EDWARD M. KENNEDY
MASSACHUSETTS

United States Senate

WASHINGTON, DC 20510-2101

'00 MAR 24 A7:15

December 14, 1999

Mr. Richard A. Meserve
Chairman
U.S. Nuclear Regulatory Commission
Washington, DC 20555

DOCKET NUMBER
PROPOSED RULE PR 50
(64FR31737)

Dear Chairman Meserve:

I am writing on behalf of the Massachusetts Citizens for Safe Energy, regarding the U.S. Nuclear Regulatory Commission's Proposed Rulemaking, Consideration of Potassium Iodide in Emergency Plans.

The stockpiling of KI is a safety measure supported by numerous organizations to protect the public in the case of a nuclear accident. Scientific evidence reveals the benefits of potassium iodide and its advantages in preventing any inhaled or ingested radioactive iodine from being lodged in the thyroid gland. In Tokaimura, Japan, where KI is stockpiled at local hospitals, police distributed potassium iodide tablets after a recent nuclear accident. By doing so, it is certain that Japanese authorities managed to dramatically reduce the numbers of its citizens who were adversely affected by the accident. I believe that it is incumbent upon us to take the same precautions to prevent the devastating effects that a nuclear accident would inevitably yield.

Potassium iodide is one of the easiest, and least expensive means of preventing radioactive iodides from being absorbed by the thyroid. Workers in power plants should not be the only ones for whom this treatment is made available. Schoolchildren and other nearby residents should also be able to receive KI in the event of a nuclear accident. KI is time-critical, and the only way to ensure that residents are able to receive the potassium iodide in enough time is to order the stockpiling of KI in those communities.

I ask that you give the proposal by the Massachusetts Citizens for Safe Energy every consideration. Preventing any unforeseen nuclear disaster from claiming additional lives should not only be an option, it should be a requirement.

If you have any questions, please feel free to contact Graham Shalgian at (617) 565-3170. Thank you in advance for your consideration.

Sincerely,

Edward M. Kennedy

DOCKETED BY SECY

DEC 99 43 37

DS10

From Ruleforum

MASSACHUSETTS COALITION TO STOCKPILE KI

*Greater Boston Physicians for Social Responsibility * C-10 * Citizens Awareness Network * Clean Water Action * Don't Waste Massachusetts * MassPirg * Massachusetts Citizens for Safe Energy * Toxics Action Center * Citizens Radiological Monitoring Network * Women's Community Cancer Project*

It costs less than a dime; our kids are worth it!

September 10, 1999

Secretary of the USNRC
Attention: Rulemakings and Adjudications Staff
U.S. Nuclear Regulatory Commission
Washington, DC 20555 / E-mail CAG@NRC.GOV

RE: Comment PRM-50-63A, Consideration of Potassium Iodide in Emergency Plans, and Proposed Rule

Summary: The June 14 notice of proposed rulemaking does not ensure sufficient protection of public health and safety. In order to do so, it must incorporate the following.

The NRC must amend its regulations concerning emergency planning to include a *requirement* that emergency planning protective actions include the prophylactic use of potassium iodide (KI) for the public. Requiring potassium iodide will not only protect public health and safety it will simplify and streamline payment for potassium iodide by the licensees. The licensee shall take responsibility for all costs associated with providing KI for the public, or face shutdown. This is the financing method for other emergency planning expenses. NRC's proposal that "consideration" shall be given to including potassium iodide is worthless.

NRC's proposal to support development of national, regional stockpiles, and to bring the KI to citizens near an accident by "fighter jet," will not work. KI must be administered before or shortly after exposure to radioiodine to be an effective block. Instead, the NRC should support the development of robust, pre-positioned *state* stockpiles of KI to be used in communities located in the "far field" - outside the Emergency Planning Zone.

NRC should support the World Health Organization's Guidance. In the "near field" (effluent pathway defined as the Emergency Planning Zone) KI shall be stockpiled in schools, shelters, hospitals and Reception Centers. In addition, KI shall be available for the public to voluntarily pick-up at a municipal office and/or local drug store. In the "far field" (outside the Emergency Planning Zone) NRC should support the development of robust, state, stockpiles to be strategically placed to allow for prompt distribution.

NRC should require using KI prophylaxis at one rem projected dose exposure not at the current 25 rem.

I Introduction

These comments are presented on behalf of state-wide Massachusetts organizations concerned with nuclear safety collectively totaling many thousands of our citizens *(Boston Chapter Physicians for Social Responsibility, C-10 Research and Education Center, Citizens Awareness Network, Clean Water Action, Don't Waste Massachusetts, MASSPIRG, Massachusetts Citizens for Safe Energy; Toxics Action Center, Women's Community Cancer Project; Citizens Radiological Monitoring Network* and a town appointed committee within Pilgrim NPS's Emergency Planning Zone - the *Duxbury Nuclear Advisory Committee).*

II. NRC Should Require the Use of KI

We oppose "the Proposed Rule (that) would amend the current regulations to require that consideration shall be given to including potassium iodide (KI), as a protective measure for the general public that would supplement sheltering and evacuation."

Instead, we support NRC amending its regulations concerning emergency planning to include a *requirement* that emergency planning protective actions include the prophylactic use of potassium iodide (KI) for the public – the original petition by Peter Crane.

Rationale For *Requiring* KI

A. To Protect Public Health and Safety

KI protects the thyroid gland, which is highly sensitive to radiation, from radioactive iodine released in nuclear accidents. KI saturates the thyroid gland with iodine in a harmless form. By doing so, it prevents inhaled or ingested radioactive iodine, which could lead to thyroid cancer, disease, and mental retardation or to other illness, from lodging in the thyroid gland. The young are particularly at risk, as evidenced from data following Chernobyl. KI has a long shelf life and causes negligible side effects. It is currently being stockpiled in communities around nuclear reactors in Europe, Japan and Canada. In the United States, Alabama, Arizona, Tennessee and Maine have decided to stockpile and numerous other states are considering doing so. The Federal Radiological Preparedness Coordinating Committee [FRPCC] is also stockpiling KI so that it can be made available to states in the event of terrorist attacks.

The evidence is in. Respected international and national professionals have enough evidence and all recommend the use of KI for the public.

For example, the World Health Organization; the International Agency of Atomic Scientists; the American Thyroid Association; the National Council on Radiation Protection; the Federation of American Physics; President Carter's Kemeny Commission following Three Mile Island; the Greater Boston Physicians for Social Responsibility; and numerous doctors in our nation's leading medical schools and hospitals, have all investigated the issue and concluded that "stockpiling/ pre-distributing KI" is "worthwhile."

Specific Health/Safety Reasons for Stockpiling KI For the Public

- **Many citizens live within the EPZ's of nuclear power plants. In Massachusetts, for example, Pilgrim NPS (Southeastern MA); Vermont Yankee NPS (Northwestern MA); and SEABROOK NPS (Northeastern MA) directly affect us.**

- **Accidents happen - Titanic, Challenger, Chernobyl, TMI and the near accident at Dresden in 1994. The risk of an accident is greater than in the past, due to: unanticipated premature aging of reactor components; the economics of utility restructuring; the documented history of NRC's laxness of oversight and their unwillingness to force licensees to adhere to their licensing requirements; on-site storage of high level nuclear waste at reactor sites - under conditions neither designed nor analyzed for the volume and longevity of such storage; and, the increased threat of terrorism with nuclear power plants as potential targets.**

- **Radioactive iodine <u>will be released in an accident</u> - it is released in smaller amounts under "normal" operations.**

- **Chernobyl demonstrated that infants and the young are most vulnerable to radioactive iodine. Thyroid cancer in the young is more aggressive - spreading to the lymph and lungs. Iodine passes the placenta freely. Mental retardation can result from radioiodine exposure.**

- **KI is a proven thyroid blocking agent. It provides almost complete thyroid protection by taking the recommended dose of KI just before or at the time of exposure. If KI is taken within (1) hour after exposure, it is 85% effective as a blocking agent; if KI is taken during the first 3-4 hours after exposure, it is 50% effective as a blocking agent. There is no protection if KI is taken after (6) hours from exposure.**

- **Contraindications exist only for a small population, and are of minimal concern. Information now available on reactions to cough syrups and expectorants that contain KI give an estimate of 1 in 10,000,000 risk for the incidence of adverse reactions from a daily dose of 130 mg of KI [NRC 1995]. Further, after Chernobyl, Poland distributed about 18 million doses with minimal serious adverse reactions reported. It is estimated that 95.3% of children and 23% of the adult population in Poland were given one or more doses of KI. The World Health Organization and the NRC evaluated the risks and found that the benefits of KI far outweighed risks. <u>KI is FDA approved</u>.**

- **Although the nuclear industry has set up "red herrings" as reasons not to stockpile, most are public-education/planning problems. They are not problems with KI, per se. Emergency management agencies are certainly capable of teaching the public that KI protects against radioactive iodine and not against other harmful radionuclides emitted, and that KI should be taken only when instructed to do so by emergency planning officials.**

- Liability is yet another "red herring." The real liability issue would be if the request of many of citizens that KI be made available were ignored; or if advice (by respected health organizations such as the World Health Organization and American Thyroid Association) to stockpile was turned aside in favor of the industry's fears for industry's "image." Additionally, KI would be taken on a strictly "voluntary" basis and is FDA approved.

- Because of the probability of fast breaking accidents and the variability of winds (especially in coastal communities), Federal regulations (10 CFR 50.47 and NUREG 0654) now speak to a *range* of protective actions - not simply evacuation. KI is an appropriate adjunct to this "range" of response - providing additional protection to the public.

K. To Simplify/Streamline Payment for Potassium Iodide by Licensee

The licensees should be responsible for all costs (original costs of stockpile, replenishment, and associated distribution/public education expenses) as they now are for other emergency planning expenses.

Bottom line is that ratepayers pick up the bill as industry's cost of doing business. The issue always is what route the money will take from the ratepayer's pocket to the manufacturer, distributor and emergency planners.

In 1997, it was announced that NRC would reimburse states. However, that offer was recently withdrawn – with no valid explanation. No agency wants funding to come out of "their" budget, although that money originates with the ratepayer. The ball is bounced from agency-to-agency and meanwhile the public is left unprotected.

NRC's meetings to "discuss" the issue could well have covered the cost of providing KI for the public. We know that the cost is not substantial and certainly not the real reason that the agency withdrew its prior commitment. Rather, its withdrawal is simply another example of the NRC caving into the whims of the nuclear industry. Industry saw that too many states were being asked by their public to take up NRC's 1997 announced offer of reimbursement.

The NRC noted in the Federal Register (Vol. 64, No. 113/Monday, June 14, 1999/Proposed Rule 31746) that

> The overall cost is minimal when placed in the context of emergency planning and should not be a deterrent to stockpiling KI for use by the general public...

A better funding plan, and one that we support, is to require that KI shall be available to the public. Then, the licensee must assure that this is so or face shutdown. It is amazing how quickly the licensee and local government will get together to comply. This is the procedure followed for other emergency planning requirements. Example: the NRC has ruled that the public shall be notified of an emergency within a specified time. Hence, the licensees pay for sirens – their purchase, installation, maintenance, testing. This simple and direct pattern should be followed in funding KI for the public.

XII. Regional Stockpiles will be Worthless – State Stockpiles are Appropriate Outside the Emergency Planning Zone.

We do not support the NRC's announced plan to work with other agencies to ensure that there are established "robust, pre-positioned regional stockpiles of KI to be effectively and timely used by states that have not established local stockpiles and wish to make use of regional stockpiles in the event of a severe nuclear power accident." Instead, we do support robust, pre-positioned state stockpiles of KI to be used to protect the "far field."

Regional stockpiles will not adequately protect the public because KI must be taken prior to exposure, or very shortly thereafter, to be an effective thyroid block. There is a six- hour window, with diminishing effectiveness over that time period. Nor can any one seriously suggest that all accidents will be announced far in advance and be slow breaking; or that distribution of KI from a regional center to communities near the reactor will occur at lightening speed. Commissioner Merrifield suggested that "fighter jets" could bring KI to where it was needed. But we know that is foolish.

In fact our nation's top emergency planner, James Lee Witt the Director of FEMA emphatically spoke to this point in an April 29, 1999 letter to the NRC Commissioners.

> **FEMA has always opposed the notion that the Federal regional stockpiles of potassium iodide would be effective in the event of a release from a nuclear power plant. The complex logistics of storage and distribution far outweigh the usefulness of such a stockpile. Regional stockpiles of potassium iodide would complicate, not strengthen radiological emergency preparedness.**

Further, if you look in the archives of responses over the years of industry's "reasons" for opposing stockpiling KI for the public, you will find industry arguing that regional stockpiles would be a waste of money because KI could not be distributed fast enough to be effective. They and the NRC can not have it "both ways."

IV. We support The World Health Organization (WHO) Organization Guidance – as described in the Federal register/Vol. 64, No. 113/Monday, June 14, 1999/Proposed Rules, 31743.

- **Specifically, the WHO recommends predistribution of stable iodine close to the site and stockpiles further from the site. These stocks should be strategically stored at points such as schools, hospitals, pharmacies, fire stations, or police stations, thereby allowing prompt distribution.**

- **The main points of the WHO Guidelines regarding the use of stable iodine are as follows:**

  > **Near Field: Stable iodine should be available for immediate distribution to all groups if the predicted thyroid dose is likely to exceed national reference levels. Close to nuclear installations iodine tablets should be stored or predistributed to facilitate prompt utilization.**

> **Far Field: Stable iodine should be available for distribution to pregnant women, neonates, infants and children if the predicted dose is likely to exceed reference levels.**

We support for the "near field" or effluent pathway defined as the Emergency Planning Zone:

<u>KI shall be stockpiled in schools, shelters, hospitals and Reception Centers. In addition, KI shall be made available for the public to voluntarily pick-up at a municipal office and/or local drug store.</u>

In general, KI shall be added to the "tool box" as a supplement to evacuation and sheltering, especially after the lessons learned from Chernobyl.

<u>KI would be an important adjunct to evacuation</u>. There is always the possibility that evacuation may be delayed due to traffic or weather conditions. Busses for the transportation dependent may arrive late. The accident may be fast breaking and the wind speed and direction may be such to expose evacuees en route.

<u>KI would be an important adjunct to sheltering</u>. The public may arrive at the shelter already exposed to radioiodine. KI is only an effective thyroid block if taken prior to or shortly after exposure – a six-hour window, with diminishing effectiveness over that time period.

<u>KI should be stockpiled in schools.</u>
This is the advice of the experts - WHO and Dr. Jean Temeck, FDA representative to NRC's KI Core Group (March 4, 1999 Transcript). Research indicates that the young are the most vulnerable; and in the words of Dr. Temeck,

> **In an emergency you want to get it to the children as quickly as possible and the teacher is right there on the spot... You do not need to be medically trained to give KI.**

A permission slip to administer KI can be sent out by the school at the beginning of each year.

Despite the fact that emergency plans contain the "concept" of "precautionary transfer" that children will be evacuated early, there are no guarantees. An accident can rapidly escalate. Winds may turn in an unfavorable direction or increase in speed. There may be traffic delays. Busses may not arrive or arrive late. Example: the bus contracts for the Duxbury school children have not been up-dated since the early 1990's. Some of the bus companies are now out of business. Even if busses do arrive, evacuation is not risk-free. According to an EPA 1992 manual on protective actions, vehicles provide only about 10% protection.

The issue is not evacuation or KI. The issue is protecting our children by providing busses and KI.

KI should be stockpiled in schools even if a community has provided citizens with an opportunity to purchase KI at a local store or municipal office. An accident may occur during school hours. Some parents may have had the foresight to purchase KI; however, the children would be in school and the parents at work or away from town. It is not reasonable to expect that parents would put KI in their children's lunch boxes every day. Also, parents who had the foresight to purchase KI and were in town may rush to the school to bring KI to their children - causing traffic logjams and havoc to emergency plans.

KI should be stockpiled in shelters.
The public may arrive at the shelter already exposed to radioiodine. The shelter may have a defective ventilation system or not provide adequate shielding – 100% shielding is not likely. Even if KI becomes available to the public to purchase, it is unlikely that tourists would have known to do so. For example, all three Emergency Planning Zones in Massachusetts are popular tourist spots. How many visitors to the Mayflower, beach-goers on Duxbury Beach or leaf-peepers in the Berkshires will know to pack KI for the trip? Transients must be protected.

KI should be stockpiled in Reception Centers.
KI should be stockpiled in Reception Centers for the same reasons as it should be stockpiled in shelters. Additionally, KI may be needed because the Reception Centers, although outside the EPZ's, may be within the plume exposure pathway. For example, the European Commission of the International Atomic Agency WHO stated in 1996 that, "Significant exposure to radioiodine extended more than 100 kilometers from Chernobyl."

KI should be stockpiled in hospitals.
Neonates are particularly susceptible to radioiodine. They should be protected. Pregnant women should be protected, too, because thyroid deficiency in mothers results in lower IQ's in children (Boston Globe, August 19, 1999, page 1).

KI should be available for the public to pick up at drug stores and/or municipal offices.
Availability must be coupled with public education to encourage the public to obtain KI and educate them about its benefits and proper use.

We support for the "far field" - defined as outside the Emergency Planning Zone:

Robust state (not regional) stockpiles are appropriate for the far field. In Massachusetts, for example, it would be appropriate to have stockpiles in the Emergency Planning Agency's Headquarters and also in their three sub-stations, Bridgewater, Tewksbury and Belchertown. Additionally if the topography is such that it would be necessary to travel through the reactor zone to reach an area, then that area should have its own supply. Cape Cod would be an example.

Rationale: In NUREG- 1633, the NRC acknowledges that the increase in cancer caused by Chernobyl

> **...was detected in Belarus, Russia, and Ukraine. Notably, this increase, seen in areas more than 150 miles (300Km) from the site, continues to this day and**

primarily affects children ...the vast majority of thyroid cancers were diagnosed among those living more than 50 km (31 miles) from the site.

The NRC acknowledged that exposure to radioiodine can occur well beyond 10 miles back in 1980 in their Document, *Examination of the Use of Potassium Iodide (KI) as an Emergency Protective Measure for Nuclear Reactor Accidents* (NUREG/CR-1433, Sandia National Laboratories, Albuquerque, New Mexico, 1980).

This report describes the health effects of a nuclear accident in detail, and provides casualty estimates at various distances from a reactor.

NUREG-1433 points out that thyroid growths (nodules) and other thyroid damage would be expected to occur for hundreds of miles downwind after an accident through breathing. This is described in tables 3 and 4 of the report, as shown below:

EFFECTS OF CORE-MELT ATMOSPHERIC ACCIDENTS BY DISTANCE

Distance in Miles	Mean Thyroid Dose (REM) for Exposed Adult Outdoors	Probability of Thyroid Damage to Exposed Adult Located Outdoors
1	13,500	60%
5	5,800	70%
10	3,200	70%
25	1,100	40%

EFFECTS OF CORE-MELT ATMOSPHERIC ACCIDENTS BY DISTANCE

Distance in Miles	Mean Thyroid Dose (REM) for Exposed Adult Outdoors	Probability of Thyroid Damage to Exposed Adult Located Outdoors
50	380	13%
100	100	3%
150	36	1%
200	16	0.5%

For children, increase dose and probability of damage by an approximate factor of two. Weather conditions based on calculated probability distributions. Thyroid damage

includes thyroid nodules (both benign and cancerous) and ablated thyroid. Assumed risk coefficient of 334 thyroid nodules per million person-rem to the thyroid. Includes inhalation dose only. Does not include ingestion. Probabilities conditional on accident occurring.

However, the NRC and States limit their accident planning to 10 miles. In other words, there is nothing to protect people who, for example, are 50 miles away, despite the probability that 13% of all exposed adults (and about a quarter of the children) at this distance could be injured. Yet use of KI would prevent this — a fact the NRC does not dispute. Therefore in addition to stockpiling KI in EPZ's, KI should be stockpiled beyond the 10-mile radius in each state.

V. KI Prophylaxis at One (1) Rem Projected Dose Exposure

We support using KI prophylaxis at one rem projected dose exposure.

Currently, Federal policy is to give KI at 25 rem projected dose. However, based on the dose response relationship reported in the 1998 *Nature* paper and Dr. Jean Temeck's discussion to NRC's KI Core Group (March 4, 1999), we know that there was an increased risk at a mean dose of 5 rem. Also, Poland used a 5 rem intervention level. The relationship of dose to disease is a linear relationship. Therefore, even if you extrapolate down to one rem, you are not coming to zero risk. Therefore, to protect public health and safety and to use the "precautionary principle" as the basis for public policy, we support a one rem projected dose as the "trigger."

VI. Summary

The evidence is in – all the experts and scientists have spoken – NRC must amend its emergency planning regulations to include a <u>requirement</u> that emergency planning includes KI for the public. The health of our children is too important to leave their protection from thyroid cancer, disease, mental retardation and other illnesses to the "consideration" of states. "Consideration" is a powder puff - meaningless. It requires nothing. The NRC promises to help the states "consider." We have had enough experience with the NRC's help on this issue. NUREG-1633, a Guidance Document, was prepared by the NRC to help states decide if they wanted to stockpile KI. Fortunately, it was withdrawn because it was so biased and clear that it was written to help states decide not to stockpile KI. In the words of New York States Director of the Bureau of Environmental Radiation Protection, "we find the document to have been prepared to justify a position advocating against the use of KI for public protection, rather than as an objective review of the relevant information." Now, a new Guidance Document is in the making. The same staff responsible for NUREG-1633 is at it again. And, again, meaningful public participation is absent in the documents preparation. We need KI. We need a requirement.

The NRC's plan to support the development of regional stockpiles is worthless. The use of "Fighter jets," as promised by Commissioner Merriweather, must be a joke. A very sick joke, indeed, because everyone knows that "Fighter jets" will not deliver KI in time. KI is time-critical.

The Commissions decision to withdraw their 1997 promise to fund KI says more about the Commissions ties to industry than the status of NRC's budget. The licensees should be directly responsible for all costs associated with KI as they now are for other emergency planning expenses. This will happen when the NRC requires that KI shall be made readily available to the public. It then becomes a cost of staying in business.

We ask that the NRC grant Mr. Crane's original petition and require KI stockpiling to be part of every emergency plan, as it is in nations around the world and as the NRC promised to do so in 1979.

Respectfully submitted on behalf of the Coalition,

Mary Elizabeth Lampert
Massachusetts Citizens for Safe Energy
148 Washington Street
Duxbury, Massachusetts 02332
Tel 781-934-0389 Fax 781-934-5579
e-mail jlampert@idt.net

Listed below are additional individuals and groups signing on to these comments.

Selectmen, Town of Duxbury – Duxbury, Massachusetts 878 Tremont Street, Duxbury, MA 02332 – Phone 781-934-1108

Paul Gunter, Michael Mariotte, *Nuclear Information and Resource Service,* 1424 16th Street NW, #404, Washington,DC 20036, Phone 202-328-0002 Email nirsnet@nirs.org

William S. Abbott, *Plymouth County Nuclear Information Committee,* c/o William S. Abbott, P.C., 50 Congress Street, Boston, Ma 02109, Phone (617) 523-5520 Email WABBOTT1@aol.com

John Anderson and Roger Erikson, *Citizens Radiological Monitoring Network,* 133 Washington Street, Duxbury MA 02332

Daniel Burnstein, *Center for Atomic Radiation Studies, Inc.,* (CARS), 35 Gardner Road, Brookline, MA 02445. Phone 617-738-9300

George Crocker, *North American Water Office/Prairie Island Coalition* P.O. Box 174 Lake Elmo Minnesota 55042 - Phone 651-770-3861 / E-mail gwillc@mtn.org

Sandra Gavutis, Director, *C-10 Research and Education Foundation, INC,* 44 Merrimac Street, Newburyport, MA 01950
Phone 978-462-3959/ Email sandra@c-10.org

Steve Haberman, Seacoast Anti-Pollution League, P.O. Box 1136, Portsmouth, NH 03802 – Phone 603-431-5089 / Email SAPL99@aol.com

Ann Harris, Executive Director, *Alliance for Public Health and Safety*, P.O. Box 40 Ten Mile, TN. 37880 – Phone 423-376-4851 / E-mail apickel@aol.com

Deborah Katz, *Citizens Awareness Network*, Box 83 Shelburne Falls, MA 01379 - Phone 202-328-0002/ E-mail can@shaysnet.com

David A. Kraft, Director, *Nuclear Energy Information Service*, P.O. Box 1637, Evanston, Illinois 60204-1637 - Phone 847-869-7650 / E-mail neis@forward.net

Cynthia Luppi, *Clean Water Action*, – 76 Summer Street, Boston MA 02110 – Phone 617-423-4661 – Email bostoncwa@cleanwater.org

Mary Lampert, *Massachusetts Citizens for Safe Energy*, 29 Temple Place, Boston MA 02111 – Phone 617-292-8057

Francis U. Macy, Director, *Center for Safe Energy*, 2812 Cherry Street, Berkeley, CA 94705 - Phone 510-540-7120 / E-Mail fmacy@igc.org

Jerry Rosenthal, *Concerned Citizens of Louisa County*, 877 Holland Creek Road, Louisa, VA 23093 / E-mail zips@firstva.com

Dr. David Rush, *Greater Boston Physicians for Social Responsibility* 68 Foster Street, Cambridge MA 02138

Bill Smith, *Fish Unlimited*, 1 Brander Parkway, Shelter Island, New York 11965 - Phone 516-749-3474 / Email bsmith@fishunlimited.org

Renee Shapiro, *Womens Community Cancer Project*, 21 Glenmont Avenue Brighton, MA 02135 – Phone 617-787-0743 / Email kokos@javanet.com

Michael Steinberg, *Black Rain Press*, 1009 Burch Avenue, Durham, NC 27701 – Email 1009Burch<sr12@duke.edu

Michael Welch, *Redwood Alliance*, PO Box 293, Arcata, CA 95518 – Phone 707-822-7884/ E-Mail michael.welch@homepower.com

Ted Vosk, *MassPirg*, 29 Temple Place, Boston MA 02111 – Phone 617-292-4800 / Email tvosk@postharvard.edu

Chris Williams, Ex. Dir., *Citizens Action Coalition of Indiana* – 5420 N. College Ave., Suite 100, Indianapolis, IN 46220 - Phone 317-205-3535 / E-mail chrisw@citact.org

Matthew Wilson, *ToxicsAction Center*, 29 Temple Place, Boston MA 02111 – Phone 617-292-4821; and 41 South Main Street, Suite #5, West Hartford CT 06107 Phone 860-233-7623 / Email mwilson@toxicsaction.org