TO: Director, Office of Community Development, City of Cambridge

FROM: Vivian Kurkjian, 86 Buckingham Street, Cambridge, MA 02138
661-0312

DATE: October 4, 1987

SUBJECT Community Development Policies and Supervision

I have enclosed a copy of my statement of candidacy (Cambridge Chronicle) in which I publicly repeat my telephone request to your office that a copy of an itemized bill for the Abt rent control study be published in the Cambridge Chronicle. That information should also be made available to the Tab.

Also enclosed are copies of letters to Congressman Joe Kennedy (with attachment regarding disastrous results of poor city planning; i.e., deaths attributed to the aggravation by air pollution in Greece last summer) and Governor Dukakis regarding the hazards of plastic pollution.

We face growing threats from increased plastic usage in home and office furnishing and fixtures. Sometimes the plastic is hidden from view. (See attached plastic arch offer.) When these seemingly innocent lightweight items which some rungs of the bureaucratic research ladder meant to ease our lives burn, they emit toxic, possibly lethal fumes, presenting great dangers to inhabitants and firefighters-- including skin contact with melted plastic. In a recent conversation with a firefighter, I learned that the first unit of firemen on the scene would not be wearing the masks needed to protect them from toxic fumes from burning plastic. The use of undetectable plastic building materials should be monitored if not prohibited.

I appreciate your taking the time to consider these concerns.

Sincerely,

V. Kurkjian

cc: The Cambridge Chronicle, The Tab, The Harvard Crimson
Cambridge City Council, Cambridge Fire Department

TO: Cambridge City Council: Can we start a program of volunteer plastic separation, including restaurants, so that we can begin addressing the plastics in trash problem.

10/14/87

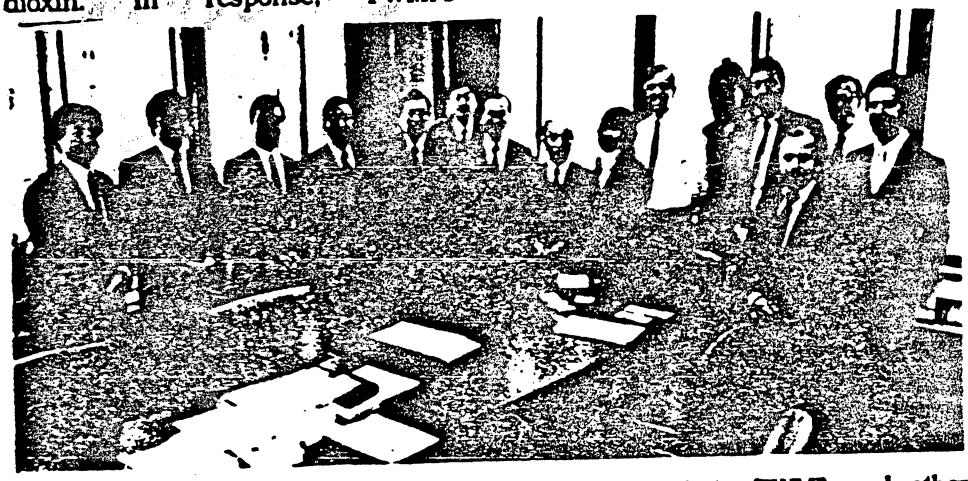
Inform Reports Jan-Feb 87

EXH. 15

Visiting Japanese Tell N.Y. Officials About Managing Plastics in Garbage

At two meetings in December arranged by INFORM, visiting members of Japan's Plastic Waste Management Institute (PWMI) heard New York City and State officials express the growing concern in the U.S. about burning plastic waste which produces dangerous hydrogen-chloride (HCl) emissions and, some believe, emissions of a lethal toxic, dioxin. In response, PWMI's plastics be taken out of the waste stream and recycled. Voluntary civic groups have also done this in about half of Japan's 3,255 municipalities. But in recent years, he said, the costs of collecting the plastics and the technical problems in recycling heterogenous plastic resins have curtailed the official programs.

Today, Mr. Motonaga said, "Most of the municipalities have given up their [official] recycling programs because of the high cost."



*Members of Japan's Plastic Waste Management Institute (PWMI) and other Japanese officials meeting with members of New York's Legislative Commission on Solid Waste Management (LCSWM) at the LCSWM offices in Albany.**

Executive Director Hidehiko Motonaga, said, "Your remarks remind me of Japan 15 years ago."

He explained his comment at the meeting he and other PWMI members had in Albany with Executive Director Gordon Boyd and the staff of New York State's Legislative Commission on Solid Waste Management (see photo). Back in the early 70s, Mr. Motonaga told them, Japan had two reasons to begin a concerted effort to remove plastics from the waste stream going to incinerators: "Because of our concern with toxic pollution and [because of] the damage to incinerators due to the high caloric value of the plastics." These can range up to 19,000 BTU per pound, 20 percent higher than coal

Recycling Reduced

After some of the older incinerators were damaged, he reported, many of Japan's major cities set up official programs requiring that

Recommended Sit-Downs

At the meeting in New York City on December 3, PWMI members exchanged their garbage burning experiences with Deputy Commissioner of Sanitation Paul Casowitz and his staff. PWMI's Executive Director gave the Department of Sanitation some advice: "The best progress [in plastic waste management] is made," he said, "when those who manufacture plastics sit down together with those who use plastics and must dispose of them." Such get-togethers, Mr. Casowitz reported, had not yet been arranged.

However, Mr. Casowitz added, "We are very interested in learning from Japan about the recycling of plastics from the residential waste stream and what actions we in New York City might take to further recycling in this country." □

* *From right to left: Mr. Randy Coburn, Research Economist, LCSWM; Mr. Stephen Wilson, Director, Scientific and Technical Studies, LCSWM; Dr. Eugene Salerni, Research Coordinator, LCSWM; Mr. Delino Bedinotti, DEC Division of Solid Waste; Dr. Allen Hershkowitz, Director, Solid Waste Management Program, INFORM; Mr. Gordon Boyd, Executive Director, LCSWM; Ms. Keiko Brenner, Interpreter; Mr. Hidehiko Motonaga, Executive Director, PWMI; Mr. Shiro Hamaya, General Manager of General Planning Dept., PWMI; Mr. Makoto Hiraoka, Technical Development Committee, PWMI; Mr. Masao Masuno, Deputy General Manager, PWMI Research and Public Relations; Mr. Goro Kaneko, PWMI Research and Public Relations Committee; Mr. Haruni Kinoshita, Director, Japan Pet Bottle Assoc.; Mr. Muneo Goto, Assistant Director, Japan Pet Bottle Assoc.; Mr. Michio Sato, tour guide.*

JAPAN'S WASTES

Continued from p. 1

Other data cited: Japan has 2,479 landfills but only 10 percent accept unprocessed, raw wastes, and 351 of its 1,951 incinerators (which handle 67 percent of Japan's garbage) recover energy from burned garbage.

Some answers to queries at the meeting provided useful lessons for U.S. waste managers, e.g., in Japan some of the toxic ash residues from incinerators are first cemented permanently into blocks and then buried in landfills fitted with liners and leachate collecting equipment.

Over 40 Organizations

The more than 90 people attending this meeting reflected the swiftly mounting U.S. interest in garbage-burning problems. They represented over 40 local, state, national, educational, environmental and corporate organizations.

In addition to representatives of such familiar groups as the Environmental Defense Fund, the National Audubon Society and NYPIRG (New York Public Interest Research Group), the audience included six members of New York City's Department of Sanitation, four from New Jersey's Department of Environmental Protection, one member from Mayor Koch's office and another from the Queens Borough President's office.

Other members represented: Shorewalkers, Tow Boat Association, Protectors of Pine Oak Woods, Town of East Hampton, New York State Legislative Task Force for Demographic Research, Clean Air Council, N.Y. Institute of Technology, Environmental Risk Ltd., Kyodo News Service, League of Conservation Voters, Queens College Chemistry Department, the Association of N.J. Recyclers, Rockefeller Institute of Government and the Grass Roots Environmental Organization.

"Tickled Pink"

Others attending included those from several consulting firms and corporations. One of these, Mr. Mark Matsuoka, Executive Vice President of ITOH Takuma Resource Systems Inc., later wrote to INFORM that he found the presentation "fair, accurate and very informative," adding that "needless to say, we were tickled pink to have all the praises of what our people accomplished in Japan in the field of recycling. You had the roomful of audience totally absorbed. It was a great feeling." □

86 Buckingham Street
Cambridge, MA 02138
October 1, 1987

The Honorable Joseph P. Kennedy II
Representative in Congress
1631 Longworth Office Building
Washington, D.C. 20515

Dear Sir:

I am enclosing a copy of my letter to you of July 28, 1987 in which I mentioned air pollution as a major factor to the heat wave deaths in Greece last summer. I have enclosed an article from a British publication confirming my belief. (Exh. A)

Also enclosed is a letter I sent to Governor Dukakis. I have not yet had a response from him nor from you regarding the July letter. He would have better press had his environmental issue person brought forth the ozone depletion ("hole") issue and he had created an emergency ban on foam plastic packaging in our state. I called Professor McElroy at Harvard University today and learned that the so-called hole is 5,000,000 sq. miles. I blame first the scientific community's unwillingness and inability to communicate this message to the public. DuPont is the primary manufacturer of CFC's, according to a program on Nova (Channel 2) a few nights ago. The heads of universities, particularly Harvard University and MIT should have insisted on DuPont to stop the manufacture of Styrofoam containers, since no one at the state or federal level has been able to do so. Any area unilaterally banning them will ease their garbage and air pollution problems.

N.B.C

I have heard that you are in the plastics industry -- the product that has most destroyed our environment in the shortest amount of time. I would be very disappointed in you if you did not simply give it up.

On another matter: the Armenian Resolution. I assume your efforts were unsuccessful because you might not have had any supportive material on Turkey's behavior to Armenians in Turkey today. Not long ago, there was a report of an entire Armenian village in Turkey converting to Islam. What other than a state-enforced act of terrorism could have prompted such action? I have enclosed some clippings from an Armenian newspaper in Watertown on Turkey's continuing attempts to eradicate Armenia from history. These and other documented acts on the part of Turkey today should leave no doubt in anyone's mind about the role Turkey (along with the Kurds) played over the centuries.

Sincerely,

Vivian Kurkjian

661-0312

Too hot to handle

It's not just the heat that's killing people in Athens, says John Blunden

THE DEATH toll from the heatwave in Greece makes the annual spate of road deaths among holidaymakers pale into insignificance. The final figures may not be known for some time but it seems likely that more than 1300 people died in the heatwave, with 1200 dying in Athens alone.

Many of the newspapers for which the heatwave provided headlines seemed to assume that the high temperatures alone caused the problems. Admittedly, a high of 50 °C was recorded and the temperature remained above 40 °C for more than a week. However, Athens has a particularly high density of buildings. This exaggerates the "heat island" effect observed in many cities around the world. Here, the buildings absorb and store large amounts of heat from the Sun—much more than the vegetation and soils of the rural areas. At the same time, the configuration of the buildings reduces wind speed, inhibiting ventilation.

Perhaps newspaper columnists were right to advise would-be tourists about how to survive in such temperatures. However, the deaths in Athens were not the result of temperature alone. The heatwave simply highlighted the problems of a city which, perhaps more than any other in western Europe, suffers from pollution, uncontrolled urban development, overpopulation, poor health-care facilities and bureaucratic laissez-faire.

In most cities of the developed world, land use zoning, which places restrictions on the density and siting of buildings, has become common place. So, too, have schemes for managing traffic and controlling air pollution. In Athens, in a period of rapid economic growth, such precepts have been largely ignored. All this despite the fact that, 10 years ago, the World Health Organisation produced a report on the environmental problems facing the city.

Of the deaths in the capital, nearly 900 occurred in hospitals, while other victims were found dead in their homes. Some of the victims had existing medical problems. A group of handicapped children, for example, died from dehydration, while a dozen inmates of a psychiatric home were given medicines incompatible with the high temperatures. For most of the victims, the problems of the city, and in particular the combination of air pollution and heat, will have been the main cause of death.

Greek tragedy. Deaths could have been averted through better planning

Presenting his preliminary report on the catastrophe, the Greek minister of health, George Mangakis, recognised that it underlined the inherent weaknesses of the city, and that it was time to put into practice "a large land clearance programme" to create open spaces. Pollution from the rapid industrial expansion in Athens, and the proliferation of motor vehicles, has led to a serious deterioration in air quality. Yet those who have studied the urban development of the city have long known that one way of drastically reducing the impact of that pollution would be to create more green areas.

Research over the past 20 years has more than borne this out. Experiments have shown, for example, that about 1 hectare of deciduous woodland is capable of extracting 4 tonnes of dust per year from the atmosphere. Studies in Hyde Park in London have revealed that a green area of about 260 hectares reduces the concentration of smoke by more than a quarter, while a green belt 183 metres wide can reduce levels of dust by 75 per cent. Conifers are by far the most effective filters: varieties of pine which grow around the Mediterranean can reduce levels of dust in the atmosphere by 20 to 50 per cent. These figures are supported by experiments in the Soviet Union, where areas of park around factories have lowered levels of dust in the air by 40 per cent.

The effects of pollutants from motor vehicles can be mitigated by traffic management schemes, which either improve the flow or reduce the level of traffic, or by building roads away from residential areas. Similarly, the effects of industrial pollutants can be reduced by separating the sources from the zones most at risk by green spaces. In Leningrad, for example, the concentration of sulphur dioxide in the atmosphere has been found to be 50 per cent lower over parklands than in neighbouring areas which lack green spaces. The importance of green spaces has long been recognised in Chicago, where city planners have taken the further step of moving people at risk, especially children and the old, away from major roads by relocating facilities such as hospitals and playgrounds.

In Athens, the problem seems to have been not so much the lack of recognition of this work, but of the political will to act upon it. Thus, although politicians have long dreamt of demolishing parts of the city and putting in green zones, little has happened. Open spaces still only occupy 3·6 per cent of the land in the capital. With one-third of the 9 million people in Greece living in Greater Athens, population densities can reach a staggering 1600 persons per hectare. In one such district, Kallithea, the total open space is no larger than the average-sized London square.

The heatwave will pass, but the basic problems persist and worsen by the day. As businesses grow, and as a growth in vehicle ownership accompanies increased prosperity, the prospects of dissipating the famous "nefos", the cloud of pollutants which hangs above Athens like a brown shroud, seems as remote as ever. □

John Blunden is a reader in resource management at the Open University.

1.0 HECTARE = 10,000 SQ. METERS = 2.47 ACRES

THE SUNDAY STAR, MARCH 8, 1987

Birds die, Mexico City wonders: Who's next?

By Bernd Debusmann
Reuter News Service

MEXICO CITY — When birds began falling out of the sky to die in convulsions in smog-choked Mexico City, a government ecology official had a ready explanation: the birds were overtired, he suggested, or perhaps they had a poor diet.

Hundreds of American robins and cedar waxwings dying of fatigue? On days this winter when heavy air pollution drove tears to the eyes of Mexico City residents, constricted their throats, stuffed up their noses, and made their chests ache?

The Ministry for Urban Development and Ecology, whose undersecretary Sergio Reyes Lujan suggested bird fatigue, furnished other possible causes for the mass death of migratory birds in one of the most polluted capitals on earth.

The birds might have eaten poisonous fruit from the trees they use as resting places on their long journey from Canada and the United States to southern Mexico and Central America.

Toxic levels

Or maybe they were brought down by toxic insecticides ingested en route. They were already sick by the time they reached the largest city in the world.

Concerned citizens collected some 500 bird bodies, dumped some of them in front of the ministry and took others to laboratories for autopsies. The diagnoses failed to confirm bird fatigue or poor diets.

Instead, they showed very high levels of lead and cadmium in the birds' blood. Both are highly toxic, counting among dozens of polluting agents found in the air here.

After conducting its own post-mortems, the ministry finally conceded that Mexico City air pollution was at least a contributing factor in the deaths of the waxwings and robins.

The demise of the birds and the ministry's reaction in the first weeks of February underlined the government's problems in dealing with pollution in a city where 2.5 to three million cars and 130,000 factories spew toxic fumes into the air day after day.

"There is a tendency to minimize our most serious problem," said Homero Aridjis, president of a group of writers, artists and intellectuals who said in their founding statement two years ago Mexico City's people were doomed to a slow death if nothing was done to curb pollution.

"In Mexico, politicians seem to think problems go away simply by making a speech or announcing a program about them," Aridjis said in an interview. "But programs remain on paper. There is a lot of talk and little action."

Leading writers

His committee of 100 includes some leading Latin American writers and painters, including Nobel-prize winning novelist Gabriel Garcia Marquez, a Colombian who lives in Mexico City, Mexican writer Octavio Paz, and painter Rufino Tamayo.

"The government's initial reaction was typical: say there is no problem and hope for its miraculous disappearance," he said. "We see it differently: the birds are live thermometers, live gauges of the danger that is facing all of us."

Columnist Jose Angel Colchello of the respected newspaper El Universal echoed such sentiments, "Today it's the birds, tomorrow it's us."

Some ecologists say that tomorrow has already come. According to Alfonso Cipres Villareal, head of the Mexican Ecologist Movement, almost 30,000 children died in the capital last year of diseases brought on by pollution.

86 Buckingham Street
Cambridge, MA 02138
July 28, 1987

Honorable Joseph P. Kennedy II
Representative in Congress
1631 Longworth Office Building
Washington, D.C. 20515

Dear Sir:

I am very concerned with the rapid destruction of our environment and is one of the reasons I have decided to run for City Councillor in Cambridge.

I have enclosed some newspaper articles from around the world regarding the disasters we face because of reckless scientific research and business mismanagement and irresponsibility.

My primary concern is preventing pollution or contamination at the source. The exessive use of plastic products created by the chemical companies is a major cause of air pollution. * Aerosal sprays should be eliminated altogether and Styrofoam (Dow Chemical) and similar fast food containers should be banned. Also the plastic plates used to heat frozen foods contribute to the unmanageable trash burdens. They are not separated at the household office or business levels. In Japan, everyone separatestheir trash into 6 categories. But Japan produces 10% of the world's chlorofluorocarbons (CFC's) and promises to cut down. There should be an international ban on the production of CFC's (see enclosed Exhibit A). All of these problems are part of the throw-away society we live in and are more due to laziness than convenience. **

As conservation measures are tax-deductible, I would like to see legislation allowing tax deductions for hazardous waste reductions; such as deducting plumber's fees for drain cleaning. (Exh.B)

My list of concerns includes: financial bonds or letters of credits posted by companies to cover pollution clean-up costs without wasting time trying to fine polluters after the fact; and the certification of people handling hazardous materials such as servicemen to computer or refrigeration companies. I have seen young men cleaning out filters in Boston and Cambridge streets, seemingly unaware of air pollution. One could have been an asbestos filter; the other young man I tried to halt from cooling himself off with freon gas and cleaning his boxes outdoors. (Exh. C)

Cambridge has only one day a year for drop-offs of household hazardous wastes. There should be a permanent place or pick-up truck once a week for these items, along with glass and plastic pick-ups. There should be educational programs begun at the school level informing everyone, including offices, schools, and business, of the everyday products that are hazardous and proper disposal routines.

Ideally, tobacco companies would provide specific places for indoor or outdoor smoking (with containment fixtures to reduce second-hand tobacco smoke pollution). Until then, it would be wonderful if cities could have outdoor smoke-free areas; particuarly in parks and children's playgrounds. That would reduce maintenance costs and the delinquincy of minors.

Sincerely,

Vivian Kurkjian

(617) 661-0312

*Air pollution could be a contributing factor in heat wave death tolls such as that recently in Greece.

**There should be legislation requiring labeling of toxic materials and proper disposal methods.

PARKS VOLUME 9, NUMBER 1 APRIL, MAY, JUNE 1984

Plastic Pollution: A Worldwide Oceanic Problem

This fur seal is girdled by a discarded plastic band used for strapping closed large boxes or similar containers. The material is water and rot resistant, and this animal has little hope of survival. As it grows the band will cut deeper and deeper into the flesh, causing increasing pain and a lingering death.

. . .

biologists studying seabird feeding ecology in the early 1970s started noticing an odd prey item in their subjects' diets: plastic. Their tales were soon joined by similar ones of plastic ingestion and entanglement in plastic debris, in a wide variety of marine organisms

. . .

surveys in both the Atlantic and Pacific oceans found unprecedented numbers of plastic particles among their samples [Feder et al., 1978; Colton et al., 1974], and members of both Ra expeditions observed plastic pollution while crossing the Atlantic [Heyerdahl, 1971]. Plastic pellets washed ashore in New Zealand in such large quantities that some beaches literally seemed covered with "plastic sand" [Gregory, 1978]. By the close of the decade, a new problem had been added to a growing list of ecological concerns—plastics at sea.

Plastic shows up in the marine environment in two forms: manufactured pieces and raw particles. Those who frequent coastal regions are painfully aware of the prevalence of manufactured plastic litter along the shore. Most of this refuse is generated by transport, fishing, and recreational vessels. In 1975, the US National Academy of Sciences estimated that commercial fishing fleets alone dumped more than 52 million pounds of plastic packaging material into the sea, and probably lost more than 298 million pounds of plastic fishing gear, including nets, lines, and buoys [Merrell, 1980].

. . .

Raw plastic particles—the spherules, nibs, cylinders, beads, pills, and pellets (each about the size of a wooden match head) from which products are manufactured — enter the ocean via inland waterways and outfalls from plastic manufacturing plants. They are also lost from freighters during loading and unloading, and, upon occasion, are deliberately dumped into the sea.

However it manages to reach the sea, plastic debris is ubiquitous

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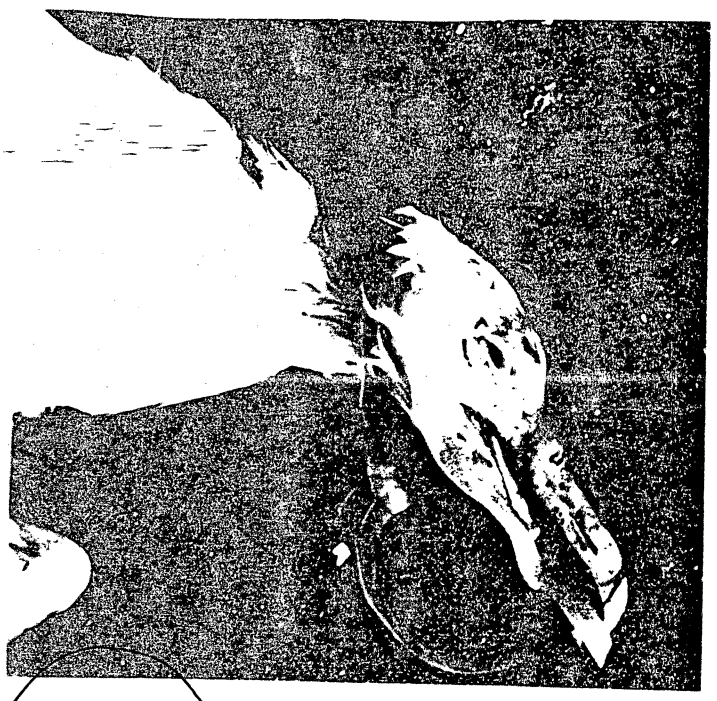
. Given the presence of plastic particles in the marine environment, it was only a matter of time before they turned up in the digestive systems of animals that forage at sea.



The death of this gull can be attributed directly to the plastic yoke from a six-pack of drink cans. These yokes are almost invisible in the water, and both divers and surface water feeders are particularly susceptible to such entrapment.

. . .

polystyrene spherules are not made with PCBs, but apparently absorb them from ambient sea water [Carpenter et al., 1972]. Some plasticizers concentrate in fatty tissues; when these highly contaminated tissues are mobilized for energy, toxins may be released in lethal doses.

. . .

Alaska is ahead of the game, in this respect. Alaskan law already requires that plastic six-pack yokes be made of a self-destructing compound. But are the compounds released by degradation more harmful than the intact plastic? This is an important fact to consider.

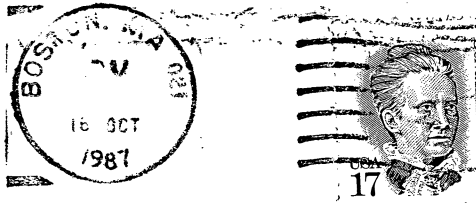
Another, but perhaps less workable solution (given the logistics and expense involved, and the degree of business and public cooperation required) lies in recyclable plastics. At the very least, all countries should require that the outflow from industrial plants be filtered for plastic particles before it enters the waterways. A recent decline in the uptake of plastic by marine organisms in southwestern England has been attributed, in part, to the efforts of one of the major contaminating plants to filter, collect, and reuse raw particles present in its effluent.

. . .

Ironically, the very characteristics that make plastic appropriate for so many uses—its lightweight, strength and durability—lead to the majority of problems associated with its occurence at sea. The longevity of plastics in seawater is not known, but on the beach, particles may last anywhere from 5 to more than 50 years. Given plastic's long life, our handling of plastic pollutors, and the projected annual increase in production [Guillet, 1974], one thing is clear—the rate of plastic deposition in the marine environment will remain higher than the rate of its disappearance.

WHY NOT OUT-LAW THESE DANGEROUS ITEMS?

F.Y.I. VIVIAN KURKJIAN



Cambridge City Council
City Hall
795 Massachusetts Ave.
Cambridge, Ma 02139

Kevin
86 Buckingham St
Cambridge, Ma 02138

S-670

Comm. from Vivian Kurkjian Re: Community Development Policies & Supervision.

October 19, 1987