homes because of uninformed parents and contractors, what protection will New York City children be provided by strangers following relaxed lead renovation standards?

9. This lack of attention to lead paint, unfortunately, is not atypical. One interesting finding of public perception studies is the contrast in the perceived seriousness of various health risks between professionals and the public. This gap between perception and reality is particularly troublesome in the area of lead. Unlike many other pollutants, which rarely exceed the threshold of toxic effects in an average household, lead can be one of the most prevalent and dangerous substances found in American homes. Most people feel safe in their own homes and cannot associate danger with a surrounding that promises retreat from the stress and problems of the outside world.

10. Lead paint from interior and exterior house surfaces is the most significant high dose source of lead for young children of all the environmental sources, as shown in the following table:

Lead Exposure for Child in a Lead Painted House (Rural and an Urban Setting)

Source	Rural Area	Urban Area	References
Ambient Air ( $\mu\text{g}/\text{m}^3$ )	0.1	0.1 - 0.3	Faroro, 1988
Indoor Air ( $\mu\text{g}/\text{m}^3$ )	0.03 - 0.14	0.03 - 0.2	EPA, 1986 (Table 7.6); Rabinowitz et al., 1985.
Soil (ppm or $\mu\text{g}/\text{g}$ )	5 - 30 80 - 4,680	30 - 4,500 80 - 4,680	EPA, 1986 (Table 7.6). Gilbert, et al., 1979
Street Dust (ppm or $\mu\text{g}/\text{g}$ )	80 - 130	100 - 5,000	Nriagru, 1978; EPA, 1986 (Table 7.6).
House Dust (ppm or $\mu\text{g}/\text{g}$ )	50 - 500	50 - 3,000	EPA, 1986 (Table 7.18, 7.20).
Food (ppm or $\mu\text{g}/\text{g}$ )	0.002 - 0.8	0.002 - 0.8	Flegel et al., 1988.
Water ( $\mu\text{g}/\text{L}$ )	5 - 75	5 - 75	Briskin, 1988.
Paint ( $\mu\text{g}/\text{cm}^2$ )	2,000 - 50,000	2,000 - 50,000	Gilbert, et al., 1979

As shown, the lead in lead painted surfaces may range from 2,000 to 50,000 micrograms (i.e., millionths of a gram) per square centimeter ( $\mu\text{g}/\text{cm}^2$ ). Thus, leaded paint in one small chip of paint that is the size of a fingernail provides hundreds to tens of thousands times the amount of lead contained in other sources. A room of lead painted wood work surfaces contains a quantity of lead sufficient to poison a whole town. A house painted with lead contains a quantity of lead sufficient to poison a whole city.

11. Lead paint can become a very fine dust that may be impossible to see. This dust can spread rapidly and is difficult to remove from surfaces and fabric. The dust is easily picked up on small fingers, playthings, and toys. Once ingested the pulverized lead paint dust is readily absorbed in the gastrointestinal tract. Thus a lead painted house provides many thousands of

grams of lead for young children who cannot safely intake more than 5 millionths of a gram of lead per kilogram of body weight per day.

12. By relaxing proper controls for work activities on lead painted surfaces, including repair and renovations, LL # 38 greatly increases the risk of exposing many families to this lead dust. Too many families have been seriously exposed to lead because uninformed or poorly trained individuals disrupted lead painted surfaces and spread pulverized paint and chips throughout their house.

13. The most important health objective during work on older houses is to control the human exposure to lead from painted surfaces. When the work is done without proper controls in houses that contain lead paint, the evidence shows that house dust lead levels will rise, increasing family blood lead levels, sometimes resulting in the poisoning of children and adults.

14. Lead paint exposure control during renovation is done through two important and linked steps. First, surfaces that contain lead paint must be identified through an inspection. Second, the pulverized lead paint produced during the work must be controlled and captured so children and adults will not accidentally swallow or inhale the dust. While the steps are stated simply, they are not always simple to execute.

15. Unfortunately, LL # 38 does not achieve either of these two steps, and thus represents a huge retreat in the protection of public health from the hazards of lead dust, as compared to the Health Code and LL # 1. Below I will set out just some of the many particular areas of concern:

#### INSPECTIONS FOR LEAD HAZARDS

16. LL # 38 only requires a landlord to inspect once a year for lead hazards. In many cases, however, this will not provide an adequate assurance against lead hazards developing in the interim. Conditions in buildings in New York City can vary greatly from one to the next. While some buildings may be sufficiently maintained that an annual inspection might suffice, other buildings may require more frequent assessment, especially if there are other factors, such as leaking pipes or roofs, or windows or pointing in poor condition, that will contribute to the more frequent and rapid failure of painted surfaces. Thus, LL # 38's limited inspection requirements will in many instances create a false assurance a dwelling is safe, when in fact it may not be for very long.

17. Perhaps even more importantly, the very definition of lead hazards in LL # 38 is insufficient to protect children from lead poisoning. By focussing solely on peeling paint, the law ignores the hazards caused by intact lead paint on friction surfaces, such as window and door frames, on impact surfaces, such as chair rails and floor moldings, and mouthable surfaces, such as window sills and balusters. All of these surfaces can present significant hazards to young children, especially as they can continuously generate lead dust.

18. Moreover, the inspection and identification of such lead hazards is not something that should be performed by an unqualified person (as permitted by LL # 38). Lead inspections, risk assessments, and the removal of lead paint requires particular training and expertise. (40 CFR Part 745) The U.S. Department of Housing and Urban Development has required for the past few years that lead paint abatement work done with HUD funds can only be done by State or federal certified lead professionals.

19. For the same reason, LL # 38's provisions (in the new § 27-2056.3(f)) that shift the responsibility to tenants to identify lead hazards will leave many children at risk of lead poisoning, as, obviously, few tenants will have the particular training and expertise to identify lead hazards.

### SAFETY STANDARDS

20. As I read it, LL # 38 sets up a scheme of so-called "interim controls" (new §§ 27-2056.2(a) and 2056.5(b)) that may be followed either before a violation has been cited by the City's Department of Housing Preservation and Development ("HPD") or for at least 21 days thereafter, in place for the far more rigorous and exacting requirements of Health Code § 173.14. Yet the work permitted under these "interim controls" is, in fact, the removal and repair of lead paint, which is extremely hazardous to human health if not handled correctly. The apparent premise of the "interim controls" is an incentive to get the work done quickly, with the potential imposition of the full set of safety measures provided in Health Code § 173.14 as "punishment" for property owners who do not comply quickly. In reality, the ones who will be punished by this approach are the innocent children who reside in the dwellings, as well as the families of those persons who perform the work. It makes absolutely no sense from a public health standpoint -- indeed it is counterproductive -- to reduce safety measures on the premise that it will get the job done more quickly. Indeed, the very goal of the work should be to reduce environmental lead exposure in an apartment, not to increase it. By reducing and omitting numerous environmental controls, however, LL # 38 is destined to increase human lead exposure.

### Qualifications of Workers



21. The Health Code safety procedures § 173.14(c)(2) require the use of certified, trained workers to remove lead paint or otherwise repair lead painted surfaces. As of March 1, 2000 (64 Fed. Reg. 42849 ), federal Environmental Protection Agency measures (40 CFR §§ 745.220-745.239, 745.320-745.339) will go into effect in New York State for such worker certification. LL# 38, as I read it, appears to permit such work to be done (as "interim controls") by anyone, regardless of their training or lack of certification. Again, the removal of lead paint permitted as "interim controls" by LL # 38 is extremely hazardous if not done correctly.

22. Renovation of lead painted surfaces done on any property must be done by a properly trained and experienced person. The thought of property owners conducting their own renovation without sufficient training is cause for great concern. While many persons are capable of doing renovation, it cannot be done without proper training. To be done properly the renovation of lead painted surfaces requires a great deal of training, discipline, attention to detail, and skill. Thus, this aspect of LL # 38 will certainly have an adverse environmental impact.

23. Regulations on lead abatement and the licensure of lead poisoning prevention professionals were developed because in too many jobs persons were not aware of the risks of lead abatement and this lack of understanding resulted in lead exposure to children and adults. Uninformed and poorly trained lead abatement professionals poisoned themselves and other workers, and poisoned their children and relatives with lead dust and particles they unknowingly took home on their clothes. Health professionals have given this route of lead exposure a name: "Take Home Lead." Who rides in the car the lead worker drives to work? Who does the laundry? Poorly conducted lead paint renovation or repair sometimes poisoned the families whose homes workers intended to make safe.

24. These concerns with renovation and repair techniques include the methods that produce low levels of dust and chips. There are few methods of renovation that do not disturb paint. Therefore, no one who is untrained should attempt to work on lead painted surfaces.

25. It is important to note that workers who do this renovation of lead painted surfaces are regulated by the Occupational Safety and Health Administration (OSHA) Lead and Construction Rule § 1926.62. The OSHA Lead and Construction Rule § 1926.62 applies when there is lead in any amount, however low, on surfaces where work may involve construction including alteration, repair, painting, and decorating. The rule requires training, personal exposure monitoring, and respiratory protection and personal protective equipment during the exposure assessment.

#### Dust Containment

26. Addressing lead painted surfaces should use a sequence of steps before and after the actual removal process. The process can fail at any of these steps and present an immediate contamination or future health hazard. It is important that those involved, (especially the family in the dwelling), in the renovation process understand the steps and the risks. The steps in the renovation process include occupant protection, worker protection, work site preparation, containment, renovation methods, daily clean up, controlling off site contamination, and final cleanup.

27. Of critical importance in any work on lead paint are measures to prevent the dispersal of toxic lead dust during the work. While the Health Code safety procedures provide extensive detailed measures to achieve this, LL # 38's "interim controls" fail to do so, in many respects.

28. For example, the Health Code requires that for abatement areas greater than six square feet the landlord must seal off the area and cover the entire floor and all openings with two layers of six-mil polyethylene sheeting. § 173.14(e)(2)(bb)(iv). LL # 38 circumvents this requirement, requiring only the covering of “the floor adjacent to the work area” – it does not even specify a certain amount of floor area. Unless they are experienced in lead safe renovation techniques, persons doing this work need additional guidance on how far this covering should extend. Also, the floor can be covered with any kind of plastic, polyethylene or “equivalent sheeting” of any thickness. Six mil plastic should be required since it is a common construction plastic material, is inexpensive, and is readily available. Plastic that is too thin can easily be torn by work shoes, ladders and equipment, allowing the release of toxic lead dust to other areas of the dwelling, where children and pregnant women may be present.

29. Likewise, the Health Code, § 173.14(e)(2)(aa)(ii), requires that furniture and other objects in the work area must be covered with two layers of six-mil polyethylene sheeting, and that the sheeting be taped together with waterproof tape and taped to the floor “to form a continuous barrier to the penetration of dust.” LL # 38 omits the crucial requirement of a "continuous barrier," merely requiring that the furniture and other objects be covered with some kind of polyethylene, plastic or similar sheeting. Nor does LL # 38 require waterproof tape. Waterproof tape should be used: since the paint should be misted before scraping, and since the area will need to be washed upon completion of the work, the integrity of the plastic barriers needs to be maintained. (It should be noted, however, LL # 38 also omits the Health Code's requirement, § 173.14(e)(4)(bb)(I), that the plastic be misted and cleaned before removal, a measure that was designed to ensure that no contamination of floors, furniture and other surfaces

occurs.) This procedure was developed by scientists to prevent contamination of furniture, floors, and other surfaces. Renovation activities produce a fine dust that spreads rapidly and pervasively and is extremely difficult (and sometimes impossible) to remove from furniture and fabrics.

30. Another very important requirement of the Health Code is that forced air systems within room must be turned off and covered with 2 layers of 6-mil polyethylene and taped. § 173.14(e)(4)(aa)(ii). This requirement is omitted in LL # 38. Thus, there is no provision in the "interim controls" to prevent the dispersal of toxic lead dust throughout the dwelling unit -- and perhaps other dwelling units in the building -- through the ventilation system.

31. The Health Code also provides exacting requirements for daily cleanup, including provisions that all contaminated materials shall be stored at end of each work day in sealed containers or removed from premises (§ 173.14(e)(cc)), that debris removed must be wrapped in 6-mil poly and sealed with waterproof tape, that adjacent areas be visually inspected and wet swept or High Efficiency Particulate Aerosol (HEPA)<sup>1</sup> vacuumed (§ 173.14(e)(4)(aa)), and that no hazardous materials, including polyethylene sheeting with lead dust, shall be accessible to young children. LL # 38's "interim controls," however, merely require the owner to mop the work area at end of day and warn occupants to stay out of work area. This lack of attention to clean-up will result in the rise of children's and adult's lead levels and will increase the risk of lead poisoning.

32. The impact of these reductions in the requirements to prevent lead dust dispersal will result in the rise of children's and adult's lead levels that will result in an increased incidence

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1. HEPA vacuums use special filters to catch fine lead dust, to prevent the release of fine particles that normally occurs from the exhaust of ordinary vacuums.

of childhood lead poisoning caused as a direct result of unsafe work practices in repairing or removing lead paint.

### Cleanup and Dust Clearance Standards

33. After repair or renovation has occurred, adequate cleanup of lead particles after the work and prior to the return of the family is absolutely critical to ensure that family members are not exposed. At some risk of oversimplifying, cleanup can include removal of all polyethylene containment on the floors, vacuuming all surfaces with a HEPA vacuum, washing all surfaces with a lead specific detergent and again vacuuming all surfaces with a HEPA vacuum. The Health Code safety procedures specified the necessary requirements; however, LL# 38 does not. The new law bypasses many essential elements of safety from the current procedures spelled out in the Health Code safety procedures for cleaning up after lead paint work. The need for these procedures is even greater under LL # 38 given the reduction in the required measures for preventing the dispersal of lead dust during the work, as addressed above. These deletions make the procedures so seriously inadequate as to make the procedure unsafe.

34. First of all, LL # 38 omits the requirement in Health Code § 173.14(e)(4)(bb) that workers wait one hour after the paint has been removed before commencing clean-up of the area. This is an extremely important requirement, the purpose of which is to allow any temporarily airborne lead dust particles to settle on surfaces before beginning clean-up. A rationale for the one hour waiting period for cleaning and dust wipe clearance sampling was developed and presented in the HUD Guidelines. Settling rates for lead dust may be estimated through the presumption of a number of conditions including: particle size, particle density, particle shape, and air movement. Particle sizes may be presumed to be approximately spherical. Density is a bit

more challenging. Pure lead oxide has a density of 9.5 grams per cubic centimeter, but lead-based paint dust contains other materials so a lower density is appropriate. Particulate matter in urban environments range in density from 1 to 1.7 grams per cubic centimeter. Mineral dust has an average density of 2.5 grams per cubic centimeter. Based on these data the authors of the HUD guidelines decided that lead particles should be assigned a density of 2.5 grams per cubic centimeter. It was determined that the majority of particles would be greater than 5  $\mu$  meters and the settling time for a ceiling height of 10 feet would be 27 minutes. If the one hour waiting period is not observed, the cleanup will not be effective in removing lead dust particles from the child's home.

35. A particularly serious concern is the omission of the requirement found in the Health Code safety standards that post-clean-up include one HEPA-vacuuming, washing with a detergent, then a second HEPA-vacuuming. § 173.14(e)(4) (bb)(ii), (iii) and (iv). LL # 38 will permit a single step clean-up, either by washing or a single HEPA vacuuming. I raised this criticism in a prior affidavit in 1996 in the case of NYCCELP v. Giuliani when the Board of Health was considering a similar weakening of its clean-up standards, and ultimately the Board of Health rejected such a change.

36. The two HEPA vacuumings and the detergent wash provided in the Health Code are essential for basic safety. No matter how small the area, lead paint renovation of any kind will generate and disperse lead particles from that area. According to the HUD Guidelines, HEPA vacuuming, followed by a detergent washing, followed by a second HEPA vacuuming, is the only currently known process to remove lead particles from any surface, however small. The HEPA vacuum and wet wash cycles were developed because the leaded dust adheres stubbornly to

surfaces, especially rough or porous ones. The first HEPA vacuum removes as much dust and debris as possible. The wet wash further displaces dust from surfaces. The final HEPA vacuum cycle removes any remaining particles displaced but not removed by the wet wash. This process is the only way to be sure all the lead dust particles are cleaned up.

37. The second HEPA vacuuming is particularly essential given that the washing "with a detergent solution" lacks the requisite specificity. The law fails to require a cleaning solution specifically for removing lead dust. Such a detergent will cut the oils holding lead on surfaces, reduce the lead particles' attraction to and electrostatic interactions with surfaces, and thus increase removal.

38. Moreover, if a HEPA vacuum is already being used as required for the first step in the clean-up, a second vacuuming is not a significant added expense. The benefit, the certainty that virtually all the toxic particles are cleaned up, however, is significant.

#### Dust Clearance Testing

39. The failure of the new law to protect public health is exacerbated because not only will the requisite procedures for cleaning up the lead paint dust be omitted, but dust clearance testing will no longer be required either, in a wide range of situations where it presently is (or should be) required. If no dust wipe analysis is done how will we know that the area is cleaned of lead particles, especially since they are so difficult to remove? Further, what independent check do we have on the status of the lead safe clean-up?

40. The lead concentration in paint and its relationship to lead dust produced during lead renovation activities should be described to demonstrate potential of lead contamination and the importance of dust clearance testing. The diameter of lead pigment particles in paint range

from 0.1 to 10 micrometers ( $\mu\text{m}$  one millionth of a meter). A 1 mm diameter lead pigment particle is about the size of a grain of salt (but more dense and therefore heavier) and will weigh about 30 micrograms. Particle sizes found in post abatement dust may range from 0.2 to 250  $\mu\text{m}$  (Mamane, 1993). If we select the median value of 125  $\mu\text{m}$  we will have particle sizes about 12 % of a grain of salt. It would take one and one third of the salt grain size lead particles over a square foot area to exceed the HUD floor dust clearance limit of 40  $\mu\text{g}/\text{ft}^2$ , and just more than three salt grain size lead particles area to exceed a floor dust clearance limit of 100  $\mu\text{g}/\text{ft}^2$ . As a point of reference for these lead in dust values a 2-3 year old child should not take in any more than approximately 100 micrograms of lead per day.

41. Lead paint removal or renovation practices will generate and disperse lead particles from the work area, no matter how small the job. A visual inspection for visible dust, followed by dust samples, taken via dust wipes, is the only currently known process to assure that as many of the tiny lead particles as possible are cleaned up from any work area, however small the job.

42. As I understand LL # 38, a property owner will not be required to have any dust clearance testing at all for work performed on lead painted surfaces as long as no violation has been placed (new § 27-2056.2(a)). This is a completely meaningless distinction from the point of view of public health; an improper cleanup from lead paint removal work is just as hazardous in those situations where owners are taking action prior to a violation being placed. As LL # 38 will require landlords to inspect and correct lead paint conditions at least once a year on their own (new § 27-2056.3), we should expect that as a result -- if the law functions and is obeyed as



intended -- many thousands of lead paint renovation activities to take place under circumstances which, under LL # 38, will not require any lead dust clearance testing.

43. Furthermore, even after a violation has been placed, as I read LL # 38, a property owner will still not be required to take any lead dust clearance samples except for work on windows and door frames. New § 27-2056.5(b)(12). Thus, walls and ceilings are excluded, and, conceivably, lead paint could be scraped from an entire wall or ceiling without any dust tests being required to ensure it was safely cleaned up. The lead content of paint of many walls and ceilings can just as easily generate toxic levels of lead dust during repair work as other surfaces. Yet LL # 38 omits the requirement that there be four dust clearance samples: from a window well, a window sill, the floor, and the floor of the adjacent area for abatement areas greater than two square feet (as provided in Health Code § 173.14(e)(4)(cc)(ii). The last sample indicates whether lead dust has migrated out of the work area, and if so, indicates that the adjoining areas must be cleaned as well.

44. Of particular interest is what these dust wipes measure. The wipe from the floor measures how well the lead renovation team kept the lead paint dust from dispersing on the floor and how well they cleaned the lead paint dust from the floor.

45. The wipe from the window sill measures how well the team kept the lead paint dust away from the sill and cleaned the dust from the sill. The sill may have both contained lead paint and received lead paint particles from other window components and from the outside of the building. The sill dust wipes reflect all these contributions.

46. Window wells or troughs reflect different exposure situations from the sills or the floors and may contain the highest concentrations of lead paint in a dwelling. Lead painted

window wells are very likely to be deteriorated, covered with cracked, chipped, and pulverized paint. Children are often attracted to window wells and often leave toys, rattles, and food in the troughs. The deteriorated paint sticks to these items. Thus the window well may be the most significant source of lead exposure for many children.

47. However, in the limited circumstances where the so-called "interim controls" in LL # 38 require lead dust clearance tests, the tests themselves are inadequate, particularly as compared to the provisions of the Health Code safety standards. For removal of paint on "any interior wood trim or door" (new § 27-2056.5(b)(12)), LL # 38 requires only that the landlord take a single dust wipe sample (on the floor). For removal of paint on "any interior wood trim or door on, near, or immediately adjacent<sup>2</sup> to a window" or "lead-based paint hazards have been corrected on any window" (new § 27-2056.5(b)(12)), LL # 38 only requires the landlord take three dust wipes samples (floor, window well, and window sill). In no circumstances is the fourth dust test -- of the adjacent area -- required, even though, as noted above in ¶ 43, this sample is extremely important to determine if lead dust has migrated out of the area and requires clean-up. For the reasons set forth above, this is inadequate.

48. In addition, LL # 38's "interim controls" omit the one hour settling requirement, as required by Health Code § 173.14(e)(4)(cc). The lack of this requirement means that the dust tests themselves will give false indications of safety, when in fact the room may be environmentally hazardous for children.

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2. These terms are quite imprecise, as well. How close is "near?" Two inches? Two feet? Twenty feet?

49. I find the dust testing particularly essential given that the preceding step, the visual inspection, lacks the requisite specificity, and the entire final clearance evaluation is not required to be performed by an experienced person such as a lead inspector. Regardless, a visual inspection only cannot detect lead. The clearance levels for lead dust on a floor in the Health Code, for example, are currently 100 micrograms (i.e., millionths of a gram) per square foot ( $\mu\text{g}/\text{ft}^2$ ). § 173.14(e)(3)(dd). Indeed, based on recent HUD studies conducted across the United States, the Federal Department of Housing and Urban Development has recently decided to lower its lead dust clearance concentration on floors to 40  $\mu\text{g}/\text{ft}^2$ . 64 F.R. 50140, 50181 (Sept. 15, 1999).

50. Further, the new law is deficient because it fails to require that a lead inspector or an independent party with a lead inspector's training and experience perform the entire final clearance evaluation. Only someone with the training and experience of a lead inspector has the expertise necessary for the evaluation. Familiarity and experience with lead paint abatement is not the same as expertise in lead inspection. Familiarity and experience with the so-called "interim controls" in the new law does not provide the requisite scientific and hands-on expertise either; a lawyer who has never performed any part of a clearance evaluation could meet such qualifications.

51. Under the Health Code safety standards, any abatement area greater than two square feet is not cleared for re-occupancy until the dust wipe clearance test results meet the Health Code standards. § 173.14(e)(4)(dd). LL # 38 only requires the landlord to arrange/supervise the work area to "discourage" occupants from re-entering "until it is safe to do so." Lead safe renovation practice requires that no one but trained lead renovation workers be

present in the work area until the area has been cleared. But with no independent inspection and dust tests, no one will not know that the area is now environmentally safe.

52. In conclusion, it is evident to me that LL # 38's "interim controls" as stated do not adequately protect the public against exposure to toxic lead dust, especially in comparison to Health Code § 173.14. We should be concerned with lead exposure during the renovating of our houses that contain lead paint. This means lead should be considered and addressed every time a housing unit built before 1978 is renovated. When the work is done without proper controls, house dust lead levels will rise, always increasing family blood lead levels, sometimes resulting in the poisoning of children and adults. Our most important health objective during the renovation of older houses is to control the exposure to lead from painted surfaces. Without this control it is my belief and fear that as a result of our not properly addressing lead exposure during renovation, much more lead dust will be released into many families homes and remain there, creating a hazard to the health of many children and adults in New York City.

/s/ Charles E. Gilbert  
CHARLES E. GILBERT, Ph.D., M.Sc.

Sworn to before me on  
October 8, 1999

/s/ Francine P. Burke  
NOTARY PUBLIC  
Francine P. Burke  
Notary Public, State of New York  
No. 4627037, Suffolk County  
Term Expires March 30, 2000



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## Charles Edward Gilbert

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### **I ACADEMIC TRAINING**

University of Massachusetts, Amherst 1983-90 Public Health Ph.D. 1990, Toxicology and Epidemiology

University of Massachusetts, Amherst 1975-79 Public Health M.S. 1979, Toxicology and Epidemiology

University of Massachusetts, Amherst 1973-75 Public Health B.S. 1975, Environmental Health

### **II CONTINUING PROFESSIONAL EDUCATION**

Asbestos Contractor Supervisor, September 22-26, 1997, Toxic Substances Control Act Title II, and New York State Department of Health Accreditation, Trade-Winds Environmental Restoration Inc., Bay Shore, NY.

Natural Resources Response and Restoration, Core Team Training, November 1, 1997, Trade-Winds Environmental Restoration Inc., Bay Shore, NY.

Hazardous Waste Operations and Emergency Response, 40 hour HAZWOPER Course, OSHA 29 CFR 1910.120, December 9-12, 1997, Trade-Winds Environmental Restoration Inc., Bay Shore, NY.

American Red Cross Adult Cardiopulmonary Resuscitation, December 9, 1997, Trade-Winds Environmental Restoration Inc., Bay Shore, NY.

American Standard First Aid, December 9, 1997, Trade-Winds Environmental Restoration Inc., Bay Shore, NY.

Hazardous Waste Operations and Emergency Response Supervisor, 8 hour HAZWOPER Course, OSHA 29 CFR 1910.120, December 22, 1997, Trade-Winds Environmental Restoration Inc., Bay Shore, NY.

Asbestos Inspector, March 31-April 2, 1998, Toxic Substances Control Act Title II, and New York State Department of Health Accreditation, Trade-Winds Environmental Restoration Inc., Bay Shore, NY.

Asbestos Management Planner, April 3 & 6, 1998, Toxic Substances Control Act Title II, and New York State Department of Health Accreditation, Trade-Winds Environmental Restoration Inc., Bay Shore, NY.

### **III WORK EXPERIENCE**

**Director Environmental and Occupational Health Services** - September 1998 - Present. Envirosciences Inc. 2150 Smithtown Avenue, Ronkonkoma, NY 11779.

**Director Occupational Health Services Toxicology and Epidemiology** - November 1998 - Present. Captree Environmental Services Inc. 605 Albany Avenue, Amityville, NY 11701.

**Director Environmental and Occupational Health Services** - July 1997 - September 1998. Trade Winds Environmental Restoration Inc., Bay Shore, NY.

**Director Environmental and Occupational Health Services** - July 1997 -- September 1998. North Atlantic Laboratories, Inc., Bay Shore, NY.

**Adjunct Professor** - July 1997 - Present. Department of Biostatistics and Epidemiology, School of Public Health, University of Massachusetts at Amherst, MA. <cgilbert@acad.umass.edu>.

**Director** - March 1992 - Present. Northeast Regional Lead Training Center, School of Public Health, University of Massachusetts at Amherst, MA.

**Deputy Director** - March 1992 - March 1995. Northeast Regional Environmental Public Health Center, University of Massachusetts.

**Adjunct Assistant Professor** - September 1991 - September 1992. School of Public Health, University of Massachusetts at Amherst, MA.

**Assistant Director** - October 1985 - March, 1992. Northeast Regional Environmental Public Health Center, University of Massachusetts at Amherst, MA.

**Research Associate** - February 1985 - October 1991. School of Public Health, University of Massachusetts at Amherst, MA.

Project Manager and Investigator in Public Health Research. Conduct classes in Public Health, Toxicology, and Risk Assessment at the undergraduate and graduate level.

Project Coordinator of Toxicology and Risk Assessment, February 1985 - December 1986. Responsible for daily management and coordination of project personnel and operations. Project duties included development of courses, advisory capacity for organic compounds in drinking water, testimony at hearings, technical assistance in developing drinking water standards, developing toxic hazards plan, risk and health assessments and public health consultation.

**Assistant Director** - May 1980 - July 1983. Childhood Lead Poisoning Prevention Program Commonwealth of Massachusetts, Department of Public Health, Boston, MA.

Responsible for daily operations, coordination and management of the personnel and activities of Laboratory, Field Inspection, Epidemiology, Planning and Special Project Components; provided direction in establishing goals and objectives and developing work plans for the program components; monitored and evaluated their efficacy and completion; conducted and provided staff development and team-building activities; provided direction in policy development and implementation; coordinated and directed the orientation and training of professional staff; directed the design and implementation of professional and public educational programs; provided assistance in budget development; directed the preparation of technical reports and analyses; directed the proposal of legislation and regulations; directed the development of laboratory and field standards; represented the Program Director and Department Assistant Commissioner at legislative and executive hearings interagency and community meetings and conferences.

Professional Accomplishments - Assistant Director.

Developed and directed continuing education programs for the staff.

Developed and provided direction in training and consultation for Boards of Health.

Developed and provided direction in education for community groups and health fairs.

Brown, M.J. and Gilbert, C. developed the first Childhood Lead Poisoning Prevention course in Massachusetts authorized to award continuing education credits for nurses.

Gilbert, C. and Prenney, B. developed the first statewide environmental case management system in Massachusetts for lead poisoning prevention.

Brown, M.J., Prenney, B. and Gilbert, C. developed the first statewide clinical case management system in Massachusetts.

Gilbert, C., Clohisy, R., Green, D., Lempicki, S., McCarthy, V., McCracken, R., Okonski, L., Savageau, S. and Smith, D. developed a comprehensive lead paint house inspection form that reduced inspection time by 25%.

Gilbert, C. and Melican, J. developed an Attorney's Childhood Lead Poisoning Prevention Compendium for distribution to members of the bar and the judiciary.

Melican, J. and Gilbert, C. developed and presented legal education seminars for members of the bar and judiciary.

Gilbert, C., Samuels, T., Clohisy, R., Green, D., Lempicki, S. and Okonski, L. determined and developed the training program for the Commonwealth of Massachusetts Department of Public Health lead inspectors.

Gilbert, C., Samuels, T., Clohisy, R., Green, D., Lempicki, S. and Okonski, L. determined and developed the criteria for deputization of lead inspectors in the Commonwealth of Massachusetts.

**Chief of Field Operations** - May 1979 - May 1980. Childhood Lead Poisoning Prevention Program.

Responsible for management and coordination of personnel and activities of field operations; assisted in establishing goals and objectives for field operations; coordinated and directed the orientation and training of field staff; developed and conducted professional and public educational programs; assisted in budget development; assisted in the preparation of technical reports and analyses; coordinated legal and enforcement activities.

**Inspector** - September 1978 - May 1979, July 1976 - March 1977. Childhood Lead Poisoning Prevention Program.

Conducted detailed, systematic and comprehensive inspections of residential units, day care and institutional facilities as required by MA Gen. Law; completed reports of lead inspection results; conducted title searches of real property to determine owner of record and mortgage holder; notified owner, tenant, health agents, mortgagors and lien holders of record of results of inspections; conducted reinspections of residential and other units in accordance with MA Gen. Law; monitored deleading process to ensure safety precautions in accordance with the law and regulations; provided outreach support such as assistance in locating alternative housing for family during deleading process; counseled parents on lead sources,



existing lead hazards, danger and prevention; certified compliance with Office for Children regulations regarding lead hazards in group day care centers and preschools; initiated criminal and/or civil court complaints against alleged violations; prepared, developed, presented and assisted with litigation of court cases; certified properties in legal compliance with applicable statutes and regulations; provided consultations, technical information and coordinated information with clinicians, case workers, health officers, parents, owners and lead removal contractors; conducted lead screening of children in conjunction with public and private agencies; provided training in blood sampling techniques to public and private individuals; provided technical assistance to and trained state and local health department personnel; investigated new technology for lead paint removal; developed print and non-print media format for use in public education and media distribution; worked with agencies to organize and conduct educational work shops and seminars for professionals and the public.

**Inspector** - September 1975 - July 1976. Childhood Lead Poisoning Prevention Program - Workstudy position.

**Research Analyst** - June 1975 - September 1975. Childhood Lead Poisoning Prevention Program.

Analyzed clinical records of children and analyzed the housing records of children with elevated blood lead levels.

#### **IV GRANTS AND RESEARCH FUNDING**

1. Assistant Director during the administration of Childhood Lead Poisoning Prevention Services under the Maternal and Child Health Services Block Grant administered by Childhood Lead Poisoning Prevention Program and Division of Family Health Services, Massachusetts Department of Public Health, November 1982 (\$800,000).
2. Coordinator of workshop on risk assessment for aerial spraying of insecticides for control of gypsy moths. U.S.D.A. Forest Service, January 1986 (\$12,000).
3. Project Manager and Investigator of a grant to estimate the amount of soil that children consume, August 1986 (\$344,000).
4. Coordinator of Conference, "The Safe Drinking Water Act: Amendments, Regulations and Standards". U.S. E.P.A., Office of Drinking Water, September 1986.
5. Coordinator of Conference, Asbestos in Play Sand? Tremolite in Play Sand: Public Health Implications. Northeast Regional Environmental Public Health Center, February 1987.
6. Coordinator of Conference on the Environmental and Health Effects of Ozone. Northeast Regional Environmental Public Health Center, U.S. E.P.A. Region I, April 1987 (\$12,000).
7. Coordinator of Executive Seminar on Risk Communication. Northeast Regional Environmental Public Health Center, June 6, 1987.

8. Assistant Director Northeast Regional Environmental Public Health Center, Health Department Grants from Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. July 1987-June 1988.
9. Coordinator of Conference: Regional Environmental Public Health Conference. Northeast Regional Environmental Public Health Center. Amherst, Massachusetts, October 13, 14, 1987.
10. Co-Director of Conference: Municipal Waste Disposal: Landfilling, Incineration and Resource Recovery: Public Health, Environmental, Economic and Technological Aspects. Northeast Regional Environmental Public Health Center. Amherst, Massachusetts. April 12,13,14, 1988.
11. Director of the writing of, the draft of Childhood Lead Poisoning Prevention and Control Regulations for Connecticut Department of Health Services. January 1988 (\$10,000).
12. Co-Director of Conference: The 1st Regional Environmental Public Health Conference for the New England Departments of Public Health, Environmental Protection and Agriculture. Northeast Regional Environmental Public Health Center. Amherst, Massachusetts. May 26, 1988.
13. Co-Director with Edward Calabrese of Executive Seminar on Risk Management of Pesticides. Seminar was cosponsored by the U.S. EPA, Office for Pesticides and Toxic Substances, June 28, 1988.
14. Assistant Director, Northeast Regional Environmental Public Health Center, Health Department grants from Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. July 1988-June 1989.
15. Project manager and investigator of a grant to assess the amount of soil that children consume. Syntex Corporation. (\$250,000) August 1988.
16. Co-Director with Edward J. Calabrese of workshop entitled "Health Effect Associated with methyl tertiary Butyl Ether". Northeast Regional Environmental Public Health Center, University of Massachusetts, Amherst, MA. March 13, 1989.
17. Co-Director with Edward J. Calabrese of workshop entitled "Daminozide, An Evaluation of Recent Oncogenicity and Mutagenicity Studies". Northeast Regional Environmental Public Health Center, University of Massachusetts, Amherst, MA. March 17, 1989.
18. Assistant Director, Northeast Regional Environmental Public Health Center, Health Department grants from Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. July 1989-June 1990.
19. Co-Director with Edward Calabrese of seminar: Reviewing and Evaluating Risk Assessments of Hazardous Waste Sites. Workshop cosponsored by the U.S. EPA Office of Research and Development Exposure Assessment Applications Branch, Exposure Assessment Group and the Association of State and Territorial Health Officers Association. Northeast Regional Environmental Public Health Center, Amherst, Massachusetts, May 11, 1989.

20. Investigator with Edward J. Calabrese and Edward J. Stanek, a study of childhood soil ingestion estimates, evaluating the contribution of house dust to soil ingestion estimates and different measures of central tendency. Grant from the Gradient Corporation. (\$10,000), July, 1989.
21. Investigator with Edward J. Calabrese and Edward J. Stanek, a study of adult soil ingestion estimates, to determine the average amount of soil consumed by adults and the most robust measure of central tendency. Gradient Corporation. (\$25,000), August, 1989.
22. Co-Director with Edward J. Calabrese of Conference entitled "Drinking Water and Public Health". Northeast Regional Environmental Public Health Center, University of Massachusetts, Amherst, Massachusetts. American Water Works Association Research Foundation, Jordan Cardiac Research Foundation, and U.S. Environmental Protection Agency. (\$20,000), April 30-May 2, 1990. Amherst Massachusetts.
23. Co-Investigator with Edward J. Calabrese. Project to review the Health Effects Basis for EPA Drinking Water Standards for Synthetic Organic Compounds and Inorganic Compounds. (\$100,000). August 1, 1990 - July 31, 1990. American Water Works Research Foundation, Denver, CO.
24. Co-Director with Edward J. Calabrese, Ralph Timperi and Julieann Nassif of Conference entitled "Eastern Equine Encephalitis: Surveillance, Prevention and Control Strategy Development". Northeast Regional Environmental Public Health Center, Massachusetts Department of Public Health, Massachusetts Health Research Institute, Massachusetts Health Officers Association, Vector Borne Disease Division, Center for Disease Control. (\$10,000), November 19, 1990. Boston, MA.
25. Co-Director with Edward J. Calabrese of conference entitled "Regulating Drinking Water Quality In The 1990s". Northeast Regional Environmental Public Health Center, Environmental Criteria and Assessment Office U.S. EPA. April 1-4, 1991. (\$25,000), Amherst, MA.
26. Principal Investigator with New England Water Works Association to maximize voluntary compliance of medium and small drinking water systems with the Lead and Copper Rule through the development and implementation of a three phase, integrated, multi-media education program. August, 1991-December 1992. (\$100,000).
27. Principal Investigator and Director, Edward J. Calabrese, Co-Principal Investigator Regional, Lead Training Center. Collaboration from Division of Continuing Education, University of Massachusetts; Work and Environment Program, University of Massachusetts-Lowell; Cornell University, School of Industrial and Labor Relations; Western Massachusetts Coalition for Occupational Safety and Health, and the Private Sector. Training lead inspection, abatement, and control professionals to address childhood lead exposure concerns from paint, dust, soil, drinking water, eating and drinking vessels, occupations and hobbies. Funded by the U.S. Environmental Protection Agency and coordinated by the National University Continuing Education Association. March 1992- September 1993. (\$320,000).
28. Co-Investigator with Frank Potter Investigator International Brotherhood of Painters and Allied Trades District Councils 35, 11, and 70 to Train Lead Paint Abatement Workers. Collaboration from Division of Continuing Education , University of Massachusetts, and the Private Sector. Training

- lead abatement, and control professionals to address childhood lead exposure concerns from paint, dust, soil, drinking water, eating and drinking vessels, occupations and hobbies. Funded by the U.S. Environmental Protection Agency. October 1992- September 1993. (\$81,000).
29. Project Manager, with Edward J. Calabrese, Principal Investigator. Kenneth Mundt, Investigator. A study of the prevalence of pica and pica behavior in children age 1-6 in certain pediatric clinics. Funded by Colorado Department of Public Health. July 1992-July 1993. (\$60,000).
  30. Director, with Edward J. Calabrese, Deputy Director Northeast Regional, Lead Training Program. Collaboration from Division of Continuing Education , University of Massachusetts; Work and Environment Program, University of Massachusetts-Lowell; Cornell University, School of Industrial and Labor Relations; Western Massachusetts Coalition for Occupational Safety and Health, and the Private Sector. Training lead inspection, abatement, and control professionals to address childhood lead exposure concerns from paint, dust, soil, drinking water, eating and drinking vessels, occupations and hobbies. Funded by the U.S. Environmental Protection Agency and coordinated by the National University Continuing Education Association. October 1993- September 1994. (\$210,000).
  31. Director, with Edward J. Calabrese, Deputy Director Northeast Regional, Lead Training Program. Collaboration from Division of Continuing Education , University of Massachusetts; Work and Environment Program, University of Massachusetts-Lowell; Cornell University, School of Industrial and Labor Relations; Western Massachusetts Coalition for Occupational Safety and Health, and the Private Sector. Training lead inspection, abatement, and control professionals to address childhood lead exposure concerns from paint, dust, soil, drinking water, eating and drinking vessels, occupations and hobbies. Funded by the U.S. Environmental Protection Agency and coordinated by the National University Continuing Education Association. October 1994- September 1995. (\$320,000).
  32. Scientific Director, Hamden County (Springfield, Holyoke, Chicopee, West Springfield, MA) HUD Regional Lead-Based Paint Abatement Program. Program design, training, data collection, data management and data analysis. Conduct an epidemiologic study to determine if lead abatement of lead painted housing surfaces reduces children's blood lead levels and reduce lead levels in the house dust. October 1994- September 1998. (\$3,300,000, Investigator Award \$90,000)
  33. Scientific and Technical Advisor with the U.S. EPA Region II Lead Coordinator and the Assistant Director, Virgin Islands Department of Environmental Protection pilot study to "Characterize Sources of Lead to Children Less Than 7 Years Old in High Risk Houses" in St Thomas, Virgin Islands. October 1996- December 1997. (\$60,000)
  34. Director, Northeast Regional, Lead Training Program. Collaboration from Division of Continuing Education , University of Massachusetts; Work and Environment Program, University of Massachusetts-Lowell; Cornell University, School of Industrial and Labor Relations; Western Massachusetts Coalition for Occupational Safety and Health, and the Private Sector. Training lead inspection, abatement, and control professionals to address childhood lead exposure concerns from paint, dust, soil, drinking water, eating and drinking vessels, occupations and hobbies. Funded by the U.S. Environmental Protection Agency. October 1995- September 1996. (\$100,000).
  35. Co-Investigator, with Megan Charlop and John Rosen of the Motefiore Medical Center (Bronx, NY) on the Montifiore Medical Center Lead Poisoning Project EPA Sponsored Lead-Based Paint

Abatement Workers Training Project. Funded by the U.S. Environmental Protection Agency.  
October 1995 September 1997 (\$78,000, Investigator Award \$21,000)

35. Scientific Director, Hamden County (Springfield, Holyoke, Chicopee, West Springfield, MA) HUD Regional Lead-Based Paint Abatement Program. Community Education and Outreach on Childhood lead poisoning Prevention. November 1995- June 1996. (\$38,000, Investigator Award \$7,000)
36. Scientific Director, Hamden County (Springfield, Holyoke, Chicopee, West Springfield, MA) HUD Regional Lead-Based Paint Abatement Program. Community Education and Outreach on Childhood lead poisoning Prevention. July 1996- June 1997. (\$38,000, Investigator Award \$7,000)

### **Journal Reviewer**

Advances in Modern Environmental Toxicology  
Biomedical and Environmental Sciences  
Risk Analysis  
Environmental Choices

### **V SOCIETIES**

American Association for the Advancement of Science.  
American College of Toxicology  
International Society of Regulatory Toxicology and Pharmacology.  
Society for Epidemiologic Research  
Society for Occupational and Environmental Health  
Society of Toxicology  
Environmental Information Association

### **VI TECHNICAL MANUSCRIPTS**

- 1 Gilbert, C.E., Clohisy, R., Green, D., Lempicki, S., Okonski, L., McCarthy, V., Savageau, S., Smith, D. 1980. Standard Operating Procedures Manual for the Childhood Lead Poisoning Prevention Program. Massachusetts Department of Public Health.
- 2 Gilbert, C.E., Balfour, S. Straub, W. 1995. Use of Encapsulants on Interior Surfaces. Adapted from the Manual developed by the Childhood Lead Poisoning Prevention Program, Massachusetts Department of Public Health.

### **VII PUBLICATIONS**

- 1 Gilbert, C.E. 1978. Comparison of Lead Hazards in the Housing Environment of Lead Poisoned Children Versus Non Poisoned Controls. Master's Thesis, University of Massachusetts at Amherst, MA.
- 2 Gilbert, C.E., Tuthill, R.W., Calabrese, E.J. and Peters, H.A. 1979. A Comparison of Lead Hazards in the Housing Environment of Lead Poisoned Children Versus Non Poisoned Controls. J. Environ. Science and Health A14(3):145-168.
- 3 Calabrese, E.J. and Gilbert, C.E. 1986. Unresolved Issues in Cancer Risk Assessment with Particular Emphasis on VOC's in Drinking Water. In: Organic Carcinogens in Drinking Water. N. Ram, E.J. Calabrese and R. Christman (eds.). John Wiley and Sons, New York.
- 4 Calabrese, E.J., Kostecki, P.T. and Gilbert, C.E. 1987. How Much Soil do Children Eat? An Emerging Consideration for Environmental Health Risk Assessment. Comments on Toxicology. Vol. I, No. 3-4.
- 5 Calabrese, E.J. and Gilbert, C.E. 1987. Uncertainties in predictive toxicology and risk assessment. In: Third National Conference on Ground Water Contamination. Phil. Acad. of Natural Sciences. Philadelphia, PA, pp. 21-46.
- 6 Gilbert C.E. 1988. Childhood Lead Poisoning - Communicating the Danger. In: Leading Us Away From Lead Poisoning Whose Responsibility? Zimmerman, A., Hollingshead, W. (eds.). Rhode Island Department of Health, Providence, Rhode Island.
- 7 Calabrese, E.J., Gilbert, C.E., and Kostecki, P.T., Barnes, R., Stanek, E., Veneman, P., Pastides, H., Edwards, C. 1988. A Methodology to Estimate How Much Soil Children Eat?. In: Environmental and Public Health Effects of Soils Contaminated with Petroleum Products, Kostecki, P.T. and Calabrese, E.J. (eds.) Lewis Publishers, Chelsea, Michigan. pp. 313-320.
- 8 Calabrese, E.J., Gilbert, C.E. 1989 Drinking Water Quality and Water Treatment Practices: Charting the Future. In: Safe Drinking Water Act: Amendments, Regulations and Standards. Calabrese, E.J., Gilbert, C.E. (eds.). Lewis Publishers, Chelsea, Michigan. pp. 113-142.
- 9 Stanek, E., Calabrese, E.J., Barnes, R., Keegan, E., Lasztity, A., Waing, X., Gilbert, C.E., Pastides, H.P., Kostecki, P.T. 1988. Ingestion of Trace Elements From Food Among Preschool Children. Journal of Trace Elements in Experimental Medicine. 1:179-190.
- 10 Calabrese, E.J., Barnes, R., Stanek, E.J., Pastides, H., Gilbert, C.E., Veneman, P., Kostecki, P.T. (1989). How Much Soil Do Children Ingest: An Epidemiologic Study. In: Environmental and Public Health Effects of Soils Contaminated with Petroleum, Vol. 2. (Calabrese, E.J., Kostecki, P.T., (eds.)). Lewis Publishers, Chelsea, Michigan. pp. 363-398.
- 11 Calabrese, E.J., Barnes, R., Stanek, E.J., Pastides, H., Gilbert, C.E., Veneman, P., Kostecki, P.T. (1989). How Much Soil do Young Children Ingest: An Epidemiologic Study. Regulatory Toxicology and Pharmacology. 10:123-127.

- 12 Calabrese, E.J., Stanek, E., Gilbert, C.E., and Barnes, R. (1990). Preliminary Adult Soil Ingestion Estimates: Results of a Pilot Study. Regulatory Toxicology and Pharmacology. 12,88-95.
- 13 Stanek, E.J., Calabrese, E.J., and Gilbert, C.E. (1990). Methods to estimate how much soil children ingest. Regulatory Toxicology and Pharmacology. (Submitted).
- 14 Calabrese, E.J., Stanek, E., and Gilbert, C.E. (1990). Soil ingestion in adults. In: Petroleum Contaminated Soils, Vol. 3. P. Kostecki and E. Calabrese (eds.). Lewis Publishers, Chelsea, MI.
- 15 Stanek, E., Calabrese, E.J., and Gilbert, C.E. (1990). Estimating soil ingestion in children. Best measure of central tendency. In: Petroleum Contaminated Soils, Vol. 3. P. Kostecki and E. Calabrese (eds.). Lewis Publishers, Chelsea, MI.
- 16 Gilbert, C.E., and Calabrese, E.J. (1990). Methods for selection of indicator compounds for number 2 heating oil. In: Petroleum Contaminated Soils, Vol.3. P. Kostecki, and E. Calabrese (eds.). Lewis Publishers, Chelsea, MI.
- 17 Calabrese, E.J., Stanek, E.J., Gilbert, C.E., Layton, D., and Barnes, R. (1990). A guide to interpreting soil ingestion studies. Regulatory Toxicology and Pharmacology.
- 18 Calabrese, E.J., Layton, D., Gilbert, C., et al. (1990). Methodological approaches for estimating soil ingestion in humans. In: Hydrocarbon Contaminated Soils and Groundwater. Kostecki, P., Calabrese, E.J. and Bell, C. (eds). Lewis Publishers, Chelsea, MI.
- 19 Gilbert, C. and Calabrese, E.J. (1991). Bilirubin kinetics in the synkavite treated neonatal rat. J. Clin. Invest. (to be submitted).
- 20 Gilbert, C. and Calabrese, E.J. (1991). Developmental changes in erythrocyte methemoglobin and GSH in the neonatal rat. Blood (to be submitted).
- 21 Gilbert, C.E. (1990). Bilirubin kinetics in the Synkayvite treated neonatal rat. Doctoral Dissertation. University of Massachusetts, Amherst, MA. May, 1990.
- 22 Calabrese, E.J., Stanek, E.S., and Gilbert, C.E. (1990). A Preliminary Decision Framework For Deriving Soil Ingestion Rate. In: Hydrocarbon Contaminated Soils and Groundwater. Kostecki, P., Calabrese, E.J. and Bell, C. (eds.). Lewis Publishers, Chelsea, MI.
- 23 Calabrese, E.J., Stanek, E.S., and Gilbert, C.E. (1991). Evidence of Soil-Pica Behavior and Quantification of Soil Ingested. Human Toxicology. (10:245-249).
- 24 Gilbert, C.E., and Calabrese, E.J. (1991). Comparison of Risk Assessment Methodologies for Methyl Tertiary Butyl Ether. In: Regulating the Safety of Drinking Water. Gilbert, C.E., Calabrese, E.J. and Feger, N., (eds.) Lewis Publishers, Chelsea, MI.
- 25 Calabrese, E.J., Stanek, E.J., and Gilbert, C. (1993). Lead exposure in a soil pica child. J. Environ. Sci. Health Res., A28(2). (353-362).

- 26 Calabrese, E.J., and Gilbert, C. (1992). Lack of independence of UF's: Implications for risk assessment. Reg. Toxic. Pharm. 17:44-51.
- 27 Calabrese, E.J., and Gilbert, C. (1992). Review of the Health Effects Basis for EPA Drinking Water Standards for Synthetic Organic Compounds and Inorganic Compounds. American Water Works Research Foundation (Denver, CO).
- 28 Gilbert, C. (1997). Renovating Our Houses, Should We Be Concerned With Lead? Environmental Solutions. Environmental Information Association (McLean VA).

#### **VIII CONFERENCE, SEMINAR, AND COURSE PRESENTATIONS**

- 1 Gilbert, C.E., Tuthill, R.W., Calabrese, E.J. and Peters, H.A. 1978. Lead Hazards in the Housing Environment of Lead Poisoned Children Versus Non Poisoned Controls. Presented at the American Public Health Association. October 1978, Los Angeles, CA.
- 2 Gilbert, C.E., Peters, H.A., Calabrese, E.J. and Tuthill, R.W. 1979. Estimating Health Risks from Lead Toxicity According to Source of Exposure: A case control study. Presented at the AAAS conference. January 1979, Houston, Texas.
- 3 Gilbert, C.E. 1979. Environmental Sources of Lead for Children and Adults. Presented at Wellesley Public Health Rounds. March 1979, Wellesley, Massachusetts.
- 4 Gilbert, C.E., Clohisy, R. 1979. Procedure for the Inspection and Removal of Lead Paint Hazards from the Housing Environment of Children. Presented to Pittsfield Department of Public Health and C.E.T.A. staff involved in lead paint removal training. July 1979, Pittsfield, Massachusetts.
- 5 Gilbert, C.E., Clohisy, R. 1979. Sources, Effects and Prevention of Childhood Lead Poisoning. Presented at Melrose Housing Authority July 1979, Melrose, Massachusetts.
- 6 Gilbert, C.E. 1980. Childhood Lead Poisoning Etiology and Prevention. Presented at the Watertown Health Department. October 1980, Watertown, Massachusetts.
- 7 Gilbert, C.E. 1981. Childhood Lead Poisoning Sources Etiology and Prevention. Seminar presented to Athol Hospital Staff. January 1981, Athol, Massachusetts.
- 8 Gilbert, C.E. 1981. Health Concerns in a Non-Manufacturing Environment, Lead Toxicity. Presented to Massachusetts Safety Council, Annual Conference. February 1981, Newton, Massachusetts.
- 9 Gilbert, C.E. 1981. Childhood Lead Poisoning Prevention and Local Boards of Health. Presented to Massachusetts Health Officers Association, Annual Meeting. March 1981, Newton, Massachusetts.
- 10 Gilbert, C.E. and Samuels, T. 1981. Childhood Lead Poisoning Prevention in the Commonwealth of Massachusetts. Presented at the Childhood Lead Poisoning Prevention Conference. April 1981, Boston, Massachusetts.



- 11 Samuels, T. and Gilbert, C.E. 1982. Childhood Lead Poisoning Prevention in the Commonwealth of Massachusetts. Presented at Public Health Rounds, Massachusetts Department of Public Health. February 1982, Boston, Massachusetts.
- 12 Gilbert, C.E. 1982. Childhood Lead Poisoning in Special Needs Children. Presented at Perkins School for the Blind. May 1982. Watertown, Massachusetts.
- 13 Gilbert, C.E. 1983. Childhood Lead Poisoning Prevention. Presented at Environmental Health Seminar Series, School of Health Sciences, Division of Public Health, University of Massachusetts. March 1983, Amherst, Massachusetts.
- 14 Gilbert, C.E. and Calabrese, E.J. 1984. Predictive Toxicology, Toxicology for Chemists, American Chemical Society Short Courses. August 1984, Philadelphia, PA.
- 15 Gilbert, C.E. and Calabrese, E.J. 1985. The Effects of Pollutants in Drinking Water on Human Health, Tri State Conference on Problem Waters and Treatment for Small and Individual Water Systems, Cooperative Extension Service, University of Connecticut. May 15, 1985, Storrs, CT.
- 16 Gilbert, C.E. and Calabrese, E.J. 1985. Predictive Toxicology, Symposium, Toxicology and Risk Assessment Part II, American Association for the Advancement of Science Annual Meeting. May 31, 1985, Los Angeles, CA.
- 17 Gilbert, C.E. and Calabrese, E.J. 1985. Pesticides and Groundwater, Panelist with Dr. Charles Frink, Connecticut Agricultural Experiment Station, and Commissioner Kenneth Anderson, Connecticut Department of Agriculture. June 25, 1985, Northeast Association of State Departments of Agriculture Annual Meeting, Portland, Maine.
- 18 Gilbert, C.E., Toxic Compounds Found in Waste Water Treatment Plants. Gardner Community College, Gardner, MA. January 1986.
- 19 Gilbert, C.E., Lead Poisoning Prevention; Health Issues in Real Estate: Protecting the Buyer and Seller, December 1986, University of Massachusetts, Amherst.
- 20 Calabrese, E.J., Gilbert, C.E. 1987. Health Concerns from Groundwater Contaminants. Third National Drinking Water Conference. Philadelphia, Pennsylvania. January 13, 1987.
- 21 Calabrese, E.J., Gilbert, C.E. and Kostecki, P.T. 1987. Epidemiological study to Estimate How Much Soil Children Eat: Environmental and Public Health Effects of Soils Contaminated with Petroleum Products, University of Massachusetts, Amherst Massachusetts. September 30, 1987.
- 22 Gilbert, C. E. 1987. Childhood Lead Poisoning - Communicating the Danger: Leading Us Away From Lead Poisoning Whose Responsibility? New England Consortium of Childhood Lead Poisoning Prevention Programs, Newport, Rhode Island. October 5, 1987.

- 23 Calabrese, E. J., Gilbert, C. E. and Kostecki, P. T. 1987. A Methodology to Estimate the Amount of Soil Young Children Eat. Regional Conference U.S. Public Health Service. Hyannis, Massachusetts, December 1, 1987.
- 24 Gilbert, C. E. 1987. Childhood Lead Poisoning Prevention and Real Estate: Health Issues and Real Estate: Protecting the Buyer and Seller. Division of Continuing Education. University of Massachusetts, Sturbridge, Massachusetts, December 7, 1987.
- 25 Gilbert, C. E. 1987. Lead Poisoning Effects, Exposure Routes and Risk Communication: Lead Poisoning: A Household Environmental Hazard. University of Massachusetts, Cooperative Extension Service, Ashland, Massachusetts, February 1, 1988.
- 26 Gilbert, C. E., Calabrese, E. J., 1988. Regional Approaches to Risk Management. American Mosquito Control Association, National Conference, Denver, Colorado, February 22, 1988.
- 27 Calabrese, E.J., Gilbert, C.E. 1988. Oral Exposure of Children to Soil and Dust. Risk Assessment Forum Colloquium. United States Environmental Protection Agency. Washington, DC, March 23, 1988.
- 28 Gilbert, C.E. and Calabrese, E.J. 1985. Impacts of Toxic Pollutants on Human Receptors, Eighth Annual Technical Conference, Water Pollution Control Association of Pennsylvania. March 25, 1985, Philadelphia, PA.
- 29 Gilbert, C.E. 1988. Moderator of Section Case Studies in Risk Management. Conference on Municipal Solid Waste Disposal: Landfilling Incineration, Resource Recovery, Recycling and Composting, Public Health, Environmental, Economic and Technological Aspects. Northeast Regional Environmental Public Health Center. Amherst, Massachusetts, April 14, 1988.
- 30 Gilbert, C.E. 1988. Regulatory Toxicology and Management. Regional Environmental Public Health Conference. Northeast Regional Environmental Public Health Center. Amherst, Massachusetts. May 26, 1988.
- 31 Calabrese, E.J., Barnes, R., Stanek, E.J., Pastides, H., Gilbert, C.E. Veneman, P. (1988). How Much Soil Do Children Ingest: An Epidemiologic Study. Third Conference on Environmental and Public Health Effects of Soils Contaminated with Petroleum. Amherst, Massachusetts, September 19-21, 1988.
- 32 Gilbert, C.E. (1988). Communicating the Risk: Educating the Public on the Dangers of Lead. Childhood Lead Poisoning: Assessing, Communicating and Combatting the Risk. New England Consortium of Childhood Lead Poisoning Prevention Programs. Marlborough, Massachusetts, November 9, 1988.
- 33 Calabrese, E.J., Gilbert, C.E. (1989). Public Health Risks Associated with Medical Waste. Medical Waste Policy Committee. New York, New York. January 19, 1989.
- 34 Gilbert, C.E. (1989). Childhood Lead Poisoning. Health Issues in Real Estate: Protecting the Buyer and Seller. Rockland, Massachusetts. March 28, 1989.

- 35 Gilbert, C.E., Calabrese, E.J. (1989). Public Health Risks Associated with Medical Waste. Medical Waste Policy Authors Meeting. Medical Waste Policy Committee, Rockefeller Institute of Government. Rockefeller University, Albany, NY. April 12, 1989.
- 36 Gilbert, C.E., Calabrese, E.J. (1989). Medical Waste Policy Workshop, Nature Extent and Scope of Problem, Occupational and Public Health Problem, Environmental Problem, Home Health Care and Public Education, and Research Needs. Medical Waste Policy Committee, Rockefeller Institute of Government. Rockefeller University, Albany, NY. April 12, 1989.
- 37 Calabrese, Edward, J., Stanek, Edward, J., and Gilbert, Charles, E. (1989). Estimates of Adult Soil Ingestions. Poster session. Conference on Petroleum Contaminated Soils: Analysis, Environmental & Public Health Effects, Remediation, and Regulation, September 26, 27, 28, 1989. School of Public Health, University of Massachusetts, Amherst, Massachusetts.
- 38 Stanek, Edward, J., Calabrese, Edward, J., Gilbert, Charles, E. (1989). Choosing a Best Estimate of Children's Daily Soil Ingestion. Poster session. Conference on Petroleum Contaminated Soils: Analysis, Environmental & Public Health Effects, Remediation, and Regulation, September 26, 27, 28, 1989. School of Public Health, University of Massachusetts, Amherst, Massachusetts.
- 39 Gilbert, Charles, E., and Calabrese, Edward, J. (1989). The Role of Indicator Compounds in the Assessment of Site Specific Contamination with particular Reference to Number 2 Fuel Oil. Conference on Petroleum Contaminated Soils: Analysis, Environmental & Public Health Effects, Remediation, and Regulation, September 28, 1989. School of Public Health, University of Massachusetts, Amherst, Massachusetts.
- 40 Calabrese, E.J., Stanek, E.J., Gilbert, C.E., Layton, D., Barnes, R. (1990). A guide for interpreting soil ingestion studies. Conference on Hydrocarbon Contaminated Soils: Analysis, Environmental and Public Health Effects, Remediation, and Regulation. February 23, 1990. Newport Beach, CA.
- 41 Gilbert, C.E. (1990). Risk Communication: Understanding Risk and Communication to Clients. Water Quality Staff Training, Cooperative Extension Service, February 28, 1990. University of Massachusetts, Amherst, Massachusetts.
- 42 Gilbert, C.E. and Calabrese, E.J. (1990). Methyl Tertiary Butyl Ether: Approaches to Developing Advisory Levels. Conference on Drinking Water and Public Health. May 2, 1990. School of Public Health, University of Massachusetts, Amherst, Massachusetts.
- 43 Gilbert, C.E., Langlois, C.J., Leonard, D., and Calabrese E.J. (1990). The Interactive Effect of Copper, Chlorite, and Nitrite on Methemoglobin Formation. Maine Biological and Medical Sciences Symposium. June 7, 1990. The College of the Atlantic, Bar Harbor, ME.
- 44 Gilbert, C.E., Calabrese, E.J., Stanek, E.J., and Levin R.E. (1990) Bilirubin Kinetics in Neonatal Rodents Treated with the Vitamin K Analogue Synkayvite. Maine Biological and Medical Sciences Symposium. June 8, 1990. The College of the Atlantic, Bar Harbor, ME.

- 45 Gilbert, C.E., Calabrese, E.J. (1990). Health Based Criteria for Siting Hazardous Waste Facilities. Conference on Basics of Hazardous Material Waste Operations and Regulatory Issues. Sentinal Training Institute. September 10, 1990. University of Massachusetts, Amherst, MA.
- 46 Gilbert, C.E. (1990). Facilitator, Environmental Health Risk Education For Youth: Curricula Concepts, Strategies and Resources. Interagency Task Force on Environmental Cancer and Lung Disease. September 12-14, 1990. Arlington, VA.
- 47 Gilbert, C.E., and Calabrese, E.J. (1990). Educating Youth on the Dangers of Childhood Lead Poisoning. Environmental Health Risk Education for Youth: Curricula Concepts, Strategies and Resources. Interagency Task Force on Environmental Cancer and Lung Disease. September 12-14, 1990. Arlington, VA.
- 48 Gilbert, C.E., Jones, T., Calabrese, E.J., and Winder, A. (1990). Environmental Curricula Concerning Waste Management. Environmental Health Risk Education for Youth: Curricula Concepts, Strategies and Resources. Interagency Task Force on Environmental Cancer and Lung Disease. September 12-14, 1990. Arlington, VA.
- 49 Gilbert, C.E., Calabrese, E.J., Stanek, E.J. and Levin, R.E. (1990). Hyperbilirubinemia Model In Neonatal Rodents Using the Vitamin K Analogue Synkayvite. Similarities and Differences Between Children and Adults: Implications for Risk Assessment. November 5-7, 1990. Hunt Valley, MD.
- 50 Gilbert, C.E., Calabrese, E.J., Stanek, E.J. and Levin, R.E. (1990). Elevated Methemoglobin and Low Reduced Glutathionne Levels In Normal Sprague-Dawley Rats 1 to 14 Days Old. Similarities and Differences Between Children and Adults: Implications for Risk Assessment. November 5-7, 1990. Hunt Valley, MD.
- 51 Gilbert, C.E., Calabrese, E.J., Stanek, E.J., and Levin, R.E. (1991). Hyperbilirubinemia Model In Neonatal Rodents Using the Vitamin K Analogue Synkayvite. 30th Annual Meeting, Society of Toxicology. February 27, 1991. Dallas, TX.
- 52 Gilbert, C.E., and Calabrese, E.J. (1991). Health Basis of the Maximum Contaminant Level Goal for Selected Inorganic Chemicals. Regulating Drinking Water Quality in the 1990's. April 3, 1991. Amherst MA.
- 53 Gilbert, C.E. Moderator. (1991). International Concerns With Regulating Drinking Water Quality. Regulating Drinking Water Quality in the 1990's. April 3, 1991. Amherst MA.
- 54 Gilbert, C.E. (1991). The Health Effects of Lead. The Lead and Copper Rule. Connecticut Section AWWA and the New England Water Works Association and U.S. Environmental Protection Agency. December 5, 1991. Cromwell, CT.
- 55 Gilbert, C.E. (1992). The Health Effects of Lead. The lead and copper rule. New England Water Works Associations and U.S. Environmental Protection Agency. January 30, 1992. Marlborough, MA.

- 56 Gilbert, C.E. (1992). The Health Effects of Lead. The lead and copper rule. New England Water Works Associations and U.S. Environmental Protection Agency. March 3, 1992. Leominster, MA.
- 57 Gilbert, C.E. (1992). Course Director, Faculty, Lead Abatement Training for Deleader Contractors, Deleader Supervisors and Deleader Workers. Lead Training Program, School of Public Health, University of Massachusetts. May 26-29, 1992. Amherst, MA.
- 58 Gilbert, C.E. (1992). The Health Effects of Lead. The Lead and Copper Rule. New England Water Works Association and U.S. Environmental Protection Agency. May 27, 1992. Lebanon, NH.
- 59 Gilbert, C.E. (1992). Medical and Public Health Implications of Undue Lead Exposure. New England Public Health Association Annual Meeting. June 4, 1992. Stratton, VT.
- 60 Gilbert, C.E. (1992). The Health Effects of Lead. The Lead and Copper Rule. New England Water Works Association and U.S. Environmental Protection Agency. June 11, 1992. Springfield, MA.
- 61 Gilbert, C.E. (1992). Environmental Factors and pathways of Contamination in Lead Poisoning. Annual Housing Court Conference. Getting the Lead Out: How and Why. massachusetts Trial Court. Judicial Institute and Housing Court Department. June 30, 1992. Weston, MA.
- 62 Gilbert, C.E. (1992). Society and Trade Professionals Role in Childhood Lead Poisoning Prevention. Annual Conference North East Regional International Brotherhood of Painters and Allied Trades. August 1, 1992. Albany, NY.
- 63 Gilbert, C.E. (1992). Lead Inspector Training. Sept. 9-11, 1992. Amherst, MA.
- 64 Gilbert, C.E. (1992). Lead Abatement Training for Deleaders, Supervisors, and Contractors. Oct. 19-22, 1992. Amherst, MA.
- 65 Gilbert, C.E. (1992). Lead Abatement Training for Deleaders, Supervisors, and Contractors. Nov. 30-Dec. 3, 1992. Amherst, MA..
- 66 Gilbert, C.E. (1992). Strategies for Detecting Lead Paint Hazards. Re-Examining Lead Poisoning: Implications for Policy and Practice. Environmental Health Policy Information Project, Tufts University. December 17, 1992. Montpelier VT.
- 67 Gilbert, C.E. (1993). Lead Inspector's Course. Southern Connecticut State University. Feb. 8-11, 1993. New Haven, CT.
- 68 Gilbert, C.E. (1993). Lead Inspector's Course. Southern Connecticut State University. Feb. 23-26, 1993. New Haven, CT.
- 69 Gilbert, C.E. (1993). Lead Inspector's Course. Southern Connecticut State University. March 1-4, 1993. New Haven, CT.

- 70 Gilbert, C.E. (1993). Lead Inspector's Course. Southern Connecticut State University. March 22-25, 1993. New Haven, CT.
- 71 Gilbert, C.E. (1993). Lead Abatement Supervisor/Contractor's Course. University of Massachusetts. March 29-April 1, 1993. Amherst, MA.
- 72 Gilbert, C.E. (1993). Health Issues: Why Monitor? Lead and Copper Sampling for Small Public Water Systems. Northeast Regional Rural Water Association. April 8, 1993. Springfield, MA.
- 73 Gilbert, C.E. (1993). Lead Inspector's Course. University of Massachusetts. April 12-15, 1993. Amherst, MA.
- 74 Gilbert, C.E. (1993). Lead Inspector's Course. Cornell University. April 19-22, 1993. Albany, NY.
- 75 Gilbert, C.E. (1993). Lead Inspector's Course. Cornell University. May 3-6, 1993. Albany, NY.
- 76 Gilbert, C.E. (1993). Lead Inspector's Course: Environmental Lead Inspector Technicians, and Environmental Lead Inspectors. Community College of Rhode Island. May 17-21, 1993. Providence, RI.
- 77 Gilbert, C.E. (1993). Lead Inspector's Course. Cornell University. May 24-27, 1993. Batavia, NY.
- 78 Gilbert, C.E. (1993). Lead Hazard Reduction Contractor/Site Supervisor, and Worker Course. Community College of Rhode Island. June 7-11, 1993. Providence, RI.
- 79 Gilbert, C.E. (1993). Lead Inspector's Course. Cornell University. June 7-10, 1993. Rye, NY.
- 80 Gilbert, C.E. (1993). Lead Inspector's Course. Cornell University. June 21-24, 1993. Syracuse, NY.
- 81 Gilbert, C.E. (1993). Lead Inspector's Course. Fashion Institute of Technology. July 26-29, 1993. New York, New York.
- 82 Gilbert, C.E. (1993). Lead Inspector's Course. University of Massachusetts. October 19-22, 1993. Amherst, MA.
- 83 Gilbert, C.E. (1993). Lead Abatement Supervisor/Contractor's Course. University of Massachusetts. October 19-22, 1993. Amherst, MA.
- 84 Gilbert, C.E. (1993). Lead Inspector's Course. Borough of Manhattan Community College. November 1-4, 1993. New York, New York.

- 85 Gilbert, C.E. (1993). Sources of Lead in a Child's Environment and Health Effects of Lead Exposure. Health Issues of Concern to Child Care Centers. Vermont Department of Social & Rehabilitative Services. November 4, 1993. Montpelier, VT.
- 86 Gilbert, C.E. (1993). Lead Abatement Supervisor/Contractor's Course. Central Maine Community College. November 15-18, 1993. Auburn, ME.
- 87 Gilbert, C.E. (1994). Lead Abatement Supervisor/Contractor's Course. Housing Preservation & Development. January 10-13 1994. New York, New York.
- 88 Gilbert, C.E. (1994). Lead Abatement Supervisor/Contractor's Course with IBPAT District Council Lead Training Fund. January 15-16, & 22-23, 1994. Hartford, CT.
- 89 Gilbert, C.E. (1994). Lead Abatement Supervisor/Contractor's Course. Colegio de Ingenieros y Agrimensores de Puerto Rico. February 1-4 1994. San Juan Puerto Rico.
- 90 Gilbert, C.E. (1994). Inspector. Colegio de Ingenieros y Agrimensores de Puerto Rico. February 1-4 1994. San Juan, Puerto Rico.
- 91 Gilbert, C.E. (1994). Abatement Supervisor/Contractor's Course. Borough of Manhattan Community College. February 14-17 1994. New York, NY.
- 92 Gilbert, C.E. (1994). Abatement Supervisor/Contractor's Course. University of Massachusetts. March 14-17 1994. Amherst, MA
- 93 Gilbert, C.E. (1994). Inspector Course. Central Maine Technical College. March 21-24 1994. Auburn, ME
- 94 Gilbert, C.E. (1994). Inspector Course. Housing Preservation & Development. April 4-7, 1994. New York, New York.
- 95 Gilbert, C.E. (1994). Inspector Course. University of Massachusetts. May 2-5, 1994. Amherst, MA.
- 96 Gilbert, C.E. (1994). Abatement Supervisor/Contractor's Course. National Association of Minority Contractors. May 9-12 1994. Boston, MA
- 97 Gilbert, C.E. (1994). Abatement Supervisor/Contractor's Course. Lead Abatement Supervisor/Contractor's Course with IBPAT District Council Lead Training Fund. May 14-15, & 22-23, 1994. Hartford, CT.
- 98 Gilbert, C.E. (1994). Abatement Supervisor/Contractor Environmental Justice Lead Abatement Training & Employment Opportunity Pilot Project. Roxbury Community College. June 13-16 1994. Roxbury, MA
- 99 Gilbert, C.E. (1994). Abatement Supervisor/Contractor Course. Dept. of Housing Preservation and Development, East Broadway. July 25-28 1994. New York, NY

- 100 Gilbert, C.E. (1994). Inspector Course. Souther Maine Technical College. August 8-11, 1994. South Portland, ME.
- 101 Gilbert, C.E. (1994). Abatement Supervisor/Contractor, Environmental Justice Lead Abatement Training & Employment Opportunity Pilot Project, In Cooperation with EPA Region I, Massachusetts Department of Employment & Training, National Association of Minority Contractors, & Roxbury Community College. Roxbury Community College. August 22-26 1994. Roxbury, MA.
- 102 Gilbert, C.E. (1994). Inspector Course. Palmer Inn, Princeton, NJ. September 19-22, 1994. Princeton, NJ.
- 103 Gilbert, C.E. (1994). Abatement Supervisor/Contractor Course. Inspector Course. Palmer Inn. September 22-25, 1994. Princeton, NJ.
- 104 Gilbert, C.E. (1994). Risk Assessment Course. Palmer Inn. September 26-27, 1994. Princeton, NJ.
- 105 Gilbert, C.E. (1994). Abatement Supervisor/Contractor Course. Holiday Inn. October 3-6, 1994. Holyoke, MA.
- 106 Gilbert, C.E. (1994). Inspector Course. Holiday Inn. October 17-20, 1994. Holyoke, MA.
- 107 Gilbert, C.E. (1994). Inspector Course. Carpenters Labor & Technical College. October 31-November 3, 1994. New York City, NY.
- 108 Gilbert, C.E. (1994). New England Native American Lead Inspector Training Conference. Narraganset Indian Vocational Training Program, Whispering Pines Conference Center, W. Alton Jones Campus, Univ. Rhode Island. November 28-December 2, 1994. West Greenwich, RI.
- 109 Gilbert, C.E. (1994). Sources of Lead in the Environment for Children and Adults and Routes of Exposure and Possible Contributions to Body Burden. University of Alabama School of Public Health, Birmingham AL. November 15, 1994. Birmingham AL.
- 110 Gilbert, C.E. (1994). Lead Inspector Course. Wannalancit Office and Technology Center, University of Massachusetts Lowell. December 12-14, 1994. Lowell, MA.
- 111 Gilbert, C.E. (1995). Abatement Supervisor/Contractor Encapsulant Training. Wannalancit Office and Technology Center, University of Massachusetts Lowell. February 1-2, 1995. Lowell, MA.
- 112 Gilbert, C.E. (1995). Abatement Supervisor/Contractor Course. Carpenters Labor & Technical College, New York City. NY. February 6-9, 1995. New York City, NY.
- 113 Gilbert, C.E. (1995). Inspector Course. Albany Ramada Inn. February 13-16, 1995. Albany, NY.



- 114 Gilbert, C.E. (1995). Abatement Supervisor/Contractor Course. Holiday Inn, Ingleside. March 13-16, 1995. Holyoke, MA.
- 115 Gilbert, C.E. (1995). Abatement Supervisor/Contractor Encapsulant Course. Holiday Inn, Ingleside. March 16-17, 1995. Holyoke, MA.
- 116 Gilbert, C.E. (1995). New England Native American Lead Inspector Training Conference. Houlton Band of Maliseet Indian Housing Authority. March 20-24, 1995. Houlton, ME.
- 117 Gilbert, C.E. (1995). Abatement Supervisor/Contractor Course. Carpenters Labor & Technical College, New York. April 3-6, 1995. New York City, NY.
- 118 Gilbert, C.E. (1995). Risk Assessment Course. Puerto Rico Housing and Urban Development Lead Poisoning Prevention Program. Tropimar Conference Center. April 12-13, 1995. San Juan, Puerto Rico.
- 119 Gilbert, C.E. (1995). Lead Inspector Course. Springfield Housing Authority. May 1-3, 1995. Springfield, MA.
- 120 Gilbert, C.E. (1995). Encapsulant Course. Springfield Housing Authority. May 4-5, 1995. Springfield, MA.
- 121 Gilbert, C.E. (1995). Inspector Course. Albany Fire Academy Training Center. May 8-11, 1995. Albany, NY
- 122 Gilbert, C.E. (1995). Lead Poisoning Prevention Concerns of Property Owners. Berkshire Realty Association. May 9, 1995. Pittsfield, MA.
- 123 Gilbert, C.E. (1995). Inspector Course. Carpenters Labor & Technical College, New York City. NY. September 25-27, 1995. New York City, NY.
- 124 Gilbert, C.E. (1995). Risk Assessment Course. Carpenters Labor & Technical College, New York City. NY. September 28-29, 1995. New York City, NY.
- 125 Gilbert, C.E. (1995). Abatement Supervisor/Contractor Course. Carpenters Labor & Technical College, New York City. NY. October 2-5, 1995. New York City, NY.
- 126 Gilbert, C.E. (1995). Inspector Course. Carpenters Labor & Technical College, New York City. NY. November 6-8, 1995. New York City, NY.
- 127 Gilbert, C.E. (1995). Abatement Supervisor/Contractor Course. Carpenters Labor & Technical College, New York City. NY. November 13-17, 1995. New York City, NY.
- 128 Gilbert, C.E. (1995). Inspector Course. Carpenters Labor & Technical College, New York City. NY. December 4-6, 1995. New York City, NY.

- 129 122. Gilbert, C.E. (1995). Risk Assessment Course. Carpenters Labor & Technical College, New York City. NY. December 7-8, 1995. New York City, NY.
- 130 Gilbert, C.E. (1996). Abatement Supervisor/Contractor Course. Carpenters Labor & Technical College, New York City. NY. January 8-11, 1996. New York City, NY.
- 131 Gilbert, C.E. (1996). Inspector Course. Carpenters Labor & Technical College, New York City. NY. February 5-7, 1996. New York City, NY.
- 132 Gilbert, C.E. (1996). Abatement Supervisor/Contractor Hands-On Training Course. Montefiore Medical Center Lead Safe House, New York City. NY. February 8-9, 1996. New York City, NY.
- 133 Gilbert, C.E. (1996). Abatement Supervisor/Contractor and Encapsulant Course. Boston Plasterers and Cement Masons, Boston. MA. February 26-March 1, 1996. Boston, MA.
- 134 Gilbert, C.E.\*, and K.A. Mundt (1996). An Unusual Look at the Relation of Lead In Paint and Dust and Blood Levels Among Children. Insight On Current and Future Lead Based Paint Activities by HUD. Environmental Information Association Annual Conference and Exposition. March 2-6, 1996. LasVegas, NV.
- 135 Gilbert, C.E. (1996). Abatement Supervisor/Contractor Course. Carpenters Labor & Technical College, New York City. NY. March 18-21, 1996. New York City, NY.
- 136 Gilbert, C.E. (1996). Abatement Supervisor/Contractor Course. Montefiore Medical Center Lead Safe House, at Banana Kelly Inc. 863 Prospect Ave, Bronx, NY. April 1-4, 1996
- 137 Gilbert, C.E. (1996). Inspector Refresher Course. New Haven Health Department. April 15, 1996. New Haven, CT.
- 138 Gilbert, C.E. (1996). Abatement Contractor Course for Lead Hazard Education and Evaluation Project. Hampden, Hampshire Housing Partnership. April 30, 1996. Springfield, MA.
- 139 Gilbert, C.E. (1996). Abatement Supervisor/Contractor Course. Carpenters Labor & Technical College, New York City. NY. May 20-23, 1996. New York City, NY.
- 140 Gilbert, C.E. (1996). Inspector Course. Carpenters Labor & Technical College. June 3-5, 1996. New York City, NY.
- 141 Gilbert, C.E. (1996). Inspector Refresher Course. Carpenters Labor & Technical College. June 6, 1996. New York City, NY.
- 142 Gilbert, C.E. (1996). Risk Assessor Course. Carpenters Labor & Technical College. June 6-7, 1996. New York City, NY.
- 143 Gilbert, C.E. (1996). Abatement Supervisor/Contractor Course. Carpenters Labor & Technical College. July 8-12 1996.

- 144 Gilbert, C.E. (1996). Abatement Supervisor/Contractor Course. Offered jointly with the National Association of Minority Contractors. John Hancock Conference Center. July 22-26 1994. Boston MA.
- 145 Gilbert, C.E. (1996). Inspector Course. Carpenters Labor & Technical College. July 29-31, 1996. New York City.
- 146 Gilbert, C.E. (1996). Risk Assessor Course. Carpenters Labor & Technical College. August 1-2, 1996. New York City, NY.
- 147 Gilbert, C.E. (1996). Abatement Supervisor/Contractor Course. Carpenters Labor & Technical College. September 9-13 1996.
- 148 Gilbert, C.E. (1996). Inspector Course. Carpenters Labor & Technical College. September 24-26, 1996. New York City.
- 149 Gilbert, C.E. (1996). Risk Assessment of Lead Hazards in the Home. Lead Prevent 96. Hunter College School of Health Sciences. September 27, 1996. New York City.
- 150 Gilbert, C.E. (1996). Title X Disclosure Mandates. Lead Prevent 96. Hunter College School of Health Sciences. September 27, 1996. New York City.
- 151 Gilbert, C.E. (1996). Massachusetts Property Transfer and Tenant Lead Notification and Disclosure, Recent Experience. Lead Prevent 96. Hunter College School of Health Sciences. September 27, 1996. New York City.
- 152 Gilbert, C.E. (1996). Massachusetts Property Transfer and Tenant Lead Notification and Disclosure, Recent Experience. Lead Tech 96. Omni Shoreham Hotel, Washington D.C. October 7-9, 1996.
- 153 Gilbert, C.E. (1996). Interim Controls and Operations and Maintenance of Lead Paint Hazards Course. Carpenters Labor & Technical College. October 15, 1996. New York City.
- 154 Gilbert, C.E. (1996). Abatement Supervisor/Contractor Course. Carpenters Labor & Technical College. October 21-25 1996. New York City
- 155 Gilbert, C.E. (1996). Abatement Contractor Course for Lead Hazard Education and Evaluation Project. Hampden, Hampshire Housing Partnership. November 1, 1996. Springfield, MA.
- 156 Gilbert, C.E. (1996). Inspector Course. Carpenters Labor & Technical College. November 4-7, 1996. New York City.
- 157 Gilbert, C.E. (1996). Impact of Massachusetts Property Transfer and Tenant Lead Notification and Disclosure. Lead Disclosure & Worker Protection, ProTect, United States Lead. Hartford Club. November 6, 1996. Hartford, CT.

- 158 Gilbert, C.E. (1996). Impact of Massachusetts Property Transfer and Tenant Lead Notification and Disclosure. Lead Disclosure & Worker Protection, ProTect, United States Lead. Tara Stamford Hotel. November 12, 1996. Stamford, CT.
- 159 Gilbert, C.E. (1996). Lead Exposure: Sources, Routes of Entry, and Health Effects. Massachusetts Department of Labor and Industries. Northampton Hotel. November 13, 1996. Northampton, MA.
- 160 Gilbert, C.E. (1996). Abatement Supervisor/Contractor Course. Carpenters Labor & Technical College. December 2-6 1996.
- 161 Gilbert, C.E. (1996). Inspector Course. Carpenters Labor & Technical College. December 16-19, 1996. New York City.
- 162 Gilbert, C.E. (1997). Abatement Supervisor/Contractor Course. Carpenters Labor & Technical College. January 6-10 1997.
- 163 Gilbert, C.E. (1997). Inspector Course. North Atlantic Laboratories. January 13-16 1997. Ronkonkoma, Long Island.
- 164 Gilbert, C.E. (1997). EPA HUD Notification and Disclosure Rule. North Atlantic Laboratories. January 17 1997. Ronkonkoma, Long Island.
- 165 Gilbert, C.E. (1997). Abatement Supervisor/Contractor Course. Carpenters Labor & Technical College. January 27-31 1997.
- 166 Gilbert, C.E. (1997). Inspector Course. North East New York Safety Council. February 10-12 1997. Albany, New York.
- 167 Gilbert, C.E. (1997). Inspector Course. Carpenters Labor & Technical College. February 24-27, 1997. New York City.
- 168 Gilbert, C.E. (1997). Abatement Supervisor/Contractor Course. Carpenters Labor & Technical College. March 3-7 1997.
- 169 Gilbert, C.E. (1997). Inspector Course. Carpenters Labor & Technical College. March 17-20, 1997. New York City.
- 170 Gilbert, C.E.\*, K.A. Mundt, Smith T. (1997). Childrens' Play Behavior and Oral Activity Behavior During A Study of the Relation of Lead In Paint and Dust and Blood Levels Among Children. Lead Management. Environmental Information Association 14th Annual Conference and Exposition. March 24, 1997. New Orleans, LA.
- 171 Gilbert, C.E. (1997). Impact of Massachusetts Property Transfer and Tenant Lead Notification and Disclosure. Lead Management. Environmental Information Association 14th Annual Conference and Exposition. March 24, 1997. New Orleans, LA.

- 172 Gilbert, C.E.\*, and K.A. Mundt (1997). A Preliminary Look at XRF Levels & Condition of Lead Paint Surfaces in Residential Housing in Four Northeast Cites. Lead Analytical. Environmental Information Association 14th Annual Conference and Exposition. March 26, 1997. New Orleans, LA.
- 173 Gilbert, C.E.\*, and K.A. Mundt (1997). Ambient Dust Wipe Lead Levels in Residential Housing in Four Northeast Cites. Lead Analytical. Environmental Information Association 14th Annual Conference and Exposition. March 26, 1997. New Orleans, LA.
- 174 Gilbert, C.E. (1997). Abatement Supervisor/Contractor Course. Carpenters Labor & Technical College, NY City. April 7-10 1997.
- 175 Gilbert, C.E. (1997). Abatement Supervisor/Contractor Course. O'Brien & Gere Environmental Engineering, 555 East Genesee St, Fayetteville, NY. June 2-5 1997.
- 176 Gilbert, C.E. (1997). Inspector Course. Carpenters Labor & Technical College. June 9-11, 1997. New York City.
- 177 Gilbert, C.E. (1997). Abatement Worker Course. Carpenters Labor & Technical College, NY City. July 7-10 1997.
- 178 Gilbert, C.E. (1997). Abatement Supervisor/Contractor Course. Trade Winds Environmental and North Atlantic Laboratories. July 14-17 1997. West Babylon, Long Island.
- 179 Gilbert, C.E. (1997). Lead Sources and Health Effects. American Real Estate School. August 18, 1997. Haupaugh, Long Island.
- 180 Gilbert, C.E. (1997). Toxicology, Risk Assessment and Material Safety Data Sheets. Hazardous Waste Operations and Emergency Response OSHA Course 29 CFR 1910.120. Trade Winds Environmental Inc., U.S. National Park Service. September 15-19, 1997. Ellis Island, New York.
- 181 Gilbert, C.E. (1997). Respiratory Protection. Trade Winds Environmental Inc., U.S. National Park Service. October 15, 1997. Bay Shore, New York.
- 182 Gilbert, C.E. (1997). Lead Sources and Health Effects. American Real Estate School. October 23, 1997. Haupaugh, Long Island.
- 183 Gilbert, C.E. (1997). Toxicology, Risk Assessment and Material Safety Data Sheets. Hazardous Waste Operations and Emergency Response OSHA Course 29 CFR 1910.120. Trade Winds Environmental Inc., October 27-31, 1997. Bay Shore, New York.
- 184 Gilbert, C.E. (1997). Field and Facility Health and Safety, Natural Resources Response and Restoration, Core Team Training. November 1, 1997, Trade-Winds Environmental Restoration Inc., Bay Shore, NY.

- 185 Gilbert, C.E. (1997). Toxicology, Risk Assessment, Ethylene Oxide, Formaldehyde, Gluteraldehyde, and Mercury. Hazardous Waste Operations and Emergency Response, 8 hour HAZWOPER Refresher Course, OSHA 29 CFR 1910.120. November 14, 1997. Saint Vincent's Hospital. Staten Island, NY.
- 186 Gilbert, C.E. (1997). State of the Art from a Public Health Perspective, Lead Around the House: Controlling Hazards in Place, A Conference on Interim Control and Lead Safe Renovation. November 19, 1997. Springfield, MA.
- 187 Gilbert, C.E. (1997). Understanding the Childhood and Occupational Health Issues State of the Art from a Public Health Perspective, Lead Around the House: Controlling Hazards in Place, A Conference on Interim Control and Lead Safe Renovation. November 19, 1997. Springfield, MA.
- 188 Gilbert, C.E. (1997). Toxicology, Risk Assessment and Material Safety Data Sheets. Hazardous Waste Operations and Emergency Response, 40 hour OSHA Course, 29 CFR 1910.120. Trade-Winds Environmental Restoration Inc. December 9-12, 1997, Bay Shore, New York.
- 189 Gilbert, C.E. (1997). Bloodborne Pathogens. 2 hour OSHA Course 29 CFR 1910.1030. General Signal O-Z / Gedney, Trade Winds Environmental Inc. December 16, 1997. Bay Shore, New York.
- 190 Gilbert, C.E. (1997). Toxicology, Risk Assessment and Material Safety Data Sheets. Hazardous Waste Operations and Emergency Response Refresher. 8 hour OSHA Course 29 CFR 1910.120. Trade Winds Environmental Inc. December 17, 1997. Bay Shore, New York.
- 191 Gilbert, C.E. (1997). Toxicology, Hazardous Waste Operations and Emergency Response Supervisor, 8 hour HAZWOPER Course, OSHA 29 CFR 1910.120. December 22, 1997. Trade-Winds Environmental Restoration Inc., Bay Shore, NY.
- 192 Gilbert, C.E. (1998). Toxicology, Risk Assessment and Material Safety Data Sheets. Hazardous Waste Operations and Emergency Response Refresher. 8 hour OSHA Course 29 CFR 1910.120. Trade Winds Environmental Inc. January 9, 1998. Estee Lauder, Melville, New York.
- 193 Gilbert, C.E. (1998). Hazardous Waste Operations and Emergency Response, 40 hour OSHA Course, 29 CFR 1910.120. Trade-Winds Environmental Restoration Inc. January 12-16, 1998, Bay Shore, New York.
- 194 Gilbert, C.E. (1998). Toxicology, Risk Assessment and Material Safety Data Sheets. Hazardous Waste Operations and Emergency Response Refresher. 8 hour OSHA Course 29 CFR 1910.120. Trade Winds Environmental Inc. January 16, 1998. Estee Lauder, Melville, New York.
- 195 Gilbert, C.E. (1998). Lead Abatement Supervisor/Contractor Course. Trade Winds Environmental Restoration Inc. January 20-23, 1998. Bay Shore, New York.
- 196 Gilbert, C.E. (1998). Toxicology, Risk Assessment and Material Safety Data Sheets. Hazardous Waste Operations and Emergency Response Refresher. 8 hour OSHA Course 29 CFR 1910.120. Trade Winds Environmental Inc. January 23, 1998. Estee Lauder, Melville, New York.

- 197 Gilbert, C.E. (1998). Hazardous Waste Operations and Emergency Response, 40 hour OSHA Course, 29 CFR 1910.120. Trade-Winds Environmental Restoration Inc. February 17-20, 1998, Bay Shore, New York.
- 198 Gilbert, C.E. (1998). Permit Required Confined Space, 8 hour OSHA Course, 29 CFR 1910.146. Trade-Winds Environmental Restoration Inc. February 26, 1998, Hazen and Sawyer Engineers and Scientists, Manhattan, New York.
- 199 Gilbert, C.E. (1998). Environmental Lead Exposure to Children and Adults. Lead A Hidden Hazard to Your Child's Health. October 27, 1998, Stony Brook, State University of New York, Departments of Environmental Health & Safety, Child & Family Studies, Stony Brook Child Care Services. Stony Brook, New York.
- 200 Gilbert, C.E. (1998). Lead Management in a University Setting (Full Day Seminar). Safety Issues for the Next Millenium. State Universities of New York Environmental Health & Safety Conference, November 1-5, 1998. Buffalo, New York.
- 201 Gilbert, C.E. (1998). Indoor Air Quality Management Program. Current Approaches to Indoor Air Quality Risk Management. Enviroscience Consultants Seminar, December 2, 1998. Holtsville, New York.
- 202 Gilbert, C.E. and C.H. Erlanger (1999). Characterization of Environmental Lead Exposure in an Elementary School. Environmental Influences on Children: Brain, Development, and Behavior Conference. Center for Children's Health and the Environment, Mount Sinai School of Medicine. New York Academy of Medicine. November 1-5, 1998. Buffalo, New York, New York.
- 203 Gilbert, C.E. (1999). Permit Required Confined Space, 8 hour OSHA Course, 29 CFR 1910.146. Seaman Electric Inc., July 6, 1999, Bohemia, NY.
- 204 Gilbert, C.E., Senuik, C. (1998). Hazardous Waste Operations and Emergency Response, 40 hour OSHA Course, 29 CFR 1910.120. Branch Environmental Services Inc. August 2- 5, 9-12, 1999, Holbrook, New York.
- 205 Gilbert, C.E. (1998). Hazardous Waste Operations and Emergency Response, 40 hour OSHA Course, 29 CFR 1910.120. FAA Regional Office, JFK International Airport. August 30-September 3, 1999, Jamaica, New York.

## **IX. BOOKS**

1. Jones, T., Calabrese, E.J., Gilbert, C.E., and Winder, A. (1990). Environmental Curricula Concerning Waste Management. Lewis Publishers, Chelsea, MI.

## **X. CONFERENCE PROCEEDINGS - EDITORSHIP**

1. Calabrese, E.J., and Gilbert, C.E., Pastides, H. (Editors). 1989. Safe Drinking Water Act: Amendments, Regulations, and Standards. Lewis Publishers, Chelsea, Michigan.
2. Calabrese, E.J., Gilbert, C.E., Beck, B., (Editors). 1990. Ozone Risk Communication. Lewis Publishers, Chelsea, Michigan.
3. Gilbert, C.E., Calabrese, E.J., Feger, N., (Editors). 1991. Regulating the Safety of Drinking Water. Lewis Publishers, Chelsea, Michigan.

## **XI. NEWSLETTERS**

### **PUBLISHED**

**1. Northeast Regional Environmental Public Health Newsletter-Spring 1987-1989.** A quarterly publication on environmental health published by the Northeast Regional Environmental Public Health Center.

**2. Lead Report.**

National Quarterly Newsletter of the EPA Sponsored Regional Lead Training Centers. October 1, 1994- Present.

### **III ARTICLES PUBLISHED IN NEWSLETTERS**

- 1 **Gilbert, C.E. (1996). Do You Intend to Do Lead Abatement?** In: Newsletter New England Environmental Information Association. July 1995. New England Environmental Information Association, Newington, CT.
- 2 **Gilbert, C.E. (1996). Lead So What?** In: Newsletter National Association of the Remodeling Industry. January 1996. National Association of the Remodeling Industry, Arlington, VA, pp. 1-2.
- 3 **Gilbert, C.E. (1996). Lead Now What?** In: Newsletter National Association of the Remodeling Industry. February 1996. National Association of the Remodeling Industry, Arlington, VA, pp. 1-2.

### **IV PUBLIC SERVICE AND CONSULTING ACTIVITY**

**1 Massport (Boston, MA)**

Provided information on health effects of lead on children associated with grit blasting of paint from the Mystic Tobin bridge; planned and directed screening programs in the Mystic Tobin bridge area; analyzed screening and environmental data from the Mystic Tobin bridge area.

**2 Cooperative Extension Service (University of MA, Waltham, MA)**



Reviewed Extension Service's lead and soil literature; provided advice and guidance concerning its accuracy and use.

**3 Massachusetts Safety Council** (Boston, MA)

Provided advice concerning the potential exposure effects of lead on children whose parents may be occupationally or recreationally exposed to lead.

**4 Davis et al. Attorneys at Law** (Milwaukee, WI)

Provided consultation concerning a case of pediatric lead poisoning.

**5 Greater Brockton Legal Services** (Brockton, MA)

Provided consultation concerning lead paint in housing units of children.

**6 Harvard School of Public Health, Community Health Improvement Program (Boston, MA).**

Acted as advisor in the Jamaica Plain (Mozart Triangle Area) lead poisoning awareness project, Mozart Triangle.

**7 Boston University School of Nursing** (Boston, MA)

Provided training and consultation in public health outreach and childhood lead poisoning.

**8 Adams Community Development - Adams Health Department** (Adams, MA)

Provided training and consultation in conducting lead inspections and lead paint removal. Deputized inspectors to conduct inspections and enforce state law and regulations.

**9 Pittsfield Department of Public Health - Pittsfield Comprehensive Employment and Training Administration (Pittsfield, MA)**

Provided training and consultation to approximately 120 CETA employees in conducting lead paint removal. Deputized inspectors to conduct inspections and enforce state law and regulations.

**10 Melrose Housing Authority** (Melrose, MA)

Provided training and consultation in conducting lead inspections and lead paint removal.

**11 Greater Lawrence Community Action Council** (Lawrence, MA)

Provided training and consultation for the operation of the Lawrence Regional Childhood Lead Poisoning Prevention Program; deputized inspectors to conduct inspections and enforce the state law and regulations.

**12 Worcester Health Department** (Worcester, MA)

Provided training and consultation for the operation of the Worcester Childhood Lead Poisoning Prevention Program. Deputized inspectors to conduct inspections and enforce the state law and regulations.

**13 Boston Environmental Health Improvement Program, Boston Health and Hospitals** (Boston, MA)

Provided training and consultation for the operation of the Boston Childhood Lead Poisoning Prevention Program.

**14 Perkins School for the Blind** (Watertown, MA)

Provided consultation for removal of lead paint from surfaces in Perkins School for the Blind.

**15 Cambridge Department of Health** (Cambridge, MA)

Provided consultation in conducting lead inspections, the requirements of the law and regulations and legal proceedings. Trained and deputized inspectors to conduct inspections and enforce state law and regulations.

**16 Connecticut Department of Health Services** (Hartford, CT)

Member of an experience and evaluation committee for senior administrative position in the State of Connecticut. January 1988.

**17 Rhode Island Department of Health** (Providence, RI)

Co-authored with Edward J. Calabrese, a report on the extent to which trichloroethylene (TCE) in well water may volatilize into the air and be inhaled during the showering process, October-December, 1987.

**18 Connecticut Department of Health Services** (Hartford, CT)

Directed the writing of Childhood Lead Poisoning Prevention and Control Regulations for the Connecticut Department of Health Services. The regulations established the removal and abatement requirements and procedures for materials containing toxic levels of lead and certification criteria and procedures for lead inspectors and lead removal contractors. January 1988 - June 1988.

**19 Eastern Research Group** (Arlington, MA)

Member of Scientific Advisory Committee for childhood lead poisoning prevention research - June 1988 to present.

**20 Vermont Department of Public Health** (Burlington, VT)

Co-authored with Edward J. Calabrese, a report to assess the risk to human health for the lampricide 4-nitro-3-trifluoromethylphenol (TFM) used for lamprey control in Lake Champlain. January 1989.

**21 Vermont Department of Public Health** (Burlington, VT)

Co-authored with Edward J. Calabrese, a report on the uptake of heavy metals by plants. February 1989.

**22 Rhode Island Department of Health** (Providence, RI)

Co-authored with Edward J. Calabrese a report entitled "Risk Assessment of Methyl Tertiary Butyl Ether". May 11, 1989.

**23 Connecticut Department of Health Services** (Hartford, CT)

Co-authored with Edward J. Calabrese and Cynthia Langlois a report entitled "Review of Three Soil Fate Models". June 30, 1989.

**24 Connecticut Department of Health Services** (Hartford, CT)

Co-authored with Edward J. Calabrese a report entitled "An Evaluation of Indicator Compound Methodology for Number 2 Fuel Oil". June 30, 1989.

**25 Rhode Island Department of Health** (Providence, RI)

Co-authored with Edward J. Calabrese a report entitled "A National Survey and Literature Review of Health Based Siting Criteria for Waste Facilities". June 30, 1989.

**26 Nelson A. Rockefeller Institute of Government State University of New York**. (Albany, NY).

Academic Advisor for the Report of the Medical Waste Policy Committee: Findings, conclusions, and recommendations of an ad hoc panel composed of representatives from health care providers, the medical supply and service industry, labor, waste disposers, and environmental groups. June, 1989.

**27 Center for Environmental Health, University of Connecticut**. (Storrs, CT).

Managed a project to research environmental curricula concerning waste management. The project included literature searches and a national survey of agencies. September, 1989.

**28 American Water Works Research Foundation** (Denver, CO).

Co-authored with Edward J. Calabrese a report entitled "Review of the Health Effects Basis for EPA Drinking Water Standards for Synthetic Organic Compounds and Inorganic Compounds. July, 1990 - July, 1991.

**29 Agency for Toxic Substances and Disease Registry** (Atlanta, GA).

Member of Scientific Review Committee to provide peer review of

protocol for health studies and review of completed health studies. August, 1990 - December 1993.

**30 University of California, Berkley Smoking and Tobacco Research Institute** (Berkley, CA).

Member of Ad Hoc Scientific Review Committee to provide peer-review of proposals. April, 1991.

**31 Massachusetts Department of Public Health** (Boston, MA).

Childhood Lead Poisoning Prevention Program. Member of Scientific Advisory Committee for study of "Blood Lead Levels Following Abatement". October 1991 - Present.

**32 Vermont Department of Public Health** (Burlington, VT).

Providing guidance for the development of a state wide childhood lead poisoning prevention program. November 1991 - Present.

**33 Society for Occupational and Environmental Health** (McLean, VA).

Consensus workshop on worker protection practices for lead abatement. Alexandria, VA. July 22-July 24, 1992.

**34 Environmental Justice Pilot Project, with Region I, E.P.A.**

Responsible for the educational quality, curriculum requirements, and course conduct in an Environmental Justice Pilot Project, with Region I, E.P.A., Roxbury Community College, Massachusetts Dept. of Employment and Training, other state and local agencies, and the National Association of Minority Contractors. The project includes course and apprenticeship training with experienced contractors enabling central city residents to abate lead paint and other hazards from neighborhood housing. March 1994 - Present.

**35 New England Native American Environmental Justice Project, with Region I, E.P.A.**

Responsible for the educational quality, curriculum requirements, and course conduct in a New England Native American Lead Training program. August 1994 - Present.

**36 Center for Environmental Education, Roxbury Community College, Boston MA, with Region I, E.P.A.**

Advisory Board Member. Responsible for the educational quality, curriculum requirements, and direction of the Center for Environmental Education, Roxbury Community College. Areas include lead poisoning prevention, waste disposal, recycling, waste management, radon, soil testing, asbestos and water. January 1995 - Present.

**37 National Lead Certification Examination System Environmental Protection Agency, Washington DC Directed by WESTAT**

Subject Matter Expert for the EPA National Lead Certification Examination System. Areas of expertise include: regulatory issues, health effects, XRF, chemical, and laboratory testing, media sampling including dust and soil, inspections, risk assessments, addressing children with elevated blood levels, abatement set up, containment, abatement methods, including encapsulation, abatement clean-up and dust control, soil and dust, interim controls, personal protective equipment, respiratory protection, personal and community relations, ethics, and waste disposal. Projects for the National Lead Certification Examination System include: 1) May 1996, review of all 600 questions and answers for the Inspectors, Risk Assessors, and Supervisors, examinations. 2) June 1996, second review of all 600 questions and answers for the Inspectors, Risk Assessors, and Supervisors, examinations. 3) June 1996, review Curricula Assessment for Learning Objectives In Lead Based Paint Inspector, Risk Assessor, and Supervisor, training. October 1 1995 - December 31, 1996.

**38 Alliance to End Childhood Lead Poisoning, Washington DC**

Ad Hoc Committee to provide the approach to Help Consumers Find Qualified Lead Professionals. June 27, 1996 - August 1, 1996.

**39 U.S. Environmental Protection Agency, Washington DC, Consumer Response to Section 1018, Workshop Lead Notification and Disclosure**

Ad Hoc Committee to generate ideas and gather information to assist EPA in the implementation of the Section 1018 Lead Notification and Disclosure Rule.

**40 Thornton & Tanenhaus, New York, New York**

Provide expert counsel on lead sources, routes of exposure and lead poisoning. July 1997- Present.

**41 Riverside Medical Associates, New York, New York**

Provide indoor air quality inspection, evaluation, risk analysis and counsel on microbes and following a flood. June-August, 1998.

**42 Fischbein, Badillo, Wagner and Harding, New York, New York**

Provide indoor air quality inspection, evaluation, toxicology and risk analysis counsel on chemicals at a printing corporation. June, 1998-Present.

**43 Sachem Central School District, Holtsville, New York**

Conducted an evaluation to characterize lead exposure to children in and elementary school including paint dust, and water. September-December, 1998.

**44 Hicksville School District, Hicksville, New York**

Counsel district on the lead paint renovation of a building and provide monitoring services to ensure occupational and environmental lead exposures are controlled. November-Present, 1998.

**45 Hempstead Housing Authority, Hempstead, New York**

Counsel district on the lead paint renovation of a residential building and provide monitoring services to ensure occupational and environmental lead exposures are controlled. November-Present, 1998.

**46 West Babylon School District, West Babylon, New York**

Conducted an Indoor Air Quality Interview evaluation of all seven schools in the West Babylon School District. The faculty interview included the routes of exposure, the location, time or circumstances for exposure. The outcome variables included upper respiratory effects, dizziness, headache, eyes, or skin. Interview results are used to identify locations of the environmental sampling in each school. Environmental sampling included temperature, relative humidity, carbon dioxide, carbon monoxide, and a volatile organic compound screen, microbial bioaerosol and swab sampling. January-Present, 1999.

**47 Carbon Monoxide Air Quality Criteria Document, Environmental Protection Agency, Cincinnati OH**

Scientific reviewer for the U.S. Environmental Protection Agency, Carbon Monoxide Air Quality Criteria Document, Chapters on Population Exposure, Health Impacts, and Relevance to the National Ambient Air Quality. April 1999.