



League of Women Voters of Minnesota Records

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704 Macalester
St. Paul, Mn. 55116
October 1, 1976

John Boland
300 Metro Square
St. Paul, Mn 55101

Dear Mr. Boland:

I am writing this letter to express the distress I experienced at a Hearing the Metropolitan Council held Sept. 30, regarding the Natural Resources Model Ordinances. I am Chairman of the Ramsey Soil and Water Conservation District and I spoke in that capacity. Before the Hearing I spent several days researching my comments and consulting with other Board members so my statement would accurately reflect their concerns. I wrote out my comments so I would testify at the Hearing with my thoughts organized, and also so my Board would know exactly what I said.

There were three persons signed up to testify and I was one of the three. When I was finished reading my 2 page statement, Mr. Short expressed his dismay that "that girl" (I am a middle aged woman) read a written statement and they had to waste valuable time listening to written statements. Mr. Hoffman commented they would have to listen to written statements since cross examination must appear in the Record. Mr. Short again expressed his dismay at the waste of time.

After 5 persons testified, the Met. Council discussed the Ordinances for an hour. It was apparent that some participating in the discussion did not understand the nature of the Ordinances.

My reaction to the entire process was outrage and disgust. I felt I had totally wasted my time in attending the Hearing and in preparing my testimony, since no one cared anyway. The Hearing was for form only.

I did call Mr. Costello the next day to discuss the purpose of the Ordinances with him. I also told him of my impression of the Hearing. He did somewhat reassure me about the interest of the Council members in public testimony. However, the Met. Council conducts its own public relations.

When I left the Hearing I felt I would never testify at a Metropolitan Council Hearing again. I have testified at many Hearings, yet this was my reaction. I wonder how a citizen that knows less about government would react? If this manner of dealing with citizens is common, I would judge many would dislike the Council.

Sincerely yours,

Marilyn D. Lundberg

O. Wendell Andersen

Helene:

Another bad experience at a Public Hearing occurred at a Hearing the St. Paul City Council held about a Comprehensive Storm Water Policy. I arrived while the engineer from the Public Works Dept was giving his presentation on the need for this policy. When he was finished, a lady from St. Paul proceeded to take the opportunity to expound on all her pet peeves. When the Councilman that chaired the meeting was finally able to get her to stop, he called for the vote.

I had prepared testimony, but I neglected to call the Council and notify them I intended to testify. I did testify after they already voted for the Policy because I felt I had information on additional needs in St. Paul. On the whole, it was a dismal experience.

Marilyn D. Lundberg

Jerry -

I had a long talk with Marilyn Lundberg concerning her (St Paul Luv) experience with the hearings procedure on the Critical Areas of the Mississippi and whether or not reference to coal sitings was pertinent to the hearings.

Although she solved some of the problems she was very frustrated by the confusion as to the public's involvement, lack of understanding by staff as to the procedure etc.

My next step would be to bring this to the attention of all ~~board~~ program chairman on the state Board.

2). Ask for a written comment on public hearings from Liz Ebbott - and Katie Sassville, both women addressed complaints to me.

3). Any other reliable source that would offer a balanced comment. Such as other leagues or leaguers who have participated. That then explains my article for the Board Memo.

Jan

881-2036

cc Helene

March, 1977

WASHINGTON STATE "MODEL LITTER LAW"

PASSED IN 1971 - proposed by industry as an alternative to deposit legislation.

PLACES TAX ON:

1. groceries
2. food (for human and pet consumption)
3. cigarettes
4. newspapers, magazines
5. household paper, paper products
6. cleaning agents, toiletries
7. non-drug drugstore sundries
8. glass containers
9. metal containers
10. plastic or fiber containers made of synthetic materials
11. soft drinks
12. beer and malt beverages
13. wine

IN 1974 THE CONTAINER INDUSTRY IN WASHINGTON PAID LESS THAN 3% (\$24,094) of THE TOTAL TAX COLLECTION OF \$902,111.

52% OF THE TAX CAME FROM WHOLESALE AND RETAIL FOOD ESTABLISHMENTS, WHICH PASSED IT ON TO CONSUMERS.

(source: Reader's Digest, July 1976, pg.172)

LITTER BAG - Sec.70.93.100 of the law requires a litter bag in every car. However, the Wash. State Patrol had determined that this provision is un-enforceable and has issued written instructions to its members not to enforce it. The courts have held that the car itself could be construed as a litter bag as well as ladies' purses and similar containers.

(source: telephone call to Captain Randall Jordan, Wash. State Highway Patrol, March 7, 1975)

LITTER RECEPTACLES - Sec.70.93.090 of the law provides for the placement of litter receptacles throughout the state. However, all litter receptacles that the Highway Dept. placed along the road and in roadside parks (except those in manned recreational areas) have been removed because they were used as garbage dumps by local residents.

(source: telephone call to Don Ernst, District Engineer, Wash. State Highway Dept. March 7, 1975)

(over)

ENFORCEMENT - the Washington State Highway Patrol's activities in the enforcement of the litter law have remained relatively constant over the past 5 years.

1974 arrests - 303
1974 warnings - 567

The great number of violations recorded were largely due to throwing lighted objects such as cigarettes from motor vehicles. This is a real problem in many parts of Washington because of forest fires.
(source: telephone call to Captain Randall Jordan, Washington State Highway Patrol, March 7, 1975)

A LITTER TAX DOES NOT:

1. save energy
2. save consumer dollars
3. reduce the generation of solid waste
4. reduce the generation of litter

A LITTER TAX DOES:

1. increase taxes
2. create more bureaucracy to administer the collection of litter.

RESOURCE RECOVERY AND WASTE REDUCTION

TABLE 21
ENVIRONMENTAL IMPACTS FROM CURRENT MIX OF BEVERAGE CONTAINERS
AND FROM A SYSTEM WITH 90 PERCENT REFILLABLES,
BASED ON 1972 DATA*

	Current system	New system			Reductions	
		90% refillable	10% one-way	Total	Amount	Percent
Raw materials (million lb)	28,054	11,060	3,199	14,259	13,795	49
Energy (trillion Btu)	388	153	50	203	185	48
Water use (billion gal)	215	109	22	131	84	39
Industrial solid waste (million cu ft)	370	63	42	105	265	72
Atmosphere emissions (million lb)	1,616	668	210	878	738	46
Waterborne waste (million lb)	337	246	39	285	52	15
Post-consumer waste (million cu ft)	122	85	12	97	25	20

*EPA estimate based on data from: Hunt, R. G., et al. [Midwest Research Institute]. *Resource and Environmental Profile Analysis of Nine Beverage Container Alternatives; Final Report*. v.1-2. Environmental Protection Publication SW-91c. Washington, U.S. Environmental Protection Agency, 1974. 178 p.

SOLID AND HAZARDOUS WASTE COMMITTEE

Jacqueline Farm	385 West County Road B2, Roseville 55113	483-9787
Charlotte Helseth	4311 Bloomington Avenue South, Minneapolis 55407	721-3901
Joanne Hughes	1114 N.W. 2nd Avenue, Grand Rapids 55744	(218) 326-2707
Ruth Jensen	R #2, Box 185, Chaska 55318	
Margaret (Maggie) Kircher	2005 Knollwood Drive, Grand Rapids 55744	(218) 326-3748
Mertyce Mayne	1479 Hythe Street, St. Paul 55108	645-4007
Connie Metcalf	860 West Moore Lake Drive, Fridley 55432	571-3596
Linda Peck	R #4, St. Cloud 56301	685-3365
Kathy Poseley	8 Lakeview Terrace, Grand Rapids 55744	(218) 326-1444
Laura Solberg	1580 27th Avenue N.W., New Brighton 55112	636-5127
Mary Lou Wheeler	2086 Iglehart Avenue, St. Paul 55104	645-8746

Natural resources Co-chairs:

Nancy Grimsby	5932 Wooddale Avenue South, Edina 55424	922-9403
Jeanne Crampton	4330 Wooddale Avenue South, St. Louis Park 55424	926-8760

Area of Interest:

Solid and Hazardous Waste Lake

Connie Metcalf
Mertyce Mayne

Mass Burning

Maggie Kircher

Recycling

Joanne Hughes
Connie Metcalf
Maggie Kircher
Laura Solberg

Source Reduction

Mary Lou Wheeler
Charlotte Helseth

Topics Discussed at May 29th Meeting:

Institutional and economic barriers to recycling; use of term, "Mass Burning," rather than "resource recovery"; need for clarification and definition of terms; "Districting" (regulation of waste disposers); incentives and applicability of various forms of waste disposal; market variability for recycled material; high technology vs. low; hidden costs in high technology; joint powers agreements (as affects districting).

To: Members of the LWVMN Solid Waste Committee
From: Nancy Grimsby, Jeanne Crampton, Natural Resources Co-chairs, LWVMN
Date: July 1, 1980

Nancy is camping in Germany and Italy, and I'm roughing it in the wilds of Michigan -- but so much has happened since our meeting on May 29th that we thought it necessary to do some catching up. So -- the following isn't in any sort of order, but it's stuff you need to know about.

Perhaps the most important news I need to impart (and you may have heard) is that the state League is experiencing a shortage of operating funds (always a problem in the summer, but more severe this year), and we have all been asked to try and retrench. If you are interested in all the gory details, each League President has had a letter from Pam Berkwitz with the particulars, and you can check there. What it means to us, specifically, is that expense vouchers will not be paid until at least November, and then only at the rate of 15¢ per mile. Also, we would like to hear from the committee as to whether they would still like to have a meeting around the 1st of August (understanding there would be no reimbursement for expenses until sometime in the future), or if they feel whatever business we have to conduct can be done by telephone or "round robin" letters. Obviously, the people this affects are the persons from Grand Rapids. More of this a bit later, since, ta-dah! -- there may be a ray of hope in all these black clouds. Read on.

The day before I left for Michigan, the LWVMN office received a letter from the national LWV Ed Fund, offering the opportunity to apply for a pass-through grant of \$3,500 (from EPA) to conduct a project for citizens on hazardous or solid waste management in Minnesota. Eleven states have been invited to apply, and five will be chosen. Over and above the \$3,500, there is a \$750 stipend for a project director (who cannot be a state Board member). In a hurried decision, we decided to apply for the grant, provisional on finding a project director. We took the liberty of indicating that we already had a state Waste Committee in existence which could form the basis of an expanded group willing to work on some kind of project. The catch-22 in all this is that while EPA indicated "hazardous and solid waste," "...EPA has expressed their desire for the state League pass-through work to concentrate on hazardous waste management," which means, contrary to our discussion at the meeting, that we would have to devote some time to hazardous waste. Thinking in terms of a project, however, we felt that since Minnesota has just adopted a new hazardous waste siting law, circumstances lent themselves to an education project on the subject of siting and the new law, and that there was no reason for any committee member to feel any more involved in the project end of things than they wished to be. The committee can be expanded, or a sub-committee established to work on the specifics of the project. What the grant would allow us to do would be to pay expenses, and probably publish our research information -- solid and

(over)

hazardous waste, recycling, etc. A letter of intent to apply must be sent by July 15th, and the formal application must be in by August 12th. The project must be completed by February 1, 1981, so it does fall within our time frame. Included with this mailing is a copy of the details regarding the grant. If you have comments or suggestions, will you please call Sally Sawyer at the LWVMN office and talk to her?

Included in this mailing you will find a memo from Neil Seldman, Director of the Institute for Local Self-Reliance (speaker at Waste Alert!), discussing the events at the first national recycling conference in Fresno, California, in April. Connie Metcalf, one of our committee members, also attended, so it will be interesting to have her comments on the memo later on. Other inclusions will probably be self-explanatory.

John Madole, who works for the Minnesota Pollution Control Agency, and is very interested in recycling, also called me just before I left. He said that the Minneapolis Recycling Alliance (I think -- unfortunately I have misplaced the notes I took) was sponsoring a sort of "Recycling Fair" on August 9th, and that Senators Durenberger, Boschwitz, and Rep. Vento had agreed to attend. Location, exact time, etc., hadn't been decided at that point, so you will have to get the information on your own. Call John Madole, or, Connie Metcalf and Linda Peck indicated they would try and attend the planning meetings, so as to keep the League up to date. John, Incidentally, is a good resource person for those of you interested in the recycling problem -- he says he has figures on the economic comparisons on recycling and mass burning. So drop him a line, or call -- he'll be glad to help (MPCA, Solid Waste Division, 1935 West County Road B2, Roseville, MN 55113).

In response to a call from Mark Norgaard, who was acting as sort of interim director of the new Waste Management Board, we sent a list of Leaguers interested in solid waste, mandatory deposit, etc. So you may find yourselves on that mailing list. I ran into Senator Dunn one morning at the Capitol shortly after he had been appointed as the Waste Board's director, and he expressed the hope that someone from the League would make a point of attending all of their meetings as an observer. Someone will, of course, but if anyone is specifically interested, let me know. No need for there to be only one either.

Nancy and I decided, on looking over our material, that most of it was old enough to be somewhat out of date, so we are in the process of trying to update our lists. I have included a recent list of publications from the Legislative Science and Technology Research Office, plus two earlier reports, just to give you an idea what they are like. They are very willing to mail stuff out, or you can pick it up in the basement of the State Office Building) around the corner from the elevators.) The address of the Federal Waste office is: Solid Waste Management Information Materials Distribution, U.S. Environmental Protection Agency, Cincinnati, Ohio 45268. They have tons of stuff -- write for specific info and/or be put on the mailing list.

I think this is just about all I had to pass on at this point; enclosed is a post card addressed to Nancy that will allow you to indicate your willingness/ability to attend an August meeting. Nancy will be back from Germany on July 11th, and you can reach her by phone then (922-9403). Please feel free to call if you have questions. We hope that outlines of what we need to cover will be developed shortly. If you have ideas in that direction or have been writing things down, why not pass them along to those on the list that indicated a similar interest? I've tried to indicate on the enclosed list who was interested in what and what some of the basic topics were.

Many thanks for all your help --

Jeanne Crampton
Route #2, Box 297
Bear Lake, Michigan 49614

League of Women Voters of Minnesota, 555 Wabasha, St. Paul, MN 55102 - July, 1980

Following is a list of "Inquiry Responses" (prepared in response to questions from legislators) from the MINNESOTA LEGISLATURE SCIENCE AND TECHNOLOGY RESEARCH OFFICE, Room 49, State Office Building, St. Paul 55155 (296-8041). Each inquiry response includes a list of references and/or resources, background material, and a response to the stated question(s). (This is a partial list.)

5. Sludge Disposal Alternatives - Describes disposal alternatives used by several different communities (1/27/77)
19. Roll of States in Radioactive Waste Disposal - Discusses whether state or federal regulations have authority over radioactive waste disposal (5/13/77)
20. Proposed Legislation on Radioactive Waste - Nine-state survey of proposed legislation on radioactive waste disposal (5/13/77)
24. Biomass - Defines biomass and discusses its potential as an energy source for Minnesota (9/20/77)
32. Hazardous Waste Generation and Disposal - Discusses the major sources and volume of hazardous waste in Minnesota; how such wastes are treated, stored, or disposed; and how the chemical landfill is used to dispose of the various types of hazardous material (12/19/77)
35. Hazardous Waste in Illinois - Discusses the status of hazardous waste legislation in Illinois (12/28/77). (This one might be outdated. J.C.)
48. Methane Digester - Explains how an animal waste digester operates and discusses the cost of one digester designed by Intermediate Technology, Inc., in Clear Lake, Minnesota (5/27/78)
50. Plastics Recycling - Discusses feasibility of plastics recycling in Minnesota (5/26/78)
59. On-Farm Production of Methane - Brief discussion of on-farm production of methane. (3/15/7?)
67. Incineration of Hazardous Chemicals - Discusses the feasibility of incinerating hazardous chemicals in electrical power plant boilers (4/17/79)
68. Methanol Production from Wood Wastes - Discusses the feasibility of producing alcohol from wood scraps, scrub trees, and timber industry residues (4/27/79)
73. Transportation of Recycled Materials - Explains the discrepancy between transportation rates for recyclable and virgin materials (5/10/79)
78. Resource Recovery from Solid Waste - Describes the status and feasibility of programs for resource recovery from solid waste in the Twin Cities Metropolitan Area (6/8/79)
85. Production of Ethanol on Farms - Describes how ethanol is produced from agricultural products (6/8/79)
100. Siting Hazardous Waste Disposal Facilities - Explains how a few other states have tried to resolve the conflict between the need for a hazardous waste disposal facility and opposition by local government (1/14/80)
101. Radioactive Waste Storage and Disposal - Lists existing storage and disposal facilities for radioactive wastes and discusses how soon a permanent disposal facility for high-level wastes might be expected to begin operation (1/23/80)
103. Toxic Waste Injection and Earthquakes - Discusses whether high-pressure injection of liquid waste into underground rocklayers would trigger earthquakes or cause other problems in Minnesota (1/28/80)
106. Disposal Methods for Hazardous Wastes in Minnesota - Identifies what type of hazardous waste facilities may be needed to handle hazardous chemicals generated in Minnesota, and what incentives would encourage the public or private sectors to build and operate such facilities (2/18/80)

(over)

112. Source Separation and Recycling - Addresses the factors that hinder the implementation and success of residential source separation and recycling (4/4/80)

(Any of these papers may be obtained by writing or calling the office listed at the top of the preceeding page.)

#32 and #73 included with this mailing

MINNESOTA LEGISLATURE
SCIENCE AND TECHNOLOGY PROJECT

17 STATE CAPITOL - ST. PAUL 55155

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HAZARDOUS WASTE GENERATION & DISPOSAL

Inquiry Response No. 32

December 19, 1977

- INQUIRY:
1. What are the major sources of hazardous waste in Minnesota?
 2. What is the volume?
 3. How are these wastes treated, stored, or disposed?
 4. How does the chemical waste landfill deal with the various types of hazardous material and relate to different disposal alternatives?

KEY RESOURCES:	Gaynor W. Dawson, Manager Water & Waste Management Section Water & Land Resources Department Battelle Northwest Battelle Boulevard Richland, Washington 99352 (509) 946-2665	Frederic C. Arnold, Staff Engineer Metropolitan Waste Control Commission 350 Metro Square Building 7th & Robert Street St. Paul, Minnesota 55101 (612) 222-8423
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BACKGROUND: A recent report by Battelle Northwest, Richland, Washington, entitled Impact of Hazardous Waste Generation in Minnesota, describes the sources and volume of hazardous waste generated in Minnesota and the manner of disposal as of 1976. The Minnesota Pollution Control Agency (MPCA) is currently seeking approval and implementation of statewide hazardous waste regulations which are in the hearing process. In addition to general sections defining and classifying hazardous waste, important sections of the regulations address generation, labeling, record keeping, and transportation of hazardous substances and the location and operation of disposal facilities. At the same time, the U.S. EPA is funding the siting and operation of a chemical waste landfill for a 5-year period. However, the role of this landfill (which will have a 20-year design capacity) in regional and state hazardous waste management plans has not been identified. No statewide management plan has been developed.

RESPONSE: 1. What are the major sources of hazardous waste in Minnesota? Four of the six MPCA regions (see Appendix I) have low volumes of hazardous waste and together account for about 8% of the state's total. Region 5, which includes Rochester, and Region 6, which includes the Twin Cities, contribute 24% and 68% respectively. The breakdown by region which follows is the result of two independent statewide surveys conducted in 1976 of potentially hazardous waste generated in Minnesota. The written survey was mailed to 5568 manufacturing firms. Of the total recipients, 15% responded, representing 21% of the state's manufacturing employment. Some detail as to the source of these wastes by industry is provided in Appendix II.

Region	% of State	% By Region of:				
		Solvent	Sludges	Oils	Oxidizing Agents	Other
1	3%	60%	30%	--	--	10%
2	2%	32%	36%	16%	6%	10%
3	1%	16%	42%	29%	--	13%
4	3%	13%	24%	10%	43%	10%
5	24%	7%	75%	11%	--	7%
6	68%	13%	33%	25%	8%	21%

In addition, the Metropolitan Waste Control Commission (MWCC) had the consulting firm of Henningson, Durham and Richardson (HDR) compile the results of a 1973 survey done by Barr Engineering and some data of the MWCC on hazardous wastes in the Metro Area. The result which follows represents 700 firms or 44% of the manufacturing man-hours in the Metro Area.

- 40% flammables & combustibles
- 1% halogenated solvents
- 1% synthetic organics
- 3% cyanide containing substances
- 8% acids
- 12% alkalies
- 9% metallic & inorganic
- 12% miscellaneous
- 12% unidentified

2. What is the volume? The estimated volume of hazardous waste in Minnesota is somewhere between 116,000 to 184,000 tons annually. The average for a given year would be 150,000 tons. The unknown factor is this estimate derives from those industries for which the hazardous waste volume is uncertain, those which do not report their waste output, or those which dispose of their hazardous waste in an otherwise inappropriate manner. It is possible that there is even more hazardous waste generated than is indicated here. The hazardous waste regulations developed by MPCA would require reporting by industry and therefore provide more accurate volume information. On the basis of these estimates, in an average year approximately 43% or 64,000 tons of the hazardous material is industrial waste water sludge and 14% or 20,000 tons is industrial solvents. About 20% or 30,000 tons of the total is waste oils. The 24% generated in Region 5 and 68% generated in Region 6 correspond to 35,000 tons and 102,500 tons respectively. The two regions together account for 92% of the state's hazardous waste.

3. How are the wastes treated, stored, or disposed? According to the 1976 statewide survey, hazardous wastes are handled in the following ways in Minnesota:

- 35% spread on land (for organic materials such as oil residues)
- 28% landfill
- 13% recycled (treated or directly reused)
- 10% lagoons
- 6% incinerated
- 8% miscellaneous (includes chemical treatment, sewer disposal, or hauled out of state)

For comparison, those methods utilizing land applications (i.e., landspreading and land-filling) which account for 63% of the hazardous waste in Minnesota, only account for

45% of the waste in Washington, Oregon, and Alaska. In those states, 37% of the hazardous waste is recycled, 3% is in lagoons, and less than 1% is incinerated.

4. How does the demonstration chemical waste landfill deal with the various types of hazardous material and relate to different disposal alternatives? The decision as to which way to dispose of a hazardous waste rests with the generator. The least cost disposal method is the disposal method most often chosen. The charge for disposal in the proposed demonstration landfill, however, will not be based upon providing an economic incentive to incinerate, recycle, or otherwise treat in order to minimize risk to the environment or human health. The charge is uniform and based upon the day-to-day costs as well as long-term care and closure costs. The grant period and funding by EPA is for five years with planning, design, EIS, and construction to take three years. Though this leaves only two years for the actual demonstration of the use of the landfill to occur, the design life of the landfill is 20 years.

The landfill area is 115 acres providing 1000 acre feet or 1.2 million metric tons of burial. Half of this is estimated to be fill so that the annual hazardous waste capacity of the operation is 30,000 tons over a 20-year period. Some treatment to remove the free moisture of materials delivered will be done on the site by settling, filtering, and chemical means. About 1/3 of the total or 10,000 metric tons will be treated in this manner.

The MPCA is developing a hazardous waste regulatory program in order to gather the data necessary to control hazardous waste disposal and to develop a statewide management plan. If, for example, a particular industrial waste sludge were analyzed and it was determined that the components were sufficiently toxic to warrant treatment to lower the potential risk to the environment or to human health over a long period of time, or one just wanted to encourage recycling or waste exchange, the management plan would have to reflect that preference. At this time, the guidelines for the operation of the chemical waste landfill do not reflect any awareness of or plan to encourage alternative disposal methods.

REFERENCES:

1. "Pollution Control Agency: Identification, Labeling, Classification, Storage, Collection, Transportation and Disposal of Hazardous Waste - Notice of Hearing," 2 S.R. 521ff.
2. Minnesota Pollution Control Agency and Battelle, Pacific Northwest Laboratories, The Impact of Hazardous Waste Generation in Minnesota, October 1977.

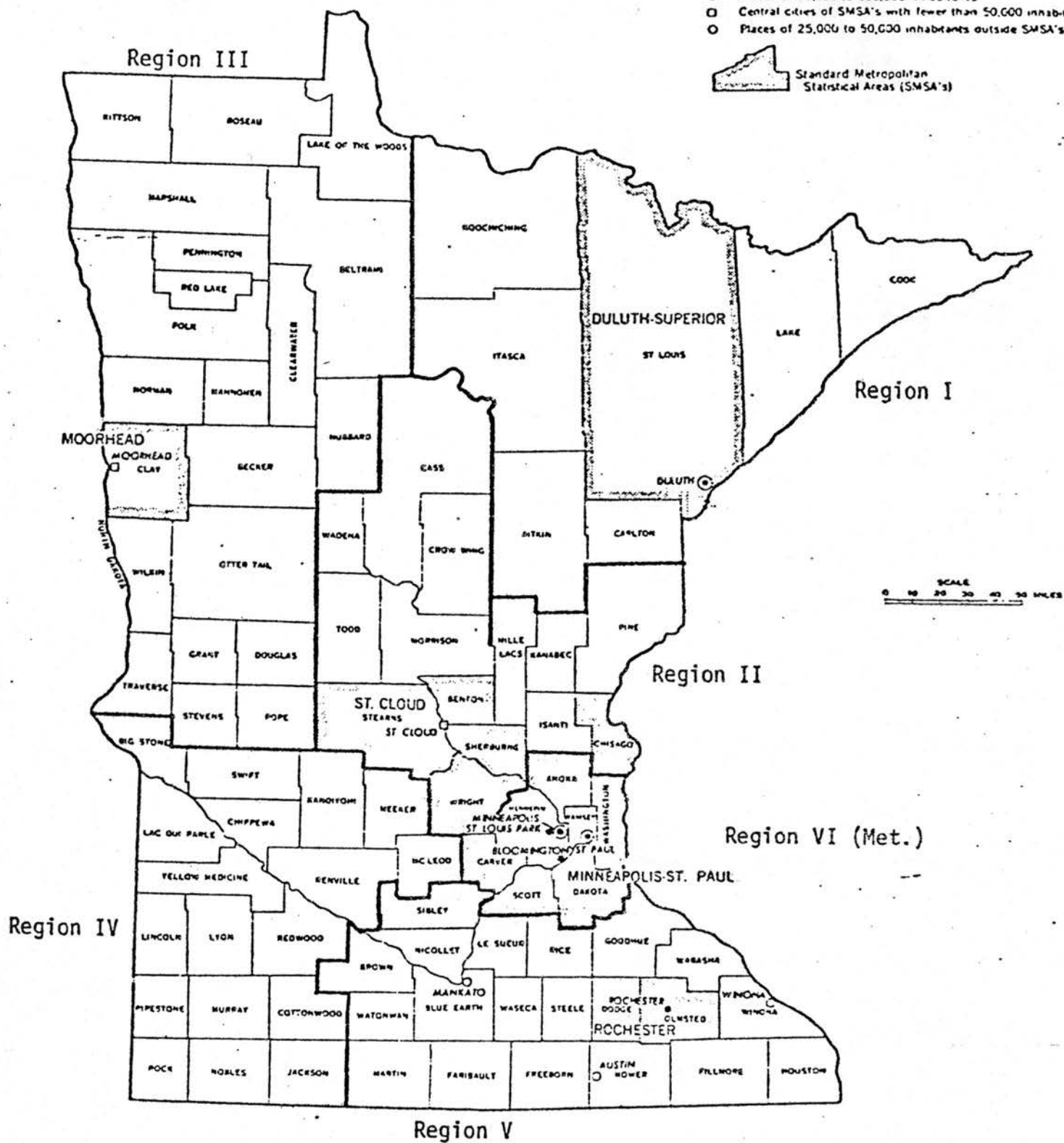
MINNESOTA

LEGEND

- ⊙ Places of 100,000 or more inhabitants
- Places of 50,000 to 100,000 inhabitants
- Central cities of SMSA's with fewer than 50,000 inhabitants
- Places of 25,000 to 50,000 inhabitants outside SMSA's



Standard Metropolitan Statistical Areas (SMSA's)



APPENDIX II

From The Impact of Hazardous Waste Generation in Minnesota:

3. Industrial Waste Sources

All of the companies classified with the 20, two-digit Standard Industrial Classification codes (SIC) comprising the manufacturing sector of industries (SIC's-20-39) were initially contacted by mailed questionnaire. Other sources of hazardous waste represented by SIC's codes outside of the manufacturing sector such as power plants and airlines are not included in the scope of this report due to insufficient return of surveys....

In Region I there are two principle SIC's contributing to the region's waste. SIC 26, paper and allied products, with over 25% of the waste and SIC 2911, petroleum refining, with over 24% of the region's waste. There are 4 SIC's in Region 2 with more than 22% of that region's waste. They are SIC 22 and 23, textile products and fabric products, SIC 26, paper and allied products, and SIC 27, printing and publishing. In Region III, 30% of the waste is devised from SIC 37, transportation equipment, and 27% from SIC 20, food products. In Region IV, 47% of the waste comes from SIC 3679, electronic components, 14% in SIC 20, food products, and 9% in SIC 26, paper and allied products.

The combined wastes from Regions I-IV constitute only 9% of the state's hazardous waste. Within any one region, a single company can easily make a significant impact on the region's waste generation. Since Regions V and VI account for 91% of the state's waste there is generally more than one company in each SIC group such that each SIC is less affected by a single company's contribution. The principal SIC's in Region V are 3111 (leather tanning), with 69% of the waste, 35 (machinery), with 7% of the waste, 3491 (metal fabrication), with 7% of the waste, 20 (food products), and 27 (printing and publishing), each with about 4% of the region's waste. Region VI has a very well integrated industrial sector. There are five SIC's that individually account for between 10% and 20% of the region waste. They are 2911, petroleum refining, 3111, leather tanning, 35, machinery, 29, petroleum related industries, and 3491, metal fabrication. There are 11 other SIC codes which account for between 1% and 10% of the region's waste.

Regions V and VI, and particularly Region VI, are the principle waste generation sectors of the state. Leather tanning and petroleum refining are large waste generators in the sectors where they occur. SIC's 26, 27, 3471, and 36 are distributed throughout the state and are considered principal waste generators. Many of the other SIC's considered have either region or company specific waste streams. (pp. vii-viii)

MINNESOTA LEGISLATURE
SCIENCE AND TECHNOLOGY PROJECT

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TRANSPORTATION OF RECYCLED MATERIALS

Inquiry Response No. 73

May 10, 1979

INQUIRY: What is the discrepancy between transportation rates for recyclable and virgin materials?

KEY RESOURCES: Meredith Wright
Legal Division
Environmental Protection Agency
Washington, D.C. 20510
(202) 426-4497

Chris Hill
Congress of the United States
Office of Technology Assessment
Washington, D.C. 20510
(202) 225-6446

BACKGROUND: Much public concern has been expressed for the need to conserve natural resources. The United States imports many industrial and manufacturing raw materials such as crude oil and chromium ore which leave our economy susceptible to embargoes and inflationary price hikes. There is an increasing need for reuse and reclamation of consumer products and materials, yet the growth and promotion of a broad-based nationwide recycling program has been slow and often characterized by setbacks. It has been suggested by several consumer and industrial groups that one reason for the slow growth of recycling has been a transportation rate policy which discriminates against recyclable and recycled materials. This response examines existing transportation rate structures, the history of recent legislation and court decisions in this area, and the implications for Minnesota.

RESPONSE: Rate structure. Railroad freight rates are examined in this report since railroads currently haul the majority of virgin and recyclable materials in the United States. The existing freight rate setting structure involves approval and regulation of rates by the Federal Interstate Commerce Commission (ICC). Rate requests by carriers of specific commodities are filed with the ICC in Washington, D.C. The ICC determines whether the rate is "workable," and evaluates the request on the basis of the revenue/operating cost ratio.¹ The ICC does not set or establish rates; it merely rules on rate requests. The ICC has traditionally not been concerned with differences in transportation rates between virgin and recyclable materials, but only whether these differences were unreasonable and discriminatory.² This is a carryover from the development days of the 1800s in the United States when the national policy was one of expansion and growth of the economy. As a result, transportation rates favored raw materials and resources. Under the present rate structures, it is cheaper to ship recyclable copper scrap by water to Europe and the Far East than to ship by rail from the West Coast to Detroit, Cleveland, or New York.³

Legal decisions. The most well known challenge to these rate structures, best known as the "SCRAP" decision, came in 1975.⁴ The courts upheld the decision of the ICC to allow the railroads a rate increase on recyclable materials. In response to this, Congress passed the Railroad Revitalization and Regulatory Reform Act in 1976,

P.L. 94-210. Section 204 of this act ordered the ICC to conduct an investigation of discriminatory freight rates for the transportation of recyclable and recycled materials. The burden of proof on the reasonableness and fairness of the existing rate structures was placed on the common carriers by congressional mandate.

The ICC responded by instituting a one-year investigation of the transportation rates established for virgin and recyclable materials. The final written report to Congress was known as Ex Parte 319.⁵ Evidence submitted to the ICC was not limited to actual rate structure differences, but included potential benefits to the environment such as the conservation of natural resources, waste reduction, and the energy savings that would result from increased recycling. For example, evidence submitted to the ICC under Ex Parte 319 showed that

considerable resource and energy savings can be made by recycling aluminum scrap. There is a conservation of bauxite and alumina and a decrease in the amount of energy consumed since it takes approximately 96 percent less electricity to recycle scrap into aluminum ingot than it does to make aluminum from virgin materials. The production of aluminum from used cans rather than bauxite (aluminum ore) also produces 23 times less air emissions and 21 times less water pollution per ton of aluminum produced.⁶

In February 1977 the ICC approved the final report (Ex Parte 319) on a 5 to 3 vote. Except for a few relatively minor adjustments, it left the base rate structure and the succession of increases intact. The National Association of Recycling Industries (NARI) filed a lawsuit against the ICC in the Federal Court of Appeals based on a decision that the Ex Parte 319 had not fulfilled the intent of Congress and had ignored certain evidence brought out in the investigation. NARI based its lawsuit on several factors: (1) that the ICC had shifted the burden of proof illegally back to the rate payers instead of the railroads, (2) that the ICC had denied energy savings and environmental considerations in reaching its conclusions in Ex Parte 319, and (3) that the ICC had determined a lack of competition between many virgin and recyclable materials where evidence clearly supported some form of market competition. The federal Environmental Protection Agency (EPA) and the Department of Energy (DOE) joined NARI in the lawsuit against the ICC.

On August 2, 1978, the U.S. Court of Appeals in Washington, D.C. ruled in favor of NARI.⁷ The court ordered the ICC to reinvestigate the freight rates and to revise all discriminatory rates by April 16, 1979. The ICC came out with new findings on April 16. It agreed in principle with the three points brought out by NARI in the lawsuit. However, the freight rates as revised are still discriminatory towards recyclable materials, according to NARI. The point of contention now rests on the revenue/operating cost ratio mentioned earlier.

Data submitted to the ICC under Ex Parte 319 showed that the national average for all railroad traffic in the U.S. has a revenue/operating cost ratio of 130 percent. A revenue/operation cost ratio of 160 percent is the generally accepted level indicating railroad monopoly over a commodity. Most recyclable materials were found to have revenue/operating cost ratios of 160 to 250 percent, with a few over 400 percent.⁸ When the ICC came out with the new findings on April 16, 1979, the maximum ceiling on the revenue/operating cost ratios for recyclable products was set at 180 percent. This was unacceptable to NARI, so another lawsuit was filed against the ICC in the District Court of Appeals on April 18, 1979, asking that the freight ratios for recyclables be brought down to the national average of 130 percent.⁹ The outcome of this lawsuit, which is pending, will undoubtedly affect the freight rate structure in Minnesota.

Minnesota rate structure. Intrastate traffic, however, is regulated by the Minnesota Public Service Commission (PSC). The PSC has statutory authority to set comparable

and favorable rates. Rail transportation rates are regulated under 1978 Minn. Statutes, Section 218.041, and motor carriers under 1978 Minn. Statutes, Section 221.041. This authority has not been used, since the PSC appears to be relying on federal policy. An example of the existing transportation rate structure in Minnesota can be found in Table 1.¹⁰

It is clear from Table I that virgin materials (i.e., pulpwood logs) are transported at lower rates per unit weight than recyclable materials (i.e., newsprint paper and paper scrap or waste).

TABLE 1
FREIGHT RATE STRUCTURE
Route: Duluth to Twin Cities

ITEM	MODE OF TRANSPORTATION	TRANSPORTATION CHARGES (per unit)
Newsprint paper	Railroad	66¢-78¢ per hundredweight, min. weight = 36,000 lbs.
Paper scrap or waste	Railroad	53¢-59¢ per hundredweight, min. weight = 55,000 lbs.
Pulpwood logs (peeled poplar)	Railroad	31¢ per hundredweight, min. weight = 55,000 lbs.
Glassware	Railroad	132¢ per hundredweight, min. weight = 36,000 lbs.
Glassware	Motorfreight Truck	86¢ per hundredweight, min. weight = 30,000 lbs.

TABLE II *
REVENUE RETURNS TO RAILROADS
COMPARED WITH VARIABLE COSTS

The chart below indicates the revenue return levels achieved by the carriers on shipments of various categories of recycled materials. These figures, submitted to the ICC by the railroads themselves, show their revenue levels as a percentage of their "variable costs" (i.e., revenue/variable cost ratio).

<u>Commodities</u>	<u>East</u>	<u>South</u>	<u>West</u>
Recyclable Aluminum Residues	431%	227%	213%
Recyclable Aluminum Scrap	177	184	161
Miscellaneous Recyclable Nonferrous Metals	319	---	227
Recyclable Copper Scrap	191	211	226
Recyclable Copper Matte	204	---	281
Recyclable Lead Matte	156	---	171
Recyclable Lead & Zinc Scrap	186	226	155
Recyclable Zinc Dross	179	214	151
Recyclable Wastepaper	124	138	150
Recyclable Textile Waste	125	109	144
Recyclable Rubber	---	228	241
Recyclable Rubber Waste	128	164	164

* Data supplied from Ex Parte 319 cited in Reference No. 3.

CONCLUSIONS: Railroad transportation rate policy has historically discriminated against recyclable materials. Recent court litigation has attempted to make the rates between virgin and recyclable materials more equitable (see Table II). The Interstate Commerce Commission (ICC) has been given congressional mandate to adjust the rates; the outcome of a pending Court of Appeals case may hasten the process of rate adjustment to better reflect an attitude of fairness and nondiscrimination among all transported commodities. On a state level, Minnesota could take legislative action similar to Michigan which passed a resolution urging the ICC to resolve the rate issue in an equitable manner.

REFERENCES:

1. Statement by Meredith Wright, Legal Division, Environmental Protection Agency, telephone conversation, September 14, 1978.
2. Statement of Chris Hill, Office of Technology Assessment, Congress of the United States, telephone conversation, September 14, 1978.
3. Interstate Commerce Commission, Ex Parte No. 319, "Investigation of Freight Rates for the Transportation of Recyclable and Recycled Commodities," February 1, 1977, p. 290.
4. Aberdeen & Rockfish Railroad Co. v. Students Challenging Regulatory Agency Procedures, ("SCRAP"), 422 U.S. 289 (1975).
5. Op. cit. Ex Parte 319.
6. Op. cit. Ex Parte 319, O. 264.
7. National Association of Recycling Industries, Inc. v. Interstate Commerce Commission, U.S. Court of Appeals, Washington, D.C., August 2, 1978.
8. Op. cit. Ex Parte 319, pp. 239 and 374.
9. Statement of Paul Parker, National Association of Recycling Industries (NARI), telephone conversation, April 25, 1979.
10. Data supplied by Don Wickstrom, Minnesota Department of Transportation, St. Paul, Minnesota, April 1979.

LAC/dw:jb



cc: Jeanne Crampton

June 16, 1980

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Ms. Pamela M. Berkwitz
LWV of Minnesota
555 Wabasha
St. Paul, Minnesota 55102

Dear Ms. Berkwitz:

We are pleased to announce that the League of Women Voters Education Fund (LWVEF) has launched the second phase of a grant from the U.S. Environmental Protection Agency (EPA) and is offering your state League the opportunity to apply for a pass-through grant of \$3500 to conduct a project for citizens on hazardous or solid waste management in your state. The purpose of the project is to educate citizens in the state about the Resource Conservation and Recovery Act (RCRA) and to encourage their participation in the development of state hazardous and solid waste management programs.

Five state Leagues will be chosen from among eleven candidates to receive funding for their projects. We hope you find this letter and the enclosed information helpful for deciding whether to submit a proposal and if so, what should be included in your proposal.

The Problem

Our country is facing a crisis in both solid and hazardous waste management. Local sanitary landfills are overflowing while city and state officials are finding it more difficult to find sites for new landfills. And each day some 160,000 metric wet tons of hazardous waste is produced, while EPA estimates that over 90 percent of these by-products are being disposed of in ways that are unsafe for human health or the environment. Horror stories such as the fate of the residents near Love Canal, New York or the explosion of a chemical "storage" facility in Elizabeth, New Jersey have provoked fear and mistrust on the part of the public. Confidence in the reliability of government and industry to safely control disposal of hazardous wastes has nearly reached rock bottom.

The passage of the Resource Conservation and Recovery Act of 1976 (RCRA) marked a new approach to solid and hazardous waste management. Regarding solid waste management, states are developing long-range plans to address the problems of increasing disposal costs and overflowing landfills. In hazardous waste management, newly-released federal reg-

ulations will have a major effect on the way hazardous wastes are stored, transported, treated and disposed of. All states are required to develop laws, regulations and programs which are as stringent as these federal rules. If any state fails to set up as strong a program, EPA will take over management of hazardous wastes in that state.

The League's Role

All of these activities call for a well-educated public and ample opportunity for citizens to have a say in solid and hazardous waste management decisions. If RCRA and the state programs are going to work smoothly, government needs the cooperation and trust of the public at large. The public must be made aware of the entire problem. This is especially true regarding the siting of hazardous waste treatment and disposal facilities. Upset by the tragic consequences of past practices, citizens are unwilling and sometimes violently opposed to a state or company deciding to build a facility in their area, even if it meets EPA and state standards. At the same time, it is crucial that state officials include the public in their decisions about solid and hazardous waste management to ensure that local and environmental concerns are carefully considered. In all of this, the League can play a vital and effective role as mediator, educator and watchdog.

WASTE ALERT!

The LWVEF has been aware of the need for public participation in solid and hazardous waste management for many years. In 1978, as part of our continuing interest, the LWVEF joined with five other national organizations--American Public Health Association, Izaak Walton League of America, National Wildlife Federation, Environmental Action Foundation, and the Technical Information Project--in an EPA-funded program called Waste Alert! The purpose of the program is to inform the public about waste management issues and the five groups have been conducting a series of conferences in the ten EPA regions across the country. So far, conferences have been held in five of these areas--Regions II, IV, V, VI, and IX. League members from your state attended the Waste Alert! conference for Region _____ in _____ last _____ (see enclosed list of attendees). In addition to co-sponsoring these conferences, the LWVEF has produced four publications on waste issues and on what citizens are doing around the country. (You will find one of the Waste Alert! newsletters enclosed.)

Your State Project

As part of this Waste Alert! program, we are asking your state League to apply for a pass-through grant of \$3500. The overall objective of your project, as stated earlier is to educate citizens about RCRA and to encourage their participation in the development of state hazardous and solid waste management programs. The particular states or hazardous waste issues that you decide to address are entirely up to you. We do, however, encourage you to consider your state's hazardous waste management program in developing your proposal. While the problem of solid waste management is an important one, EPA has expressed their desire for the state League pass-through work to concentrate on hazardous waste management. They consider this to be one of the most pressing environmental issues

of the decade and we have found that many state and local Leagues agree. [A number of Leagues are undertaking further studies and have conducted activities on this issue (see enclosed sheet, "A Sampling of League Activities in Hazardous Waste").]

State Leagues are especially well-suited for working on the hazardous waste management problem and this is a particularly good time to have an influence on state hazardous waste programs, which are, in many cases in the development stage. State Leagues can be very effective in encouraging and assisting states to involve the public at this early stage of the game.

A reminder: this grant is funded under RCRA, which does not cover radioactive wastes. Project activities proposed and undertaken as part of this pass-through grant should focus on those areas subject to RCRA.

The range of activities is limitless. Leagues in the past have done everything from public meetings and workshops to tours of landfills, from publications to media events. It just depends on who your target audience is, how much time and manpower you have, and how you intend to reach them. We suggest that you take advantage of the existing recognition of Waste Alert! and associate your projects with the Waste Alert! program. One caveat: This is a grant-funded project, and as such cannot be used for legislative lobbying. This is not to say that you cannot inform members of the public on different proposals before the legislature, but none of these funds can be used to advocate a position.

Choosing a Project Manager

We suggest that your project be managed by one League member, assisted by a steering committee of between six and ten people. EPA encourages you to include on your committee as many representatives from other organizations around the state as you think would be workable.

The position of project manager is an important one. This person will manage the activities and finances of the steering committee and serve as liaison with the state League board and the LWVEF. The manager will be responsible for overall project management including helping to plan the activities and making sure that the grant requirements are met. The LWVEF will provide the project manager with a stipend of \$750 (in addition to the \$3500 for conducting the activities) as a token compensation for his or her time and efforts.

The project manager must agree not to lobby on any solid or hazardous waste issue and to accept a limitation on other lobbying activities while serving as project manager. Since this project will take a substantial amount of time (about the same as a part time job), it is important that the project manager not be a current state board member who may have many other demands on their time and who may be called upon to represent the

League in a lobbying capacity.

The project manager will be responsible for helping to plan the activities and should help in preparing the proposal to submit to the LWVEF. The manager will be responsible for organizing and managing the steering committee. The manager will also be responsible for making sure that grant funds are administered according to federal regulations. We do suggest however, that this duty be assigned to either a project treasurer or the state League treasurer.

From our experience with pass-through grants of this nature, we have found that the person designated to serve as a project manager should be a League member with knowledge of the League and good organizational and administrative skills to manage and direct a working group. For example, past local or state League presidents or state board and committee members have made excellent project managers. The manager should be able to assign responsibility and to communicate with the various groups with which the steering committee will be involved--the state board, the LWVEF staff, state and EPA officials, and the public. While the emphasis is on management capability, vast experience in management is not required. After all, the League is a training ground. If possible, it would be helpful if the project manager had some knowledge of or experience in promoting public participation. Expertise in hazardous or solid waste can also be a consideration, but there is no need to select someone who is an expert on RCRA. We have enclosed a list of League members and others who attended the regional Waste Alert! conference and might be good candidates to serve as project managers or as members of the steering committee.

Benefits to Your League

We already have discussed the benefits of a project of this sort in helping to develop an informed and active citizenry. But managing a grant of this kind, while it takes a great deal of time and effort, also has direct benefits to your state League. Hazardous waste is a highly visible issue at this time, and working on this project further increases your League's reputation as an effective public interest organization. This, in turn, can help make the job of fundraising, selling publications and increasing League membership easier.

Moreover, the steering committee can rent or purchase state League office space, duplicating services, telephone, office supplies and personnel with pass-through funds. This can help supplement the state League budget. And most importantly, the project offers an opportunity to include and train League members who may not have been active or involved with this issue. There are many cases of former project managers who have gained experience running a League grant and then gone on to work for government, industry or on their own as consultants.

What We Want From You

If your League is interested in receiving this funding, we would like you

to choose a prospective project manager and begin developing a proposal. By July 15, we would like to have a short letter from you which briefly outlines: 1) What kinds of projects you are considering 2) The number of possible steering committee members and 3) Whether you have someone who will serve as project manager. This will help us to gauge the number of Leagues interested in running a grant, and should help you in defining what activities your League may decide on.

THE ENCLOSED APPLICATION FORM IS DUE AT THE NATIONAL OFFICE BY AUGUST 12th. Send it to Waste Alert!, League of Women Voters Education Fund, 1730 M St., N.W., Washington, D.C. 20036 ATTN: Barbara Brereton. Once we have received the proposals, the LWVEF staff, National Environmental Quality Committee members, League project advisor and myself will select the five projects for funding. In evaluating the proposals, three of several evaluation criteria will be: 1) What is the need for public participation in the state and how will your project fill that need?; and 3) What are the target audiences of the project and how effective will the activities be in reaching that audience? Another criteria that will be used is innovativeness of the proposal program.

We will notify you by the end of August of the outcome of the selection, and if your proposal is not selected, we hope to be able to suggest alternative sources of funding for you.

Enclosed are some materials to help you and the project manager in developing a proposal:

- Project Application Form and a sample budget
- A copy of the relevant grant work plan and timetable
- Fact sheets describing the hazardous waste regulations recently issued by EPA
- A Hazardous Waste Primer
- Waste Alert! newsletter #3
- Everybody's Problem: Hazardous Waste
- Background papers on your state and regional hazardous waste programs
- "A Sampling of League Activities on Hazardous Waste"
- List of League participants in the Waste Alert! conference in your region from your state
- Conservation Foundation Letter

If you have any further questions, you can call the Waste Alert! project manager, Barbara Brereton, at (202) 296-1770 ext 287. The staff will be happy to help you in any way they can. (Please call collect)

We are very excited about this phase of the grant and the prospect of your state League's participation. I sincerely hope you will be interested in this project, but the decision whether or not to participate is, of course, up to you.

Sincerely,

Merilyn Reeves
Natural Resources Coordinator



League of Women Voters Education Fund

JUL 7 1980

June 24, 1980

Dear State League President:

Oops! We forgot an enclosure for the hazardous waste grant application package - "A Sampling of League Activities on Hazardous Waste". We hope this will be helpful as a guide to what other Leagues have done in the past.

Sincerely,

Barbara Brereton
Project Manager
WASTE ALERT!

A SAMPLING OF LEAGUE ACTIVITIES ON HAZARDOUS WASTE

Colorado

The LWV has conducted a study of hazardous materials with emphasis on nuclear material including low-level radiation. In conjunction with this study, the League held two workshops, and also issued a statement to the House State Affairs committee supporting legislation to "create a focus of responsibility and authority for handling hazardous materials."

Connecticut

The LWV has conducted an extensive public education program on hazardous waste. Their primary activity has been a series of 12 regional meetings in conjunction with regional planning agencies.

Georgia

The LWV issued a statement urging passage of legislation amending Georgia's Hazardous Waste Management Act to provide minimum bonding requirements to maintain and operate hazardous waste storage, treatment and disposal.

Idaho

The state League supported legislation in Idaho which would give power to the Environment Management Board to regulate the transportation, storage, and disposal of hazardous waste generated or brought into the state."

Illinois

Thirty-five local leagues put in over 300 hours into a hazardous waste materials survey which included questions as to whether hazardous wastes were generated in local communities.

Iowa

The LWV has adopted a study of hazardous waste materials.

Louisiana

Through a grant from EPA, the LWV organized a citizen's task force to investigate the problems of producing and disposing of toxic substances. As part of this program, the state League also held a conference concerning hazardous chemicals in the environment.

Massachusetts

The LWV conducted a workshop on what hazardous wastes are produced in Massachusetts, their environmental and public health impact, and the problems of facility sitings.

Michigan

Kalamazoo: The LWV held a meeting on types of hazardous waste generation and the problems of disposal.

Niles-Buchanan Area: In an effort to heighten public awareness, the League produced editorials, featured articles and moderated radio broadcasts on hazardous waste.

Minnesota

Organized a two day Waste Alert! conference focusing on problems of both solid and hazardous waste.

Mississippi

The LWV voted to adopt hazardous waste disposal as a state study item for 1979-1980.

New Jersey

The LWV produced a slide show on the effects of hazardous waste, and how to deal with it.

North Carolina

The President of the LWV delivered a testimony before the North Caroling Department of Human Resources on "Rules for Hazardous Waste Management."

Ohio

The LWV conducted and published a study, and held a conference on the topics of transportation, storage, disposal and the reprocessing of toxic and hazardous substances.

Texas

The LWV delivered a statement to the Subcommittee of Hazardous Waste, Environmental Affairs Committee in the state legislature on the problems of disposal of hazardous waste.

Wisconsin

As a result of the Region V Waste Alert! conference, the Wisconsin Waste Alert Task Force has formed of which the state League is a member. As part of their work on the task force, the LWV collected specific hazardous waste information for various countries in order to lobby county boards to up grade hazardous waste planning.

This is by no means a complete list of League activities concerning hazardous and solid wastes - many other programs have been implemented, and many other possibilities have yet to be pursued.

Senator appointed as chairman of new Waste Management Board

By BETTY WILSON
Minneapolis Star Staff Writer

Robert Dunn, a state senator and retail lumber dealer from Princeton, will be the first full-time chairman of a powerful new statewide Waste Management Board that decides where toxic chemicals and other hazardous waste are to be dumped.

Dunn, 57, the assistant Senate Independent-Republican minority leader, has concentrated on environmental legislation during his 16 years in the Legislature.

He was appointed today by Gov. Al Quie to the \$45,000-a-year job.

Quie said he plans to name the eight other part-time, citizen members to the board by July 1. One

"a very sensitive area."

But the decision-making process on sites will provide for "maximum involvement" of concerned citizens, local governments, affected industries and others, Dunn said.

Dunn said he hoped to avoid the kind of violence and bitterness that centered on the powerline in west central Minnesota.

"I think we have learned a great deal in Minnesota through the power-line siting," Dunn said. "We have learned that [for] citizen involvement to be meaningful [it] has to be early and direct, not just a placating kind of thing."

"Everybody concerned is going to be part of this decision. It's criti-

Minnesota does not have a commercial disposal site for wastes such as industrial chemicals, oil residue, farm pesticides and other materials that cannot be left in ordinary dumps. Some businesses are hauling their hazardous waste to disposal sites as far away as Illinois.

The new board may sell up to \$15 million worth of state general obligation bonds, with \$8.8 million to be used for grants to communities to develop demonstration projects for resource recovery. The remainder is to be used by the board for acquisition of hazardous waste sites. The demonstration projects would show how garbage can be recycled or burned for fuel.

Dunn was one of four finalists

June, 1980



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as an integral part of any serious energy conservation effort, particularly those approaches embracing alternative sources of energy. Education will include education of consumers regarding their exercising choice in the marketplace as a means to reward or penalize the production of non--recyclable products or packaging.

Recycling Operation: to implement steps towards a source separation program for the City of Minneapolis. Initially we will endeavor to link the existing small ventures with additional garage-type operations so an actual recycling network can be built to serve more people now as we prepare for a more inclusive program for the future.

Organizing: to formulate research, education, and recycling activity into an effective instrument to greatly enlarge our membership and support in every area of the City. Such an effort will be instrumental to any future municipal source separation program, as well as to the political process which will be necessary to achieve it. This will include linkage to existing groups of an identifiable environmental or community service orientation, as well as commercial concerns and governmental units interested in attainment of our goals.

Lobbying: to pull together everything finally, in a concerted action to influence public policy decision makers at the City, County, Metropolitan, State, and Federal levels to sponsor legislation, policy, regulations, and funding support of pilot projects conducive to a municipal source separation program for Minneapolis.

Membership activity of the Minneapolis Recycling Alliance will be grouped about each functional area on the Basis of interest. Each area group will designate a coordinator. The coordinator, together with other area coordinators will comprise the steering committee of the Minneapolis Recycling Alliance. Our approach will be cooperative, with decisions formulated on a consensual basis. We welcome the involvement and support of all persons in our efforts.



Join with us! We ask you to become a member of the Minneapolis Recycling Alliance. Find out the many ways you can be of assistance. You may be as active as your time permits.

Fill out the coupon and mail it today. We suggest a \$4 membership donation to help defray costs of mailings and organizing. Other contributions are appreciated.

Mail to: The Minneapolis Recycling Alliance, P.O. Box 8764, Mpls 55408

name _____ Ward _____

Address _____ Zip _____

Phone _____ Member: Yes _____ No _____

Donation _____

7.
League of Women Voters of the United States
1730 M Street, NW
Washington, DC 20036
Telephone (202) 296-1770

CRITERIA
FOR

HAZARDOUS AND NUCLEAR, INCLUDING
LOW-LEVEL RADIOACTIVE, WASTE DISPOSAL
OR STORAGE SITES

Jeanne K. Crompton
4330 Wooddale Ave. So.
St. Louis Park, MN 55424

Hazardous and nuclear waste management shall ensure safe disposal or storage with no contamination of groundwater, surface waters, soils or release into the air.

To ensure safe disposal:

- No disposal or storage sites shall be located in natural hazard areas such as floodplains, areas with high seismic or volcanic activity, areas of unstable geologic, ice or snow formations, or areas subject to extensive damage from hurricanes.
- There should be an examination of alternative sites, methods of storage and methods of treatment.
- Both on and off site monitoring for contamination of ground and surface waters and soils are of the utmost importance.
- Containers should be designed to prevent leakage of the material stored or disposed of.
- When containers are stored there should be regular inspections for possible leakage.

Siting of waste disposal or storage facilities should not take place in areas of critical concern which include:

- Drinking water supply sources such as reservoirs and other storage facilities and sole source aquifers and watersheds.
- Fragile land areas such as shorelines of rivers, lakes and streams; estuaries and bays or wetlands.
- Where there are rare or valuable ecosystems or geologic formations, significant wildlife habitat or unique scenic or historic areas.
- Areas with significant renewable resource value, such as prime agricultural lands, aquifer or aquifer recharge areas, significant grazing and forest lands.

The waste siting decision-making process should provide for:

- Ample and effective public participation, including adequate funding for such participation.

(over)

- Economic, social and environmental impacts statements so that both decision makers and the public have information on which to base a decision. Secondary land use demands, in addition to the actual site, should be considered--roads, sewers, water, etc.
- Sites selection in conformance with any adopted comprehensive plan--an example would be an adopted Coastal Zone Management Plan.
- Participation and review by all governmental levels to assure conformance with comprehensive plans at each level of government.
- Procedures for mediation of intergovernmental conflicts.

--No disposal or storage sites shall be located in natural hazard areas such as floodplains, areas with high seismic or volcanic activity, areas of unstable geologic, ice or snow formations, or areas subject to extensive damage from hurricanes.

--There should be an examination of alternative sites, methods of storage and methods of treatment.

--Both on and off site monitoring for contamination of ground and surface waters and soils are of the utmost importance.

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--Siting of waste disposal or storage facilities should not take place in areas of critical concern which include:

--Drinking water supply sources such as reservoirs and other storage facilities and sole source aquifers and watersheds.

--Fragile land areas such as shorelines of rivers, lakes and streams; estuaries and bays or wetlands.

--Where there are rare or valuable ecosystems or geologic formations, significant wildlife habitat or unique scenic or historic areas.

--Areas with significant renewable resource value, such as prime agricultural lands, aquifer or aquifer recharge areas, significant grazing and forest lands.

The waste siting decision-making process should provide for:

--Adequate and effective public participation, including adequate funding for such participation.

all mailed 7/9/80 (retyped)

✓ Enclosures with letter to Solid Waste Committee: +

13-

- 1- "Inquiry Responses" list ✓ +
- 2- Inquiry Response #32 ✓ +
- 3- " " " #73 ✓ +
- 4- Letter from Ed Fund re grant \$3500 ✓ +
- 5- News Article re. Bob Dunn Appt. ✓ +
- 6- Recycling Alliance (9 copies here) ✓ +
- 7- Criteria for Hg. & Inc. Waste
(be sure to get stuff on rear) ✓ +
- 8- Committee list (needs re-typing) ✓ +
- 9- Post Cards (11) ✓ +
- 10- Neil Seldman's memo (you have those ready to go) ✓
Please send the letter, plus the above, to
the 13 names on the list. (No need to send
post cards to Nancy or I.)

Don't send Seldman's memo to me.

Please reproduce all this junk on both sides of
the sheet, as much as possible.

League of Women Voters of Minnesota Solid and Hazardous Waste Committee

Jacqueline Farm
Charlotte Helseth

385 W. Co. Rd. B2, Roseville 55113, 483-9787
4311 Bloomington Ave. S.

DID YOU KNOW...



● 62 million Americans live in urban areas with unhealthy levels of carbon monoxide.(3)

● In early 1981, 103 of the 105 urban areas with a population of over 200,000 exceeded one or more of the health-related national air quality standards.(9)

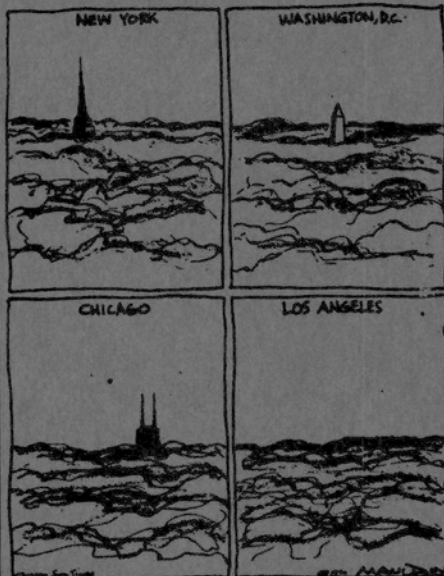
● In 1980, 395 counties violated the minimum federal health standard for clean air which was set in 1970.(1)

● 161 counties exceeded the health standard for carbon monoxide in 1980. 97 counties exceeded the standard for sulfur dioxide. 538 counties exceeded the standard for ozone even though it was relaxed by more than 50% in 1979.(1)

● New York City and Los Angeles had 174 and 206 days, respectively, in 1978 when air pollution readings violated national standards.(1)



● In at least one-half of the year 1976, L.A., Denver, Cleveland and St. Louis had pollution index values above 100 (the "unhealthful" range or worse). 43 U.S. cities experienced unhealthy air quality for 27 or more days.(1)



HOW TO SPOT SOME MAJOR AMERICAN CITIES FROM THE AIR

● There were several air pollution episodes leading to deaths in recent history: 1930, Muese Valley, Belgium, 63 people; 1948, Donora, PA, 20 people; 1952, London, 4000 people; 1953, New York City, 200 people; 1962, London, 700 people.(8)

● If present trends continue, up to 163,000 people in the Ohio Valley could die of heart and lung disease related to pollution in the next 25 years.(2)

● Of the 60 integrated iron and steel facilities in the U.S. in March 1980, only 13% (8) were in compliance with emissions limitations.(1)

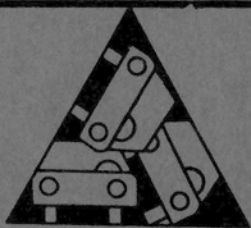
● More than 102 metric tons (metric ton=1000 kilograms) of carbon monoxide are spewed into the air each year in the U.S.(9)

● 21,000 extra deaths are occurring each year east of the Mississippi due to only one class of particulates (the sulfur complex, which emanates from coal and oil-burning plants).(5)

● One microgram of benzopyrene (comes from steel mill coke ovens) in 1000 cubic meters of air is associated with a 5% increase in lung cancer.(6)



(over, please!)

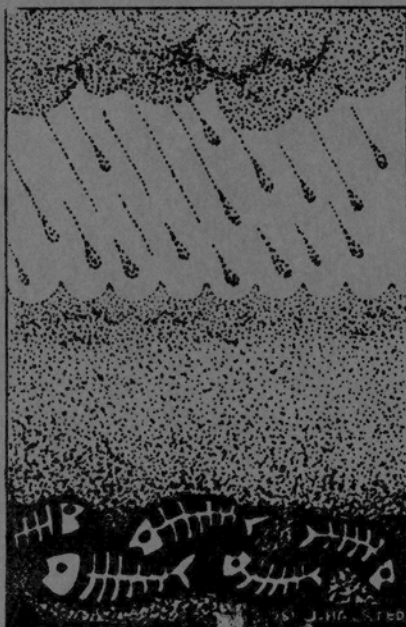


- For each 1% reduction in ozone concentrations in the upper atmosphere, an increase of approximately 4% in non-melanoma skin cancers occurs, or an additional 210,000 cases every year. (9)

- Motor vehicles account for 50% of the hydrocarbons and 90% of the carbon monoxide emissions in most urban areas. (9)



- People in vehicles in heavy traffic are subject to sustained levels of 50 ppm (parts per million parts of air) of carbon monoxide (at 30 ppm, vision and physical responses are affected.) (8)



- Acid rain in America causes \$200 million in damages each year. (4)

- In the Adirondack mountains (New York state), 180 lakes once known for trout fishing now contain no fish at all. (10)

- Jobs created in the manufacture and operation of pollution control equipment are expected to reduce the rate of unemployment by .2% each year between 1982 and 1986. (7)

● THE CLEAN AIR ACT SAVED 14,000
LIVES IN 1978. (1)

...PASS THE WORD

1. Report of the President's Council on Environmental Quality
2. Washington Post
3. National Academy of Sciences
4. Scientific American
5. New York Times
6. Study by Dr. Bertram Carnow and Dr. Paul Meier (University of Illinois, University of Chicago)
7. Data Resources Incorporated for the Environmental Protection Agency and the Council on Environmental Quality
8. American Lung Association
9. Environmental Protection Agency
10. Canadian Embassy

By Miriam Rosenblum

Sierra Club, 530 Bush Street, San Francisco, CA 94108

4/81

Sierra Club Air Quality Campaign Q+A₁

ENERGY DEVELOPMENT AND CLEAN AIR

~ QUESTION:

Doesn't the Clean Air Act stifle energy development, especially in the western part of the country?

ANSWER:

The National Commission on Air Quality (NCAQ) found that significant amounts of energy development can be accommodated within the PSD increments, even in areas with the greatest potential conflicts. NCAQ studied the Four Corners region (AZ, NM, CO, UT) and assumed a high level of energy growth (8% per year), and still found that all energy growth would be permitted. In the past, only two PSD permits have been rejected. But applicants altered their proposals and ultimately approved.

~ QUESTION; Won't the Clean Air Act prevent conversion of power plants from oil to coal?

ANSWER:

Many pollution control systems, including scrubbers and washing of coal, can be used to reduce emissions from coal-fired power plants without adding substantially to the costs of conversion. A study of a power plant conversion to coal in New York City revealed that use of the Best Available Control Technology would save Consolidated Edison \$240 million. Furthermore, the World Coal Study (MIT, 1980) found that environmental regulations are not a major impediment to increased coal use. Instead, the coal industry will have greater problems obtaining needed capital, labor, and transportation resources. Even with best available pollution control technology, coal remains competitively priced with oil in the world energy market. Finally, the New Source Performance Standard for coal-fired power plants permits the use of even the highest sulfur coal.

~ QUESTION:

What pollution control options are available to power plants converting from oil to coal, which do not involve installing scrubbers?

ANSWER:

Scrubbers remain the most cost-effective pollution control option for most facilities. However, some power plants have physical limitations which preclude the use of scrubbers. Other options are available. Coal washing, a process which remove much of the sulfur in coal, can be a cost-effective option for utilities. Studies indicate that coal-washing may save utilities money, because it removes the sulfur before shipping, thereby reducing overall shipping costs. Natural gas may also be an important control alternative. Although the Fuel Use Act presently prevents its use in power plants after 1990, natural gas may be used by itself or in mixture with coal, to produce a cleaner combustion process. Finally, environmentalists have long supported energy conservation, through

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which major reductions in emissions can be obtained. The NCAQ found in the Ohio River Valley that energy conservation measures and higher fuel prices would reduce projected emissions of sulfur dioxide in 1990 by 20%. In the New York-Hartford region, comparable projections reduce sulfur dioxide emissions 6.5% and particulates by 12%.

- QUESTION:

Don't PSD Class I areas have increments which are so stringent that no energy development can occur within one hundred miles of a Class I area, thus creating buffer zones around Class I areas?

ANSWER:

Several energy facilities have been constructed within easy reach of Class I areas. In particular, the Colstrip power plant in northern Wyoming originally had its PSD permit rejected. But the applicant added better-than-best available control technology and was able to meet the increments requirement. In addition, the National Commission on Air Quality found that many of the potential conflicts between energy development and Class I areas could be resolved by altering the specific siting of the new facility, but still allowing the new development.

Sierra Club Air Quality Campaign

Q+A₂

NONATTAINMENT AREAS

~ QUESTION:

Shouldn't the deadlines for meeting ambient air quality standards be abolished? The system has not worked--many areas of the country will not meet the standards by 1987.

ANSWER:

It is true that some areas of the country will not meet the clean air standards by 1987 but this does not mean that the deadlines should be abolished. Many other areas in the country will meet the deadlines. Before 1970 there were no national, uniform deadlines for meeting air quality standards. There was also very little progress towards cleaning up the air.

Eliminating deadlines will further slow progress towards clean air in those areas where the standards will not be met by 1987 and will threaten air quality improvements in areas predicted to meet the standards. Without deadlines there will be no way of ensuring that the air is cleaned up or determining an acceptable way for the clean-up. (Imagine what would happen if there were no deadlines for monthly payment of mortgages or rents.)

~ QUESTION:

Doesn't the Lowest Achievable Emission Rate (LAER) requirement for new sources delay the permit process unnecessarily, and hasn't it proven to be no more stringent, in practice, than Best Available Control Technology (BACT) which provides ample protection for air quality and also takes the economic impacts of the control equipment into account on a case-by-case basis?

ANSWER:

The permit process is not unnecessarily lengthy. The National Commission on Air Quality found that the average permit process time was 3 to 5 months.

That LAER and BACT are essentially the same in practice is a failing of the regulatory officials to carry out the mandates of the act -- not a cause for abandoning LAER in nonattainment areas. LAER is needed to make sure that new industries in areas that exceed the health based standards emit as little pollution as possible. This makes it easier to clean up existing sources to the point where the standards will be met and also provides the greatest opportunity for economic growth. Since there is a limit to the amount of pollution that can be tolerated in an area, unnecessary emissions use up a portion of that tolerable pollution and make it more difficult for new businesses to locate in the area.

In contrast to BACT, LAER is supposed to involve less opportunity for making decisions which result in inconsistency from one region of the country to the next. Because of the discretion involved in determining BACT (it considers the economic impacts of the technology on a case-by-case basis) parts of the country with a strong desire to protect air quality which define BACT stringently are at

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... a disadvantage when they compete for new industry against a part of the country that is more lax in its definition of BACT. The result will be a control technology that is the lowest common denominator. One major goal of the Act is to provide national uniformity in air quality requirements and prevent just this kind of interstate or inter-regional blackmail.

~ QUESTION:

Emission offsets are not available in nonattainment areas. Shouldn't industry be allowed to pay a fee to the regulatory agency in lieu of finding emission reductions to offset its increases?

ANSWER:

Emission offsets are easiest to find in nonattainment areas where there is a large amount of pollution that can be reduced to make room for new or expanding industry. Over 500 offset transactions have already occurred. Most of these have been at existing plants to offset increases from expanding that same plant.

Eliminating the requirement for offsets will relieve the incentive for innovation in pollution control technology. As long as new industrial growth is dependent upon reducing pollution at existing sources it will be in industries' own self-interest to find new imaginative means of polluting less.

New industry which does not own sources of pollution that can be cleaned up (imaginatively or otherwise) and used as offsets may have a difficult time convincing other facilities to clean up. Paying a fee instead of decreasing emissions won't help. If industry can't find offsets, why should government be able to do so? Finding offsets must remain the responsibility of the industry wishing to increase pollution in an area that is already overburdened. Transferring this problem to government to be solved at some future date is deficit spending with air quality. What is needed is a system which will prevent existing industry from holding on to its potential emission reductions only for its own use, a program to share the filth.

~ QUESTION:

Haven't technology and offset requirements in nonattainment areas interfered with industrial growth?

ANSWER:

The National Commission on Air Quality reports that "studies of facility siting have found that few applications for new or modified facilities have been denied for any reason, including the failure to obtain necessary offsets." And air quality has improved--from 1974-1987, the largest urban areas reduced the number of days in excess of ambient air quality by 18%; from 1973 to 1978, average annual concentrations of SO₂ decreased by 20%, particulates by 7% and CO by 33%; for most areas, the number of days in excess of the ozone standard decreased.

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Q+A₃

TOXIC AIR POLLUTANTS

QUESTION:

What evidence is there that air pollutants cause cancer?

ANSWER:

Most cancer experts agree that the majority of cancer cases -- some believe up to 90% -- are caused by "risk factors" we can avoid. This makes these cancers preventable.

A substantial percentage of this preventable portion is due to exposure to toxic chemicals. Cancer rates are higher in urban areas than in rural areas. Even after taking into account the effects of smoking and exposure to chemicals in the workplace, lung cancer -- the kind most obviously linked to what's in the air -- is higher in urban and industrial polluted areas than in rural areas.

Moreover, rates of the cancers most directly linked to pollution appear to be rising dramatically, especially among non-smokers. A Presidential task force reported last year that lung cancer among non-smokers was rising more than 10 percent each year. ("Toxic Substances and Public Protection," Report of the President's Toxic Substances Strategy Committee - May 1980).

One recent study, by a team of scientists headed by Dr. Richard Wilson, estimated the number of cancer deaths associated with air levels of benzo(s)pyrene -- just one of the dozens of toxic chemical air pollutants -- at 1,000 deaths per year. (Wilson, et al., "Health Effects of Fossil Fuel Burning; Assessment and Mitigation", Ballinger, 1980).

Other studies suggest higher cancer rates from air pollution, ranging up to as much as 10 percent of lung cancer, or 4,000 cases per year. Counting other types of cancer induced by these chemicals, the total would likely be even higher.

QUESTION:

Why should we pay any attention to animal experiments in which these chemicals cause cancer at high doses? Why shouldn't we wait for convincing human evidence?

ANSWER:

Convincing human evidence means waiting for proof of "bodies in the street." This would be totally irresponsible, for our fundamental goal should be to prevent this kind of human experimentation and unnecessary loss of life.

Sometimes the cancer-causing ability of a chemical is discovered by studying workers exposed for long periods, 20 years or more. We should pay close attention to what occupational studies can tell us, but there is no excuse for running long experiments on human guinea pigs when other means exist to discover which chemicals cause cancer and other diseases.

For very practical reasons, we have to rely on animal studies. Mice and rats are used because their lifespan is only two or three years; longer-living animals would make experiments impractically long and expensive. Small numbers must be used for the same practical reasons. High doses must be used, too; in experiments with only several hundred animals, using the same size doses that people are likely to experience, a chemical that

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caused one cancer in 1,000 subjects would almost certainly escape detection by the experimenters. Yet this 1 in 1,000 risk would translate into more than 20,000 cases of cancer in the U.S. population of 220 million. In order to avoid missing these apparently "small" but really very important risks, higher doses must be used.

Animal studies like this are accepted by every reputable scientific organization and individual cancer scientist as a valid way to identify cancer-causing substances. They are a sound basis for taking action to protect people from cancer-causing pollutants.

QUESTION:

What other diseases can be caused by air pollution?

ANSWER:

Many toxic pollutants released into the air are strongly suspected of causing lung diseases, nerve disorders, sterility, birth defects, and genetic mutations.

Much more work needs to be done to figure out what other long-term effects toxic air pollutants cause. Up til now there hasn't been even as much research on these effects as on cancer. But what we know now is reason for concern.

QUESTION:

Hasn't the EPA got all the authority it needs?

ANSWER:

EPA has some authority, but has basically refused to use it. It has regulated only 4 hazardous air pollutants, officially recognized ("listed") only 3 more, and has been unwilling to make decisions about some 40 more chemicals endlessly "under evaluation."

If people are to be protected from cancer and other diseases caused or aggravated by air pollutants, Congress is going to have to act to force EPA to control more pollutants. That's why we need requirements in the Clean Air Act to identify "candidate" substances that may be hazardous air pollutants as the law defines them, to decide within a fixed period whether they are hazardous, and to take action to control them by a fixed date.

QUESTION:

Wouldn't the current law's requirement that standards assure an "ample margin of safety to protect the public health" result in standards that are too burdensome?

ANSWER:

The goal of these standards should remain protecting public health with an "ample margin of safety." People have a basic right not to have their life cut short or their health destroyed by a neighboring industry's pollution.

As an interim measure, EPA should be allowed to set standards that require the use of what is genuinely the best technology. EPA should also have to say whether more is required to meet the goal of protecting people's health, and to say when that goal should be met if it can't be by the use of best technology today.

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Q+A₄

HEALTH STANDARDS

QUESTION:

We have many national goals, like energy independence and economic recovery, in addition to clean air goals. Shouldn't these other national interests be taken into account in setting clean air standards?

ANSWER:

The Clean Air Act provides ample opportunities for consideration of economic and energy needs within the process for meeting the air quality standards. Costs and other national interests are considered in the development of pollution limits for individual polluters under State Implementation Plans, the setting of federal emission limits for new plants and motor vehicles, and in Congressional setting of deadlines for meeting standards. The clean air standards themselves should continue to be set to protect public health. The standards serve two purposes: they protect people's health by serving as a major goal of regulatory programs; and they are a yardstick against which the public can judge the success of pollution control programs and the quality of their air. Cost balancing in the standard setting process would not only weaken health protection, it would make it even more difficult for the public to hold polluters and public officials accountable for dirty, unhealthful air.

QUESTION:

Why should the health standards be set to protect people who are susceptible to air pollution? Wouldn't it be cheaper for society if these people just move or stay indoors?

ANSWER:

Every person has a right to breathe healthy air. Not only the strong should be protected. Tens of millions of people, including each one of us at some time in our lives, are members of a susceptible group -- children, the elderly, and people with illnesses like asthma, heart and lung diseases. In addition, effects on susceptible people can signal long-term effects on stronger members of the population.

QUESTION:

But what about small effects like teary eyes or a little shortness of breath? It can cost a lot to meet standards to protect against these effects. Shouldn't only "unreasonable" risks be considered?

ANSWER:

Harm to health should be defined as it now is to include all genuine adverse health effects. Air is not "safe" just because it doesn't send people to the hospital, immediately threaten lives, or incapacitate people. Good health means more than mere survival. Good health is a positive state, and the air we breathe should contribute to that positive state -- not interfere with it.

In addition, protection against all adverse health effects helps protect sensitive individuals. (One person's reasonable risk is another person's lost work day or shortened life.) The current approach also helps guard against long term effects and synergistic effects, those which result from the mixing of lots of pollutants in the air and in our lungs.

QUESTION:

If the health standard is set based on the best scientific evidence and to protect susceptible people, why should there also be an "adequate margin of safety" in the standards?

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ANSWER:

Public health standards should be precautionary. There is still much to learn about the total effects of pollutants interacting with each other and about long-term, chronic effects. The "margin of safety" requirement helps protect against these unexplored risks.

QUESTION:

I know that cost-benefit analysis shouldn't be used in setting health standards because it is impossible to quantify costs and benefits in an exact way. But what about risk assessment? After all, risk assessment is used in other environmental laws like the Toxic Substances Control Act (TOSCA) and Safe Drinking Water Act (SDWA) and in the pharmaceutical drug laws.

ANSWER:

"Risk assessment" can mean two things. First, it can be an inexact way of letting a public official take costs and the "reasonableness" of risks into account in setting a standard. We oppose using "risk assessment" in this way for the same reasons we oppose taking costs into account for letting an EPA Administrator decide that some health effects are not important. This kind of "risk assessment" is a technique used to compare the risks of using something, a drug for example, against the risk of not using it. This is the way risk assessment is used in other laws. This type of risk assessment is entirely inappropriate for setting clean air standards because the benefits and the costs go to different people. If used in setting clean air standards, risk assessment is just disguised cost/benefit analysis.

QUESTION:

The health standards are based on "bad science" studies which can't be duplicated and which haven't received peer review. What about that?

ANSWER:

We support better studies and more peer review. But concerns over the quality of the science should not be an excuse for not setting standards. We must do the best we can while realizing that we don't live in a perfect world. It must also be remembered that the standards of pure academic scientific research are not appropriate for guiding action to protect public health.

All the evidence, both definitive and developing, must be taken into account when setting standards. Academic and laboratory scientists, however, are trained to refrain from reaching conclusions where there is some gap in information. In the realm of pure science there are no costs attached to waiting before drawing conclusions. But the public cannot afford this approach. Our air is polluted now. We know our knowledge of all its ill effects is very limited and will remain so for decades. While the full extent of health damages may be fully revealed after many years of research, the cost of waiting before setting standards based on the developing, as well as the definitive, evidence may be years of deaths and illnesses which could have been prevented. Thus, the Clean Air Act instructs EPA to resolve many of the information gaps on a prudent public health protection basis.

QUESTION:

Why don't we allow the standards to be exceeded a few more days of the year?

ANSWER:

The standards are set with consideration of the interrelationship of the absolute level of the standards and the number of days violations are allowed. Because of the statistical interrelationship, changing the number of days violations are allowed would greatly increase the total pollution every day of the year and not just for the additional days a violation is allowed.

Sierra Club Air Quality Campaign

Q+A₅

ACID RAIN

-QUESTION:

The data on acidity of rainfall in the United States is of questionable value. How do we know there is an acid rain problem at all?

ANSWER:

No one questions the fact that rainfall in many sections of the U.S., Canada and Europe is abnormally acidic due to man-made sources. A major source of natural acidity is dissolved carbon dioxide which would give "natural" rain in an environment undisturbed by human activity a pH of about 5.6. Natural sources of sulfates and nitrates as well as sea salt and dust may alter the pH by a small fraction from place to place. But the observed pH of rainfall in many areas of the northeastern U.S. averages about 4.6, which represents 5 - 10 times the acidity caused by all natural sources combined. And man-made sulfur in the U.S. accounts for 95% of all airborne sulfur. There is no doubt that the activity of humans leads to very high acidity of rainfall over large sections of the U.S.

-QUESTION:

Even if precipitation is abnormally acidic, there is no reliable evidence that the problem has been getting worse over the last 25 years. Emissions of sulfur dioxide and oxides of nitrogen, supposedly responsible for acidifying rainfall, have certainly increased over this period in the U.S. If these emissions are indeed the cause of acid rain, why is there no conclusive evidence of decrease in precipitation pH?

ANSWER:

Many scientists regard the evidence that does exist as strongly suggestive of increased acidity of rainfall over an increasing area of the U.S. In addition, in northern Europe, the data is of much higher quality, and there a clear trend emerges of increasing acidity of rainfall beyond possible natural variations. Although the European and North American situations are not identical, the European data lend heavy support to the argument that increased emissions of oxides of sulfur and nitrogen lead to increased rainfall acidity. Moreover, existing lake and stream damage in North America indicates that present acidity levels are too high.

-QUESTION:

Even though power plants are a major source of sulfur and nitrogen pollutants, the chemical transformation of these substances into acid in the atmosphere is not well understood. How do we know they are responsible for the formation of atmospheric acids?

ANSWER:

Although some uncertainties exist in the chemistry of sulfur and nitrogen compounds in the atmosphere, there is no doubt that they generate sulfuric and nitric acid, the major components of acid rain. They also generate solid particles which create acid conditions after falling to earth. This process is known as "dry deposition." Again, natural sources cannot generate the level of acidity observed in rainfall in many areas or the observed level of dry deposition, so the blame must fall on man-made sources of sulfur and nitrogen oxides.

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- QUESTION:

Even if sulfur and nitrogen pollutants are converted to acids in the atmosphere, there is no evidence that these substances are transported great distances from their source, causing acid rain elsewhere.

ANSWER:

Long-range transport of pollutants from the Ohio Valley to the East Coast has been observed directly on several occasions. In addition, recent computer studies, reviewed by the U.S.-Canada Research Consultation Group, clearly show that a large amount of sulfate material originating in the Ohio Valley and the Upper Midwest reaches the Adirondacks and Eastern Canada. The exact amounts are in question but a reasonable estimate is that about 70% of the sulfate material reaching New York and New Jersey originates outside those states, mostly in the mid-Atlantic region, the Ohio Valley, and the Upper Midwest.

- QUESTION:

Nevertheless, aren't there so-called "local" sources of acid rain which may dominate over long-range sources? Also, isn't it true that no precise relation is known between sulfur dioxide emissions and atmospheric sulfate concentrations? Why try to regulate tall-stack emissions under such circumstances?

ANSWER:

In some areas, particularly near big cities, local sources many dominate. But the aforementioned study strongly suggests that away from large cities, long-range transport is significant, probably the major source of sulfates. Some of the most sensitive ecosystems now threatened, such as the Adirondacks, have no local sources of sulfur/nitrogen oxides. In any event, most of the sulfur loading of the atmosphere in the U.S. originates in power plants. Since sulfates are generally the major source of acid rain, it is reasonable to try to reduce such emissions even if all the steps of chemical transformation and transport are not precisely specified.

- QUESTION:

The chemistry of surface water is poorly understood. How do we know that acid rain is affecting the pH of lakes and rivers? What evidence is there that acid rain has anything to do with reduced fish populations in lakes? Couldn't pesticides or other pollution problems be responsible?

ANSWER:

Thousands of lakes in the U.S., Canada and Europe are believed to be more acidic than normal but exact measurements of changes in pH levels in lakes over long periods of time are not well documented for large regions of the U.S. because of the lack of long-term studies. However, it is well established that lakes in Ontario and the U.S. have been losing their "buffering capacity" over the last decade and that hundreds of Ontario and Adirondack lakes and streams in New Jersey already have become too acidic to sustain fish populations where such populations existed previously. In Norway, where the pH of some lakes has been measured for years, decreasing pH has been confirmed and correlated with loss of fish populations. Finally, the regions where lakes are believed to be more acidic than normal correspond well to regions with abnormally acidic rainfall. There is no other known source of increased acidification.

Sierra Club Air Quality Campaign

Q+A₆

THE ECONOMY AND CLEAN AIR

- QUESTION:

Air pollution is too expensive, both for consumers and industry. How can this country justify its continued investment in air pollution control?

ANSWER:

The National Commission on Air Quality (NCAQ) reports that "the effect of the Act on national economic indicators -- unemployment, inflation, GNP -- has not been significant and is not expected to be significant through the period for which projections are available, the mid-1980's." In addition, the report notes that industry expenditures for pollution control are a small percentage of their total investments. The industry-wide average is 2.38%, with the steel industry the greatest exception, with about 11% going for pollution control.

Costs for consumers are only slightly higher. A study by the President's Council on Environmental Quality (CEQ) found that all federal environmental regulations add less than .3% to the rate of inflation.

- QUESTION:

The Clean Air Act also throws thousands of workers out of work. We can't afford to lose all those jobs.

ANSWER:

The 1980 report from CEQ found that pollution control caused a net increase of 400,000 jobs since the clean air program began. In addition, labor unions have been some of the strongest supporters of a tough Clean Air Act. The United Steelworkers of America and Oil, Chemical, and Atomic Workers have supported the work of the Clean Air Coalition, even though they would suffer the greatest job loss if the myth about jobs and environmental protection was true.

- QUESTION:

How can we afford to continue investment in pollution control when our industries are unable to compete with foreign countries?

ANSWER:

A Department of Commerce study reports no adverse affects from foreign competition due to pollution control measures. Many of our greatest competitors spend an equal or greater amount than the .7% to 1% of the GNP that the United States invests; for example: Germany - 1.8% from 1971-1975, Japan - 1.2% in 1973, Canada - 2% from 1974-1980, Belgium - 1% in 1974, Sweden - 1% in 1974, and the United Kingdom - 1% in 1974.

- QUESTION:

The free market is a much more efficient way to make decisions about investments in pollution control. Why not let industry use the free market to make its own decisions?

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ANSWER:

The free market has no systematic mechanism for pricing "free" goods such as air quality. Emission control regulations address this shortcoming; they cause the price of a product to reflect the true cost of its manufacture, including the use and consumption of a "free" source.

Furthermore, the NCAQ report states "reliance on the present market to measure the value of longer term benefits, e.g., illness avoided, discounts the value of these benefits in the future.

Similarly, the present market cannot accurately assess the future value of options which are foreclosed by irreversible degradation or the costs of restoring those lost options. For example, it is estimated that a \$200,000 investment at the Life Sciences plant at Hopewell, Virginia would have made it safe for kepone production. Now, in addition to million dollar lawsuits brought by plant workers, EPA estimates that \$8 billion would be needed to clean up the James River, even if it is possible.

-QUESTION:

President Reagan has issued Executive Order 12991 requiring that all major regulations be cost beneficial. Why don't we just plug this economic data into a computer and develop the regulations from the output?

ANSWER:

The goal of the Clean Air Act is to provide clean, healthy air for people. Therefore, health standards are set without consideration for benefits and costs. But state and local governments may consider compliance costs and benefits in planning and implementing specific control strategies. This is an incentive to development of increasingly efficient control strategies. In addition, this permits flexibility in achieving the standards.

Finally, cost/benefit analysis is not objective; its results are only as valid as the assumptions made at the outset. Many of these assumptions deal with intangible concerns such as the value of good health, the pleasure of blue skies, and the concern for future generations. Their price, if they can be reduced to dollar terms at all, is beyond the realm of objectivity. In setting a health standard, for example, EPA would have to consider the benefits of saving lives through increased air pollution control. If they could determine how many lives could be saved, they would have to price a human life. But in different studies, a human life has been valued at \$47,000 and \$6.1 million. When either of these figures are multiplied by the number of affected people, the number is practically meaningless.

-QUESTION:

Not only is clean air too expensive, but the American public doesn't want to pay to clean up the air. How can we continue with air quality protection when the public doesn't want it?

ANSWER:

A 1980 study by the CEQ found that a growing percentage of the country believes that environmental protection and economic growth are not mutually exclusive; in 1978, only 18% felt that both goals could be accommodated, while in 1980, 39% believed both were possible. Furthermore, only 20% of the country believes that environmental standards should be weakened in order to allow economic growth. Thus, the public clearly believes that clean air and economic growth can both be achieved.

Sierra Club Air Quality Campaign Q+A7

-QUESTION: PREVENTION OF SIGNIFICANT DETERIORATION

The PSD program impedes economic development in most of the country. How can we justify this program during our present economic depression?

ANSWER:

There is absolutely no indication that the Clean Air Act's PSD program has halted growth in any area of the country. Of the more than 250 PSD permit applications submitted since the program began, only two were initially denied. Even these two permits were eventually granted after the applicants strengthened their pollution control. In addition, the PSD program is a mechanism to allow state and local governments to budget their air quality resource. Violations of the allowable air quality limits (increments) do not automatically mean that the permit will be denied. Instead, increment violations trigger a more rigorous investigation of the air quality impacts of a new facility by the developer. Two waiver options, which have never been tested, are available to facilities whose development may be in the national interest. The Governor and the President each have the power to grant a waiver of the Class I PSD increments. In addition, almost all Class II areas may be redesignated to Class III, which permits greater pollution degradation. These waiver provisions allow considerable flexibility in balancing national economic and energy needs with protection of clean air.

-QUESTION:

Doesn't the PSD program cause tremendous delay for new facilities as they wade through the permitting process?

ANSWER:

The PSD permitting process is the mechanism for balancing economic and environmental needs. As the National Academy of Sciences report on PSD notes, this balancing process, which industry has called for repeatedly, is more complex than an automatic approval process. But the National Commission on Air Quality noted that even these delays have been minimal; 75% of all PSD permits have been granted within 10 months. Finally, the National Clean Air Coalition supports proposals to streamline the permitting process. But industry groups have sought to cripple the PSD program. If industry seriously wishes a balance, then they must work to improve the existing balancing program.

-QUESTION:

The PSD permitting program requires that a new facility apply the Best Available Control Technology (BACT). The states determine BACT, but it must not be lower than the EPA-determined New Source Performance Standard for that kind of facility, and it must not lead to violation of the increment. Why not just apply the Best Available Control Technology? How can you expect a company to apply better than BACT?

ANSWER:

The BACT determination allows a state to make a case-by-case consideration of the pollution control equipment which should be used at a new facility. The BACT determination includes consideration of economic and technological factors. Thus, a state is allowed to balance these interests for each facility. States may require facilities to adopt tougher pollution control than the federal government, if the state desires it. . . .

The Increment can force Industries to develop more cost-effective and better pollution control equipment. At the Colstrip power plant in northern Wyoming, the original proposal by the developer demonstrated that even with BACT the power plant would cause violations of the Increment in a Class I area only 15 miles away. But the applicant redesigned the plant with pollution control equipment which was capable of making greater reductions than BACT, thus making a major step forward in developing improved pollution control equipment for power plants.

Presently, examples of this sort are rare, but the PSD program has not been in effect long and the Increments have not been consumed in most areas. In the future, however, this provision will be the major force in encouraging Industries to develop more cost-effective pollution control measures.

-QUESTION:

The Clean Air Act's expressed purpose is to protect the public's health. Why should we have a program like the PSD program, which is not designed to do that?

ANSWER:

Congress decided in 1970 that this country has multiple air quality objectives. Health protection is not the only goal of the Clean Air Act. The PSD program is primarily designed as a mechanism to budget air quality resources in clean air areas, but it also:

1. protects health and environment in clean areas. Minimum federal air quality standards do not completely protect public health and the environment, especially from effects which may not have been discovered yet;
2. promotes clean-up in dirty areas by limiting the amount of pollution from clean areas which can blow downwind and add to existing pollution;
3. saves room for future growth by preserving our clean air resources; and
4. prevents transport of sulfur oxides, the major contributor to acid rain and visibility degradation.

-QUESTION:

The visibility protection program which is part of the PSD program, protects vast areas of the West because of its more stringent requirements. Worst of all, the new EPA regulations require protection of vistas which extend outside the mandatory Class areas. These "integral vistas" will lock up the badly needed energy resources in the West. When are we going to do away with this restrictive program?

ANSWER:

Like the PSD program, the visibility protection program has a great deal of flexibility. The Manager of an affected Class I area advises the state during the PSD permitting process that visibility impairment may occur. The state shall consider this requirement, but may still grant the permit. If the Federal Land Manager (FLM) still disagrees, the Governor may grant a direct waiver of the permit requirement. If the FLM still disagrees, the President may grant the PSD permit. That decision is final, and is not reviewable in court.

Even more flexibility is permitted for impacts on "integral vistas." EPA's regulations specifically allow states to issue permits affecting visibility in integral vistas, despite the objections of the FLM. The state can issue the permit simply by determining that other factors outweigh the adverse visibility impacts.

**National Clean Air Coalition
Positions On**

**THE
CLEAN AIR
ACT**

April 1981

Air Coalition

National Clean

THE NATIONAL CLEAN AIR COALITION IS...

The National Clean Air Coalition is made up of the following national organizations:

American Lung Association
Center for Auto Safety
Citizens for a Better Environment
Environmental Action
Environmental Defense Fund
Environmental Policy Center
Friends of the Earth
Izaak Walton League of America
League of Women Voters of the United States
National Audubon Society
National Parks and Conservation Association
National Wildlife Federation
Natural Resources Defense Council
Sierra Club
United Steelworkers of America
The Wilderness Society
Western Organization of Resource Councils

The National Clean Air Coalition is also a network of thousands of individuals and state and local organizations concerned with the environment, health, labor, parks and other resources threatened by air pollution.

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NAAQS

The National Ambient Air Quality Standards established to protect public health are the cornerstone of the Clean Air Act. These health standards, now covering seven widespread and harmful pollutants, set the target that state and federal air pollution control programs must meet. The standards tell the public what air quality is needed to protect health, and they give citizens a way to tell if government is protecting their health.

The National Clean Air Coalition opposes any changes in how these standards are set which would weaken them and compromise the public health protection they provide.

Through these health standards, Congress recognized Americans' basic right to air that is fit to breathe. Under the Clean Air Act, the standards must be established at the levels needed to protect the public health, with an adequate margin of safety. Congress has emphasized that the standards must not only protect the "average" citizen, but also the tens of millions of people more sensitive to air pollution -- children, the elderly, persons with lung disease, developing fetuses, and others.

Congress has also emphasized that these standards must be precautionary and preventive, rather than reactive. The law directs EPA to make prudent judgments to prevent harm before it occurs, taking into account all the evidence, and giving the benefit of the doubt where uncertainties exist to stronger standards rather than weaker ones. The law provides a process for periodically updating the standards to reflect new scientific data.

Some interests, however, want to compromise these health standards with other considerations, and to give up both the protection of sensitive people and the element of precaution. The NCAC opposes these changes.

STANDARDS SHOULD PROTECT PUBLIC HEALTH

The air quality standards should continue to reflect what is needed to protect public health, and not be weakened based on cost considerations. Some propose that the standards should be set through "cost-benefit analysis," in which the cost of control measures is balanced against health concerns. Other groups are proposing cost-benefit in a disguised form. For example, one industry proposal would have EPA protect against only "unreasonable risks" determined by considering the "attainability of the standard" and "economic values." But Congress has determined that cost considerations should not enter into the establishment of the air quality standards themselves; the standards must remain clear statements of what the protection of public health requires.

There are ample opportunities to consider our economic needs and limitations within the process for meeting the air quality standards. In the development of State Implementation Plans, the setting of federal emission limits for new plants and motor vehicles, and other standard setting processes, cost concerns are fully considered.

Leaving consideration of costs to the implementation stage is sound policy that should not be changed. It makes for more accurate estimates. Cost tallies made before trying to meet standards often have shown large over-estimates, both because of incentives to exaggerate and because of cost-saving innovations that are found when compliance is actually attempted. Moreover, considering costs when setting the standards themselves would lead to having the federal government put a price on human life and health. This is morally unacceptable.

STANDARDS SHOULD PROTECT SENSITIVE PEOPLE

Air quality standards must continue to protect sensitive groups. We should not set health standards that protect only the strongest part of our populations. The tens of millions of children, senior citizens and people with pre-existing illnesses are entitled to air that does not harm their health.

Where people live can also make them more sensitive to air pollution. Some studies show indication that carbon monoxide is more detrimental to health at high altitudes than at sea level. As a result, the present air quality standard

for CO may be inadequate to protect health. EPA should be required to study this problem and, if necessary, establish a special CO standard for high altitude areas.

STANDARDS SHOULD PROTECT AGAINST ALL GENUINE ADVERSE EFFECTS

The term "adverse health effects" should not be limited to only life-threatening or incapacitating illness. Harm to health should be defined as it now is to include all genuine adverse health effects. "Adverse effects" should not be re-defined, as some suggest, to exclude all health effects that fall short of threatening life or incapacitating individuals. The Business Roundtable has proposed to define adverse effects so narrowly that the air quality would be officially "safe" even though it made people feel physically miserable, so long as they were not confined to bed or the hospital. This approach should be rejected. Good health means more than mere survival. Good health is a positive state, and the air we breathe should contribute to that positive state -- not interfere with it. In addition, the current definition of adverse health effects is necessary to protect more sensitive individuals. Most human clinical studies expose healthy adult male volunteers. Pollutant exposures which produce "moderate" symptoms in these individuals are likely to have much more serious effects on more sensitive groups.

STANDARDS SHOULD PROVIDE A MARGIN OF SAFETY

The concept of margin of safety should be retained. Public health standards should be precautionary. We have

enormously altered the quality of the air we breathe in our cities. We have much to learn about the total health impacts of the complex soup of air pollutants we breathe. Almost no long-term studies on the effects of chronic (multi-year) exposure to polluted air have been done. Studying a health problem this complex is extremely difficult. While many studies are definitive, much research is "on the frontiers of scientific knowledge." Studies suggesting serious, yet not completely proven, health hazards from the air we breathe are common. In particular, many studies on animals show serious adverse health effects which are likely to occur in humans also, but which may be impossible to demonstrate in people, given the ethical limits on human experimentation. Most human and animal studies are based on exposures to single pollutants, but we breathe a mixture of many pollutants that together may interact to cause more serious health problems than separately.

Precautionary action is in the fundamental tradition of public health medicine. Cholera was virtually eliminated in the 19th century simply by cleaning up contaminated water supplies. No one knew how the water was contaminated, or exactly what caused the disease until decades later. Had prudent public health measures been blocked because the exact mechanism of disease was unknown, cholera would have killed millions more victims.

The law now requires EPA to provide a margin of safety to take some account of suggested and incompletely explored risks. This important provision should be retained.

"TECHNICAL" CHANGES SHOULD NOT MASK THE WEAKENING OF STANDARDS

Some business groups are proposing a seemingly technical change: that Congress should require EPA to increase the number of days each year that health standards may be violated. Such a change would allow more pollution and increase public health risks, just as much as relaxing the standards themselves. Increasing the number of days the standard can be violated would mean more pollution from existing sources every day of the year. It would also mean dirtier new sources could locate in polluted areas. This would increase pollution and increase health risks.

THE SCIENCE ADVISORY COMMITTEE SHOULD REMAIN ADVISORY

The function of the Clean Air Science Advisory Committee (CASAC) should remain advisory. EPA should continue to make Criteria Documents -- the agency's compilation of the health studies regarding a pollutant -- available to the CASAC for review. EPA should continue also to respond to the CASAC's advice and should continue to have the authority for setting air quality standards.

Some industry organizations have proposed that CASAC be given final authority over whether a pollutant may be regulated and to what degree. Alternatively, some have suggested giving this function to the National Academy of Sciences. Underlying these proposals is the claim that EPA, by taking into account in a precautionary way the developing (though incomplete) evidence suggesting serious health

effects, as well as the definitive evidence, has somehow acted "unscientifically."

The standards of pure academic scientific research, however, are not appropriate for guiding action to protect public health. All the evidence, both definitive and developing, must be taken into account when setting standards. Academic and laboratory scientists, however, are trained to refrain from reaching conclusions where there is some gap in information. In the realm of pure science there are no costs attached to waiting before drawing conclusions. But the public cannot afford this approach. Our air is polluted now. We know our knowledge of all its ill effects is limited and will remain so for decades. While the full extent of health damages may be revealed after many years of research, the cost of waiting before setting standards based on the developing as well as the definitive evidence may be years of deaths and illnesses which could have been prevented. Thus the Clean Air Act instructs EPA to resolve many of the information gaps on a prudent public health protection basis.

The EPA Administrator is assigned this role, and is accountable to Congress, the President, and the public. No case has been made for turning over the responsibility to protect public health to an unaccountable advisory body which may bring an inappropriate point of view to critical public health decisions.

Nonattainment

Since 1970, the Nation's air quality program has relied on the federal and state governments, sharing responsibility, to accomplish the cleaning up of pollution. The Clean Air Act directed EPA to establish air quality standards needed to protect public health. Congress set deadlines, now 1982 and 1987, for attaining these standards. The Act gives the states the primary responsibility for establishing "State Implementation Plans" ("SIP's") with measures sufficient to meet the standards by the deadlines. EPA is required to review the SIP's, to obtain state revision of those which fall short of the Clean Air Act's minimum requirements, and in some cases, to take action in the place of states which have not acted themselves. This system of shared responsibility is working to clean the air.

DEADLINES FOR MEETING HEALTH STANDARDS MUST BE RETAINED

The NCAC opposes proposals to eliminate deadlines from the Clean Air Act. Deadlines are the backbone of programs to clean our air. While the current deadlines may need to be changed for some areas, replacing them with new deadlines is essential. Congress should continue to require states to

design their air pollution control programs to meet air quality standards by a specific date. Without deadlines the states and EPA will be virtually unable to resist pressure to weaken pollution control regulations and our air will stay unhealthy for years longer.

Citizens need deadlines to participate effectively in determining the quality of the air they must breathe. Citizens have a right to know when the health standards will be attained. They have a right to be told by their public officials whether the planned pollution control measures will be sufficient to meet that deadline. Deadlines require pollution control officials to explain their decisions in terms that the public can readily understand and evaluate -- how soon are today's pollution control programs likely to produce clean air. Today's programs already tend to be dominated by highly technical debates between engineers. If deadlines are removed, there will be even less opportunity for the public to participate and affect pollution control decisions.

ONLY LIMITED EXTENSIONS OF CURRENT DEADLINES ARE NEEDED

The current 1982 and 1987 deadlines for meeting air quality standards should be retained for most areas of the country. These areas either already have developed plans or have enough time remaining to develop adequate plans. The NCAC supports some changes, however, for those areas with especially severe problems.

- First, Congress should extend the schedule for submitting a complete plan for attaining the ozone standard from July 1982 to December 1984. Congress should retain the requirement for states to adopt additional "reasonably available control technology" regulations for stationary sources by 1982.
- Second, the National Commission on Air Quality recently estimated that seven areas may not be able to attain the ozone standard by 1987 and that one or two areas may not be able to attain the carbon monoxide standards by that date. In addition the Commission estimated that some of the seven areas now exceeding the nitrogen oxides standard may not attain that standard by 1982. Congress should examine what efforts will be required to attain the standards in these areas. If it appears that the necessary reductions in emissions can not be obtained by the deadlines, Congress should enact mechanisms for ensuring prompt implementation of all necessary emission reductions. Congressional modifications of the deadlines should be considered only for those areas where attainment by the current dates is impossible even after technology-forcing improvements in controls are required. These procedures should include additional incentives to promote more rapid progress in areas with the most serious air pollution problems.
- Third, for areas with severe total suspended particulate problems, Congress should extend the deadline to 1985 to permit implementation of measures which have not yet been identified by the states. All measures already adopted by the states should be implemented on schedule by 1982. Studies of non-traditional particulate problems and adoption of additional necessary control measures should be completed by 1982 in accordance with schedules already adopted by the states.
- Congress should retain the 1982 deadline for the sulfur oxide standard.
- Congress should retain the current deadline for the lead standard.

THE LAER REQUIREMENT SHOULD BE RETAINED

Pollution from new sources in dirty air areas must be tightly controlled in order to make progress toward meeting the air quality standards. To ensure this, in 1977 Congress required these sources to meet emission standards reflecting the "Lowest Achievable Emission Rate" (LAER) -- the lowest emission level actually achieved by another source of that kind, or the lowest level required by another state. The NCAC recommends retaining this requirement and increasing oversight to ensure that it is implemented.

Some proposals for changing the Clean Air Act have called for the elimination of LAER. But LAER is needed to meet health standards in most of our major cities. If new sources are built with greater emissions than LAER would allow, then more emission reductions from existing sources will be required to offset the impact of new growth. This will mean that fewer and fewer feasible emission reductions will be left to enable an area to reduce total pollution and make progress toward meeting air quality standards. Weaker controls on new sources will also mean that the total amount of growth that can occur in an area will be reduced.

The LAER requirement is not unduly complex. The National Commission on Air Quality found that, including the time for conducting a LAER analysis, most permits for new sources in dirty areas have been issued within 3 to 5 months.

THE "OFFSET" POLICY SHOULD BE RETAINED

Under the offset policy new sources of pollution in dirty areas must obtain a reduction in emissions from existing sources which is equal to or greater than the new pollution added. (Needed offsets can also be provided by the state.) This program is needed to prevent new growth from worsening existing violations of public health standards. The offset policy recognizes that air is a scarce resource and uses market forces to accomodate growth without increasing total pollution. Programs such as "banking" of emission reductions can promote the orderly functioning of a pollution reduction market, and Congress should consider amendments which will encourage states to use those and other related techniques. Banking should be limited to states with plans adequate to meet health standards. Steps must be taken to reduce the number of "paper" offsets -- offsets that exist on paper but do not actually result in reductions of existing emissions.

CONGRESS SHOULD AUTHORIZE GRADUATED RESTRICTIONS

Congress should continue EPA's existing authority to withhold federal funds, to restrict construction of new pollution sources, and to set federal cleanup requirements for areas that fail to do the job themselves. Congress should provide EPA with new authority to apply the restrictions on federal

funding and on source permits on a graduated basis corresponding to the extent and duration of an area's failure to comply with the law.

STATUS OF "UNCLASSIFIED" AREAS MUST BE RESOLVED

Adequate monitoring in currently "unclassified" areas is needed to determine appropriate requirements for new and existing sources. The National Commission on Air Quality has recommended that the funding and permitting restrictions should also be applied to states which fail to implement adequate air quality monitoring in "unclassified" areas. The NCAC supports that recommendation.

PSD

In 90 percent of our country the air is cleaner for one or more pollutants than the minimum standards for polluted cities and industrial areas. In 1977, to manage these valuable air quality resources, Congress enacted a far-sighted program known as "Prevention of Significant Deterioration" (PSD). The PSD program has one central objective: to keep overall air pollution increases for an area within a Congressionally-fixed air pollution budget ceiling.

Congress set three different sized budgets for the country, expressing a judgment that the value of clean air differs according to the type of area.

Congress established a very tight budget for large national parks, wildernesses, and other treasured areas. These areas (labelled "Class I" areas) add up to about one percent of the country. For the rest of the country with clean air, Congress established moderate budgets ("Class II") which allow substantial growth of well-controlled facilities. The third and largest budget ("Class III") is available at the option of the state for any particular areas where a greater amount of polluting growth is desired. The PSD budget program in the current Act is expressed in terms of limits on

allowable increases (called "increments") of sulfur dioxide and total suspended particulate concentrations calculated over 3-hour, 24-hour and annual periods.

The PSD system of air pollution budgets represents a long-term program to promote conservation and wise use of scarce clean air resources. The program is a Congressional declaration that air resources can no longer be treated as a "free" waste dump and that this generation must take steps to conserve the remaining resources for future generations. While the moderate air quality budgets (Classes II and III) have been designed to allow substantial room for growth, they also serve notice on government and industry that they must begin planning now to minimize pollution from future growth. Because the Class II and III budgets are large, there is ample lead time for industrial managers to develop the innovative technologies that will be needed to have economic growth without losing our clean air resources.

The PSD program also provides a measure of health and environmental protection beyond that offered by the minimum standards for cities and industrial areas, guarding against serious effects suggested in the scientific literature but not encompassed by the standards. While some of these effects may not yet have been established definitely enough to mandate further pollution reductions in dirty areas, they are sufficient reason for a policy of prevention in clean areas. Finally, the PSD program prevents economic dislocation by reducing the temptation for industry to relocate

away from developed areas in order to avoid pollution control requirements.

The National Academy of Sciences, in its recent comprehensive review of the PSD program, emphasized the need for both a technology requirement and a budget limiting future emissions growth. The current PSD program, the NAS concluded, is "basically sound" and can be improved administratively within the framework of the current law.

Proposals are being made, however, to abandon the Congressional objective of limiting total pollution increases outside national parklands. Some industry organizations have proposed major weakening of even Class I budget protection for our parklands. These proposals would destroy the ability of the PSD program to protect our country's clean air resources. The National Clean Air Coalition opposes these proposals. They would allow our clean air areas to become as dirty as many of our already polluted cities and industrial areas.

POLLUTION BUDGETS ARE CRITICAL TO PROTECT CLEAN AIR RESOURCES

Those who propose to eliminate the PSD budgets argue that another element of the program -- "best available control technology" (BACT) -- can protect air quality. This claim is wrong -- BACT alone cannot protect clean air.

- Under the Clean Air Act, BACT, despite its name, is not "best" control technology. Rather, BACT for each plant represents a balancing of air quality concerns and economic considerations. Without a pollution budget,

individual BACT determinations will be lenient, due to the perception that there is no cost to using up the clean air resources. The pollution budget provides a powerful incentive to make better BACT decisions.

- Without a pollution budget there will be no market pressure to spur the investment in research and development that is needed to improve control technology over the long term. The pollution budget creates pressure for innovation that is essential to having economic growth without environmental degradation.
- BACT alone will not require clusters of sources to have controls sufficient to prevent significant pollution increases in an area.

BACT is not a substitute for the PSD budget program; it is merely a tool which can be used to support the objective of staying within the budget. If the budget objective is eliminated, however, today's BACT decisions will become lax and future technology will not improve. As a result, areas that now have clean air will become steadily dirtier.

SHORT-TERM LIMITS ON POLLUTION INCREASES MUST BE RETAINED

Some have also proposed elimination of the "short-term" (3 and 24 hour) budget limits even if the "long-term" (annual) budget limits are kept. The NCAC opposes this change because it is just a disguised way of drastically increasing pollution in clean air areas.

The pollution problem caused by a source changes from day to day as the weather changes. The short-term limits are designed to insure that the source is controlled well enough to prevent pollution buildups from occurring on the many days of the year when the weather does not disperse the pollutants over a broader area.

If short-term limits are abandoned, new plants can be built with much poorer controls. This would result in huge emission increases every day of the year from large polluting facilities -- 15-20 times more pollution than they are now allowed. These much greater annual emissions would worsen such regional air pollution-problems as poor visibility and acid rain.

If short-term limits were dropped, there would be nothing to limit how badly polluted our parks and other clean air areas could become on any given day of the year. Since most visits to national parks are only for one or two days, this could ruin visits for millions of people every year.

THE PSD PROGRAM SHOULD BE MADE LESS COMPLEX

Critics of the PSD program have correctly pointed out that the program's procedures are very complex. The NCAC believes that there are many opportunities to simplify the program. We will support changes which do not destroy the objective of keeping pollution increases within Congressionally-fixed budget limits. But those who have proposed to eliminate the current Class II and III budget limits have not suggested any effective alternative. This approach would destroy the objective of conserving air resources.

The NCAC believes the critics of the PSD program should concentrate on identifying changes that will simplify the program rather than on attacking the fundamentals of the

program to keep clean air clean. The NCAC has identified several simplifications which it can support:

- The requirement for air quality monitoring before the filing of permit applications should be removed. Monitoring before construction (but after application) should be retained in areas where there has been inadequate monitoring before. This monitoring would not have to be complete before permits were issued. Post-construction monitoring requirements should be retained.
- Under current rules, the minimum size of a source which must be reviewed differs based on whether the source is a modification of an existing plant or an entirely new plant. The minimum size subject to review should be the same for modifications as it is for new plants.
- Congress should examine the long-term implications of alternative size "thresholds" for full permit review.
- Congress should examine techniques for simplifying the procedure for keeping track of consumption of short-term budget limits, without reducing the air quality protection the short-term limits afford.
- New sources which employ BACT more stringent than the national minimum New Source Performance Standards should not be subject to changes in their emission limit for a 10-year period, except if necessary to meet national ambient air quality standards or to control newly identified and regulated pollutants.

The NCAC will evaluate other simplifying changes as they are identified and will support those that do not undermine the basic purposes of the PSD program.

PERFORMANCE OF THE CURRENT PROGRAM

The track record of the present program, even before simplification, demonstrates that we can protect our air quality resources without disrupting economic growth or

energy supplies. Several hundred permits have been issued so far, and only two were turned down even initially. Those two were approved when better controls were applied. The program has not caused significant delay in construction. According to the National Commission on Air Quality, 75 percent of all PSD permits were issued in 10 months or less. When significant simplifying changes are implemented, the NCAC believes that the program can produce the same benefits with even less cost and time consumed.

Acid Rain

Congress should enact a program to curtail acid rain by reducing emissions from existing coal-fired power plants and other major sources of acid rain-causing pollutants.

DAMAGES CAUSED BY ACID RAIN

Acid rain (including acid snow and dry acid fallout) is now causing serious damage to the environment:

- In the United States, all fish have been killed in several hundred lakes, and tens of thousands more lakes and streams are threatened in the U.S. and Canada.
- Acid rain is causing significant damage to buildings, monuments, paints and other materials.
- Experiments show that acid rain damages some important commercial crops.
- Acid rain leaches important minerals and nutrients from soils. This effect may eventually seriously affect forest yields.
- A recent National Academy of Sciences report cites an estimate that as of 1978 acid rain caused \$5 billion in damage per year.
- Acid rain may threaten human health by leaching toxic metals into the drinking water of areas that rely on wells or other untreated supplies.

Delaying action to reduce acid rain will cause irreversible damage. The effects of acid fallout are cumulative,

worsening as the capacity of the environment to "buffer," or neutralize, the acids is depleted. No way is known to reverse the destruction of lakes. Probably no practical means exist to reverse acid rain's other effects either.

CAUSES OF ACID RAIN

Acid rain is caused by man-made emissions of sulfur oxides and oxides of nitrogen. These pollutants are often transported far from their sources of origin, transformed in the atmosphere into strong acids, and deposited as much as 1,000 miles downwind. Large coal-fired power plants are the major sources of acid rain-causing pollutants in the eastern half of the nation. Smelters are the largest sources of such pollutants in the West. Huge amounts of SO_x and NO_x are often projected up to 2,000 feet high into the air by excessively tall smokestacks (built despite a ban in the Clean Air Act since 1970).

RELATIONS WITH CANADA

Acid rain is rapidly becoming a major foreign policy issue with implications for America's supplies of energy and other natural resources imported from Canada. In Canada the public and all major political parties are demanding American cooperation in controlling acid rain, since the U.S. "exports" four times as much acid rain-causing pollution to Canada as Canada sends us. If we do not act, Canada may be tempted to apply pressure on the United States by

increasing prices or restricting exports of energy and other vital natural resources we import from Canada.

WHAT WE KNOW ABOUT ACID RAIN

Industry argues we should study acid rain more before doing anything about it. But their argument for delay requires ignoring the growing weight of the evidence, and taking some data seriously out of context. For example, the available monitoring data strongly indicate that acid rainfall in North America is increasing. But some industries, taking advantage of both government's and industry's past failure to monitor more thoroughly, now claim the increase has not been proved. These arguments ignore the fact that where there has been comprehensive monitoring, as in Scandinavia, the results clearly show that acid rain has increased as transported sulfur and nitrogen emissions have risen.

These arguments also ignore the fact that the present rate of acid fallout is causing serious damage. Every additional year the present acid rain rate continues, the damage will increase. In many sensitive areas we are well beyond the critical point where nature can no longer withstand man's enormous additional burden of pollutants. We must reduce that burden or face major damages to our environment.

Scientists who have devoted their careers to the study of acid rain have reached consensus that we know enough now to identify a virtually foolproof first step in reducing acid rain -- reduction of sulfur oxide emissions. The longer we

wait to take the step, the greater the damage to our environment will be.

While research should continue, no other plausible cause of acid rain exists except man-made emissions of sulfur and nitrogen oxides, and no other plausible cure exists except substantially reducing those emissions over broad areas of the country.

WHAT NEEDS TO BE DONE

It is widely recognized that the current State Implementation Plan program is not adequate to address these problems. Additional federal authority to control existing sources is required.

The National Commission on Air Quality recently recommended that Congress adopt a program to significantly reduce emissions of sulfur oxides in the eastern half of the country. Based on analyses already done it is clear that substantial sulfur oxides reductions can be accomplished with only small economic impact. Studies cited by the National Commission on Air Quality indicate, for example, that the cost of reducing sulfur oxide emissions by 7 million tons per year would raise average eastern electricity rates by less than 2%.

The National Clean Air Coalition supports the enactment of an acid rain control program this session that in the near term will significantly reduce present levels of sulfur oxide emissions by 1985:

- Congress should specify in the Act the total emission reduction to be accomplished by this initial acid rain abatement program.
- Congress should identify the source categories whose emissions must be reduced and should apportion the total reduction target within these categories.
- Sources should be allowed to meet their portion of the total reduction target by trading with other sources in the region. This "regional bubble" approach will allow the total reduction to be achieved at the least cost.
- Utility sources should be required to analyze the additional emission reductions which could be accomplished by making investments in energy conservation measures.
- Increases in emissions of sulfur as a consequence of converting oil-fired power plants to coal should be prohibited. Such a program should allow use of the "bubble" approach to minimize costs.
- EPA should be required to set strict New Source Performance Standards for industrial boilers within one year.
- EPA should be required to fund commercial demonstration of improved technologies for controlling nitrogen oxides from fossil-fuel fired boilers within three years.
- To avoid disruptions in the coal mining industry, conditions should be included in the program to prevent loss of mining jobs.
- Congress should establish physical limitations on stack heights in order to reduce long-range transport of pollutants.
- Existing controls on mobile-source nitrogen oxide emissions should be retained.

Fine Particles

The smallest particles in the air -- so-called "fine particles" -- are a severe danger to human health and to the environment. While particulate matter in general is hazardous, it is generally agreed that fine particles -- those less than 2.5 microns (1/10,000th of an inch) in diameter -- are the most dangerous. They cause or worsen serious lung diseases -- asthma, bronchitis, emphysema, lung cancer. Several studies have estimated they cause tens of thousands of premature deaths each year.

Composed of sulfates, nitrates, toxic organic compounds, and trace metals, fine particles are inhaled and deposited in the deepest, most sensitive part of the lungs. They can evade the lungs' defensive screen, remaining lodged there for months or longer. They can dissolve, bringing their dangerous components into contact with the vital cells where oxygen and carbon dioxide are exchanged to and from the blood.

Fine particles, as a component of acid rain, also damage vegetation, aquatic life, buildings, paints and other materials. They are also responsible for the virtual destruction of visibility in the East, and the rapid loss of visibility in a number of formerly pristine areas of the West as well.

Since 1973 EPA has repeatedly recognized the danger from fine particles and has acknowledged the need for air quality standards covering fine particles in addition to the standards for total suspended particulates. Yet EPA has taken no action. Congress must direct EPA to set the fine particle standards needed to protect the lives, health, and surroundings of millions of Americans. The National Clean Air Coalition recommends:

- Congress should direct EPA to establish primary and secondary ambient air quality standards for fine particles, in addition to those for total suspended particulates, within two years.

Toxic Air Pollutants

Dozens of toxic chemicals are commonly found in the air where millions of people live. Pollutants released from chemical plants, refineries, coke ovens, smelters, synthetic fuel plants, and other facilities are being linked in a growing number of cases to cancer and other killing and disabling diseases.

Cancer alone now kills one American in five. Cancer rates are extraordinarily high in many urbanized and industrialized parts of the United States. Dangerous chemicals in the air, as well as in workplaces, water, and other media, play an important role in causing cancer. Areas around petrochemical complexes, smelters, and coke ovens are often cancer "hot spots." Studies have estimated that air pollutants cause thousands of cancer cases each year, even after accounting for smoking and exposure to chemicals in the workplace.

Future cancer rates, moreover, may rise further. Cancer is a latent disease, and today's cases are the result, in many instances, of exposure to causes as long as 40 years ago. Meanwhile, chemical use has multiplied many times

over the past three decades. Between 1950 and 1977, production of benzene, a cause of leukemia, rose eight-fold; production of vinyl chloride, another cancer-causing agent, grew more than 24-fold. With greater production and use has come increased chemical air pollution, for with few exceptions little or no pollution control has been required for these substances.

The majority of cancer cases -- some scientists believe up to 90 percent -- are preventable. Toxic chemicals account for a large percentage of preventable cancer. Controlling toxic air pollutants is one necessary step against this and other diseases.

EPA has long had authority to bring these pollutants under control, through provisions of the Clean Air Act aimed at "hazardous" air pollutants. Under the Act, EPA must officially designate ("list") those pollutants which may cause death or very serious illness. The Agency then must set standards that protect public health with "an ample margin of safety" within tight statutory deadlines.

But EPA has done very little to control these pollutants. In 10 years EPA has set standards for only four hazardous pollutants (asbestos, beryllium, mercury and vinyl chloride). EPA has officially listed three other hazardous air pollutants (benzene, arsenic, and radionuclides), but though the statutory deadlines have long since passed, EPA has failed to set any standards for them. The Agency has identified some 40 more pollutants as causes of concern, but

has studied them for years without being willing to decide whether to control them.

A reason often given for EPA's inaction is concern that too rapid an implementation of standards that would fully protect public health might be too disruptive. EPA's approach, where it has acted at all, has been to set technology standards. But none of the standards EPA has set requires the use of even the best controls some companies were already using when the standards were issued. Moreover, EPA has attempted to abandon full protection of health even as a long-term goal.

The National Clean Air Coalition believes major Congressional action is needed to speed up control of hazardous air pollutants. Provisions are needed to accelerate the identification and listing of additional hazardous pollutants. Protecting public health with an ample margin of safety, while not always immediately feasible, must remain the goal. Technology standards should be authorized as an acceptable interim measure, capable of achieving major reductions in risk, but only if the genuinely best controls are required.

The proposals that follow set out a feasible program for more rapid and protective regulation of hazardous air pollutants:

ACCELERATED IDENTIFICATION AND LISTING PROCESS

- Congress should direct EPA to screen the scientific literature and identify all air contaminants

which are known or suspected to cause cancer or other serious diseases. EPA should be required to prepare periodic reports to Congress on these "candidates" for control as hazardous air pollutants. The first report should be required within six months and should be updated annually thereafter.

- Sources of candidate substances should be required to monitor ambient concentrations around them.
- EPA should be required to decide, within a year of identifying a candidate substance, whether it is a hazardous air pollutant.

STANDARDS FOR BEST TECHNOLOGY AND PROTECTION OF HEALTH

- The goal of standards for hazardous air pollutants should remain to protect public health with an ample margin of safety.
- As an interim measure, EPA should be authorized to set "good housekeeping" standards -- requiring immediate use of readily available, economical control measures -- when it lists a substance a hazardous air pollutant.
- Congress should direct EPA to issue permanent standards for sources of hazardous air pollutants within two years of listing.
- EPA should be authorized to establish "best technology" standards for hazardous air pollutants, provided -- in contrast to past practice -- these standards require a level of control greater than that established for less dangerous pollutants. Industry should bear the burden of proof on issues of technical feasibility and economic cost.
- When EPA issues best technology standards, it should also be required to determine if greater emission control is needed to protect public health with an ample margin of safety. If so, EPA should establish deadlines for complying with such health standards.
- For new sources built after a hazardous air pollutant has been listed, but before standards are established, EPA should be required to undertake case-by-case permit reviews to determine the best technology. EPA should have authority to undertake such reviews after candidate pollutants are identified, as well.

SPECIFIC ACTION ON POLLUTANTS OVERDUE FOR CONTROL DECISIONS

- ② Congress should require EPA to set standards as rapidly as possible for benzene, arsenic, and radionuclides, the three hazardous air pollutants EPA has listed but failed to bring under control. Millions of people around sources of these pollutants remain unprotected.
- ② Congress should direct EPA to list coke oven emissions as a hazardous air pollutant. Since feasible control measures for coke ovens are well known, EPA should be required to set standards within one year.
- ② Congress should require EPA to decide, within one year, whether the 40 substances long under evaluation are or are not hazardous air pollutants. Those which EPA determines are hazardous should be controlled on the timetable described above.
- ② As far as practical, EPA should set standards for listed hazardous pollutants by groups and classes emitted from common sources.

Mobile Sources

The Clean Air Act requires motor vehicle makers to control emissions from cars, trucks, and buses. Pollutants from gasoline-powered vehicles are the dominant factor in violations of the health-based air quality standards in areas where tens of millions of people live. Other vehicle pollutants, such as fine particle emissions from diesels, pose serious new threats to health. The National Clean Air Coalition recommends:

RETAIN CURRENT STANDARDS FOR NEW AUTOS, TRUCKS AND BUSES

Gasoline Automobiles. Most new cars, equipped with catalytic converters and other technologies that actually save fuel as they control exhausts, meet the final standards for hydrocarbons and oxides of nitrogen (NO_x). Seventy percent of 1981 model year cars meet the final carbon monoxide (CO) standard too, although EPA has granted auto makers a two year delay for the remainder of the fleet. Now some auto makers want to roll back the CO and NO_x standards to double the emissions currently allowed. They also want to eliminate assembly line testing, and other effective means EPA has to ensure compliance with

standards. But these controls and measures to enforce them are needed to meet air quality standards in major areas of the country where tens of millions of people live.

Diesel Automobiles. As diesel cars rapidly multiply, their very high fine particle emissions pose a threat of cancer and other serious lung diseases. The manufacturers, discounting the health risks and downplaying their ability to develop controls, want diesel particulate standards delayed beyond the scheduled effective date of 1985. But these standards are both needed and practical, and must not be postponed.

Trucks and Buses. Equivalent standards for gasoline and diesel trucks and buses, already long-delayed, will start to take effect between 1984 and 1986, depending on the pollutant. The manufacturers want them postponed as well. But the pollutants from trucks and buses have been regulated little or not at all and regulating these vehicles is one of the cheapest ways available to make the additional reductions in these pollutants which are needed to meet air quality standards in many areas. These standards are needed to protect health and are clearly feasible at a reasonable cost.

PROMPTLY IMPLEMENT INSPECTION/MAINTENANCE

To make sure that cars in use continue to meet the emission standards, the Clean Air Act requires inspection and maintenance programs in areas with unhealthy air. Some have suggested that the "I/M" requirement be repealed. But I/M is

an effective, reasonably priced measure necessary for attaining the air quality standards in many places. It is also needed to maintain our multi-billion dollar investment in pollution controls in working order. I/M programs have broad majority public support where they are already in place, and they are well on their way to operating in many areas. They must not be short circuited now.

RETAIN CURRENT EMISSION CONTROL WARRANTIES

Most motor vehicle makers now must cover emission controls under warranties. If defects cause controls to fail, the manufacturers must pay for repairs. Some auto makers want the warranty requirement drastically cut back or eliminated. But warranties are needed so that auto owners aren't stuck with unfair bills, and so that the auto makers have incentives to build controls that last.

RETENTION OF HIGH-ALTITUDE STANDARDS

High altitude cities suffer the most serious carbon monoxide (CO) pollution in the country. High levels of CO are caused by inefficient combustion of fuels in the low-oxygen atmosphere. Studies show that CO is more dangerous to health at high altitudes as well. The Act now requires that vehicles effectively control CO emissions at high altitudes as well as low beginning in 1984. The technology to do so, exists today. These emission reductions must be achieved if healthful air is ever to be achieved in high altitude areas of the country.

DISCUSSION GUIDE
FOR FILM/DISCUSSION PROGRAM

The purpose of a film/discussion program is to involve audiences in the reality of the energy crisis, to assist them in understanding the major policy issues, and to enlarge their perception of their own power in the energy choices ahead.

The films are available through your local public library. Projectors are frequently available at libraries and schools. You should request copies of THE POLITICS OF ENERGY from Marge Post at the state office or by calling her at home (612)-636-4409; it is a helpful aid for reviewing energy alternatives. Consider having a blackboard or a poster listing the three major energy issues listed below and allowing room for other issues the audience might add to the list. Finally, be prepared to give the name and address of your local/state/national representative who should hear from "us" (you and the audience) regarding energy issues.

I. "There is an energy problem"

An effective way to begin your program would be to have an audience participation activity to get them thinking about energy as a public policy problem. The following is an energy quiz you could use:

The "energy crisis" has been a major issue for several years, but how much do we really know about energy? For example:

- . Between 1946 and 1968, the population of the United States grew by about 40%. In that same period, how much did electric power consumption increase?

- a) same as population growth?
- b) twice as much as population growth?
- *c) over five times as much as population growth?

(Read each response again and ask the audience to raise their hands for the answer they think is correct. The correct answer is starred. Repeat this format for the next four questions.)

- . In the United States, what is the percentage of our energy which comes from non-renewable fossil fuel reserves?

- a) 50%
- b) 75%
- *c) 98%

- . How much of the energy stored in coal which is burned in a power plant can be delivered to the customer's home as electricity?

- *a) 1/3
- b) 2/3
- c) all

(Only 1/3 is delivered because there are losses

- in getting coal from the ground to the power plant;
- when coal is burned in the power plant to produce electricity;
- in transmitting the electricity to your home.)

- . How much energy stored in crude petroleum is lost in the series of processes between the oil well and a moving car?

- a) 20%
- b) 60%
- *c) 90%

- . If one-half of the United States cars were to have an average fuel economy of 22 miles per gallon as compared with today's average of 14 miles per gallon, the annual fuel savings would be
 - a) 17 thousand gallons?
 - b) 17 million gallons?
 - *c) 17 billion gallons?

Source of these questions:

Kilowatt Counter: A Consumer's Guide to Energy Concepts, Quantities and Uses, Alternative Sources of Energy, Inc., 1975

II. The problem seems to boil down to these three major issues:

- A. What should our energy growth rate be?
- B. What sources should we use? (What are the pros and cons of each?)
- C. How should the growth rate and energy sources we favor be implemented? (By the private market? By government action? By both?)
- D. Can you think of any issue that does not fall into one of these categories?

III. The film we are going to see today addresses particular aspects of these issues. Every film (like every energy-related advertisement) has prejudices. This film represents a particular viewpoint regarding these issues. See if you can identify the biases and think of alternative viewpoints as you watch.

For discussion leaders only:

"Bottom of the Oil Barrel" is "doomsdayish." If costs rise, will 1995 be the use-up date? What could happen to slow down use other than rising prices?

"The Sunbeam Solution" is opposed to nuclear power and ignores coal-fired electric power plants as a future energy source. Also, there is a blanket statement that Utilities do not want to conserve.

IV. Show the film.

V. Now we are ready to discuss the major issues.

- A. What should our energy growth rate be?
 - 1. According to the film.
 - 2. According to other points of view. (Carter is asking for a 2% growth rate. Our growth rate from 1972-76 was 3.1%. During the 1960's it was 4.5%. See ENERGY DILEMMAS, pp. 27-29, for descriptions of high, moderate, and low growth scenarios. What are the pros and cons of each?)
- B. What sources should we use?
 - 1. According to the film.
 - 2. According to other points of view. (Have the audience refer to the chart, "An Inventory of Energy Sources," in the LWVUS reprint, "The Politics of ENERGY." What are the pros and cons of each source?)
- C. How should the growth rate and energy sources you favor be implemented?
 - 1. According to the film.
 - 2. According to other points of view. (See ENERGY OPTION, pp. 41-42, which describes alternative ways to deal with this question. After discussing the ideas given in the film, ask what we are doing now to affect the growth rate and types of sources we use for energy. This is described in the "A Continuation of Present Policies" energy package. Then ask, "How would you change our present policy?" Use the other energy policy packages listed in ENERGY OPTIONS to prompt audience response, if necessary.

VI. Conclusion

Energy policy or lack thereof will affect all aspects of our lives. Our goal is an energy policy not by chance, but by choice, based on sound facts and an explicit set of values. Write to your elected officials and let your views be known.

DISCUSSION QUESTIONS

Where does Minnesota's energy presently come from?

How will the mix of sources providing Minnesota's energy change in the future?

- How much energy will come from coal in the future? How will Minnesota deal with the problems associated with increased coal use? For example:
 - . problems associated with a greater number and longer coal trains;
 - . coal trans-shipment site conflicts, such as at Pigs Eye;
 - . siting difficulties for coal-burning plants because of concerns about air, land, and water quality.
- How much oil can we expect from Canada in the future? What plans are there for securing alternative sources of crude oil?
- What steps have been taken to minimize the adverse effects of declining natural gas supplies? Are steps being taken to increase gas supplies available? Has a curtailment schedule been worked out with gas pipeline companies, distribution utilities and users? What alternative energy supplies are available to replace natural gas?
- What is the future of nuclear energy in Minnesota?

What alternative energy sources are being studied (e.g. solar, peat, wind, bio-conversion)? How much of our energy could each potentially provide. What are the problems associated with each?

What conservation measures are being planned by the state to "stretch" our energy resources? How will these measures be implemented? How much of a difference will conservation measures make in the level of future energy supplies needed?

All of us are feeling the pinch of rapidly rising electricity rates. What incentives or regulatory techniques are being proposed to maximize power plant efficiency and minimize the use of scarce fuels for electricity generation? For example, are peak load pricing or interruptible electricity sales being proposed to keep rate increases down?

How much of the energy consumed per year in Minnesota is used in transportation? What proportion is used by the private auto?

What is the potential of each of the following to reduce transportation energy consumption? How economical is each? How politically possible would it be to implement each? What has been done so far to encourage each?

- encourage the use of car and van pools;
- encourage flexible work schedules to improve traffic efficiency;
- increase subsidies to mass transit, particularly buses;
- provide preferential access or reserve lanes for buses or other multi-passenger vehicles;
- tie vehicle license fees to gasoline mileage;
- increase the state gas tax;
- require annual gas efficiency inspections of vehicles;
- minimize "empty" truck trips;
- build more bike trails for commuters;
- provide a "mass transit" system for farm-to-market shipping;
- increase railroad service for freight and passenger transport.

(Over)

What have been the benefits and the problems with the electric buses being used in Chippewa County? Would this form of mass transit be practical and economical in other areas of Minnesota?

To reduce energy used for transportation, would public money be better spent on transportation investments (e.g. mass transit) or on rehabilitating blighted urban areas and designing more self-contained communities to reduce transportation needs? I.e., how does lack of land use policy and planning relate to increased energy demand?

To: Local Leagues
From: Jeanne Crampton, LWVMN Natural Resources Co-chair
Re: Clean Air Act
Date: July 22, 1981

CLEAN AIR

The upcoming battle over the Clean Air Act will pit wide public support for cleaner, healthier air against an anti-regulatory political sentiment aimed at severely weakening the Act. Clean air advocates like the League and other members of the National Clean Air Coalition are pushing to maintain and improve on the progress made under the Act. Industrial groups have been at work trying to demonstrate that provisions of the Act are overly burdensome or do not take economic or energy goals sufficiently into account. The current mood in Congress seems predisposed to endorse the anti-regulatory view; we must go over Congress' head to the public and organize grass roots pressure to persuade MCs that the Act is basically sound, that moderate rather than radical changes should be made, and that new problems must be addressed.

THE CLEAN AIR ACT

How it all fits together: A simplified description of the CAA's major elements

Federal emission limits apply to the *sources* of pollution on an *industry-wide* basis:

- ☐ new source performance standards (NSPS) for *new* factories and plants;
- ☐ motor vehicle emission standards for *new* cars, trucks and buses;
- ☐ national emission standards for hazardous air pollutants (NESHAPS) for *new* and *existing* sources of airborne toxics.

* * *

National ambient air quality standards (NAAQS) state the maximum *levels* of pollution permitted in the air.

* * *

State implementation plans (SIPs) specify cleanup requirements for existing sources and control requirements and permit procedures for new sources on a *case-by-case* basis.

* * *

Polluted areas are designated "nonattainment" if they exceed the NAAQS.

- ☐ *Existing* factories and plants must install Reasonably Available Control Technology (RACT).
- ☐ *New* or modified factories and plants must install pollution controls with the Lowest Achievable Emission Rate (LAER) and obtain further emission reductions (offsets) from existing sources.
- ☐ Urban areas must adopt Inspection/Maintenance (I/M) programs for cars and institute other transportation control measures.

* * *

Cleaner areas are designated "attainment" and are subject to Prevention of Significant Deterioration (PSD) requirements.

- ☐ *Existing* sources that can be traced to visibility impairment in National Parks must install Best Available Retrofit Technology (BART).
- ☐ *New* and modified factories and plants must install Best Available Control Technology (BACT) and must not exceed increments.

WHAT YOU CAN DO

Contact your Members of Congress (MCs).
Urge them to support a strong Clean Air Act. The League and other Clean Air Coalition groups support 1) setting primary ambient air quality standards to protect public health without taking costs into account; 2) deadlines for attainment of ambient standards; 3) requiring offsetting emissions reductions as new pollution is allowed in areas which don't meet standards; 4) inspection and maintenance programs; 5) a prevention of significant deterioration program with a pollution budget to protect clean air areas from becoming significantly dirtier; 6) significant reductions in acid rain causing pollutants; and 7) a stepped-up schedule for regulating toxic air pollutants. Urge other citizens to contact MCs. Organize with members of the National Coalition--American Lung Association, United Steelworkers, Sierra Club, Audubon, etc.

Global air pollution issues

Depletion of the ozone layer The stratosphere—a part of the atmosphere between 7 and 40 miles above the earth—contains a layer of gaseous ozone that serves as a protective barrier to shield life on earth from the sun's harmful ultraviolet radiation. The Clean Air Act requires EPA to regulate substances, activities and processes that may affect the ozone layer and endanger public health or welfare. A study by the National Academy of Sciences has shown that chlorofluorocarbon (CFC) emissions can deplete ozone in the stratosphere, which could cause a dramatic increase in the incidence of skin cancer. The United States and members of the European Economic Community have phased out use of CFCs as an aerosol propellant in spray cans. EPA is also considering regulating the use of CFCs as blowing agents in the manufacture of styrofoam and urethane foams and as a heat transfer medium in automobile air conditioners, refrigerators and freezers.

Carbon dioxide pollution Scientists now agree that the buildup of CO₂ in the atmosphere—mainly from burning coal, oil and gas—could bring about a general warming of the earth, because CO₂ absorbs the radiant energy that is bounced off the earth's surface. If, as predicted, worldwide use of fossil fuel doubles by the year 2050, the earth's temperature could rise 5° F on the average, with changes at the polar regions of up to 15° F. This "greenhouse effect" could warm the oceans, raise sea levels, change rainfall patterns and shift agricultural zones and desert areas—with enormous social and economic implications. Experts recommend several immediate strategies: burn less fossil fuel; maximize conservation and use of renewable energy sources; stimulate reforestation worldwide and restrict the rate of harvest in primary forests, because forests absorb CO₂.

Other suggestions for local League involvement in the Clean Air campaign 1981:

Multiple goals include: encouraging discussion, research, lobbying, public education, generating media attention, outreach to other groups/organizations, and always -- fundraising!

Education and media materials readily available include:

League publications --- The Dollars and Sense of Environmental Regulation, #514 - 50¢

Federal Environmental Laws and You, #564 - 75¢

Coal Use and Clean Air: Goals in Collision, #179 - 30¢

Controlling Hazardous Pollutants: In the Air, #385 - 15¢

Cleaning Up the Nation's Cities, #135 - 75¢

A Congregation of Vapors, #393 - free

Blueprint for Clean Air, #222 - 75¢

Films and Slide Shows - An Act of Congress: HR 6161 - This film is a chronology of the work involved that led to final adoption of the 1977 amendments to the Clean Air Act. It can be used as an educational tool or to generate discussion for future work plans. Available through the state League office. (45 minutes)

Acid Rain: The Choice is Ours - Slide show available for rental from Friends of the Boundary Waters Wilderness, Inc., 111 East Franklin Avenue, Minneapolis, MN 55404 - (612) 871-7861. Again, excellent for educating, discusses the effects of acid rain and seriousness of the problem. This program is excellent for groups with fishing, farming, forestry, and historical preservation interests. (19 minutes)

Two publications available to assist in lobbying efforts are:

Public Opinion on Environmental Issues - available from Council on Environmental Quality
722 Jackson Place N.W.
Washington, D.C. 20006

You might also want to try the library, since this agency has been severely reduced in staff by the Reagan administration.

How You Can Influence Congress - by George Alderman and Everett Sentman
E.B. Dutton, Publisher

EXCELLENT

Besides educating others through the traditional meeting, try some of the ideas presented in Citizens: The Untapped Energy Source (LWVEF, #436), like booths at fairs, bus ads, billboards in supermarkets, laundromats, etc. Investigate public service announcements on local radio and TV.

Compiled for LWV Clean Air Campaign updates and National Clean Air Coalition materials by Karen R. Evens, 22 16th Avenue North, St. Cloud, MN 56301. Please contact me if you need more information - state LWV office, (612) 224-5445, between June 1 and September 15, 1981.

*The Honorable Rudy Boschwitz - or
David Durenberger
United States Senate
Washington, D.C. 20510
("Dear Senator Durenberger/Boschwitz")

The Honorable _____
House of Representatives
Washington, D.C. 20515
("Dear Mr. Doe:")

(See "Tell It To Washington," LWVUS pub. #349, 50¢, for details and "how to.")

TO: LWV State Energy Committee
FROM: Jeanne Crampton, Natural Resources Co-chair
DATE: March 3, 1981

"Yes, Virginia, there really is an energy committee," although some of you may have begun to seriously doubt that. I do apologize for being so late contacting you---it was due to some lacks in your fearless leader, and some problems about financing, word of which has been trickling out to local Leagues the past two months.

Where are We? Well, we will probably not soon be meeting face to face, unless there is general agreement to forego mileage in getting here. At this point that is probably not a serious problem, since we will not be undertaking any large size (or even small size) energy projects unless there is specific, advance funding. There are things we can do, however, by mail, and by phone. One is attached to this memo. As you may have read in the VOTER or Board Memo, LWVMN did receive a \$2,000 grant from LWVUS Ed Fund for a nuclear education project. Karen Kooda, Anoka-Blaine-Coon Rapids LWV, is our project director and chief author (only author) of the enclosed information brochure, and would be very happy if you would read it, make comments on the style, content, etc. Because our funding comes from the Education Fund, the information must be objective, with no specific bias presented. (Although we have tried to present the arguments used by those with a bias, on both sides of the question.) We have also asked individuals at Northern Sun Alliance, NSP, Minnesota-Wisconsin Power Suppliers, and others, to read and comment. Our intent was to put out information on separate, specific topics relating to nuclear energy, that could easily be reproduced by citizen's groups and agencies, schools, and governmental units and included in their newsletters and publications. We hope that the format we use will allow the material to be reproduced either all at one time, or piecemeal. We look forward to your comments.

One specific suggestion we had from an energy committee volunteer (Barb Maher, Mankato) was that since the Minnesota Energy Agency was emphasizing decentralized energy solutions, which in turn means local planning, was whether local Leagues might not function as facilitators to arrange local energy committees under the auspices of MEA. (Something like what was done on the evaluation of equal opportunity in athletics with the State Human Rights Department.)

Barb is an energy consultant to the city of Mankato, and works with an Energy Awareness Subcommittee there. It's certainly an interesting proposition, and well worth consideration.

One thing I would like to do is obtain from each League in Minnesota that is doing anything about energy in any shape or form, a short statement that would detail just what the goals were, where they are, etc. Something more than a statement of a local study---perhaps one-half to one page. Something that could be reproduced and passed around to other Leagues---since I sometimes feel we reinvent the wheel, simply because we aren't aware. Rochester, for instance, has just finished a study on present and future power supply needs in their area, and Red Wing is looking at the Prairie Island Nuclear Plant, and its effect on the community.

You will also be receiving via 3rd class mail a copy of the 1980 Power Plant Siting Advisory Committee Report, issued last June. This report discusses the idea of decentralized power supplies in some detail, looking at the size of power plants, the location, and types of fuels they might use in the future.

Included with this memo is a list of individuals who indicated interest in the committee---and I do hope no one has withered away by now, waiting to hear from me. We shall try to be in regular contact from now on, and will really appreciate hearing from any or all of you, with suggestions or comments on just how we might function.

Jeanne Crampton (612)926-8760
4330 Wooddale Ave. S.
St. Louis Park, MN 55424

P.S. I have also enclosed the legislative committee schedule for this session---those of you who live close enough to St. Paul to come in might enjoy attending either the House or Senate Energy Committee. If you contact me ahead of time, I'll try and meet you at the Capitol, or put you in touch with our regular observer(s).

"A Citizen's Introduction to
Nuclear Power"

To: Local League Presidents
Local League Natural Resources Chairs
Local League Citizen Information Chairs
From: Jeanne Crampton, LWVMN Natural Resources Co-chair
Date: July 20, 1981

Most local Leagues picked up their five copies of this new publication at state Convention. The rest of you will be receiving them in the mini-mailing in July. The cover letter you received with the booklets gives some basic reproduction and distribution ideas, but it's apparent from the questions the state LWV office has received that there is some confusion as to just what is to be done with those five copies.

First of all, these are Master copies, purposely designed to be easily disassembled, reproduced, and reassembled. Our hope is that, ultimately, the 1,500 Master copies distributed to Leagues, school Social Studies Departments, and other community groups will multiply through reproduction to tens of thousands of copies. Our goal is to provide some basic nuclear energy education to as many Minnesotans as possible through this new way of "information dissemination."

Perhaps a bit of background and explanation will help. The LWVUS-Education Fund pass-through grant from the U.S. Department of Energy was in the amount of \$2,000. This sounds like a sizeable sum but really doesn't go far when producing a booklet such as ours. By the time research, writing, typing, layout, proofreading, printing, mailing, and related office costs are included, it's an expensive affair, even with lots of volunteer time. It was apparent that the usual procedure of printing 15 to 20 thousand copies of the booklet for League use and public sale and distribution would not work in this case. We also needed a way to disseminate a large number of publications, or the information contained in it, without tying up other LWVMN cash for months in paper and printing costs. In addition, considering the technical nature of the information, we wanted to let those individuals/groups most likely to reproduce it be the ones to decide how many copies they could best use.

So.....that's where the "seed" idea comes in; we want local Leagues to take their five Masters and see how far they can go. Initially, we'd like to see one Master used to reproduce a copy for every League member--either as a booklet, or serially in the local League bulletin. We'd like the other four Masters placed with groups in each community who will promise to reproduce the booklet for their members, in any way they wish, at their own cost. Suggested groups were listed in the June cover letter; you can add your local newspaper or library to that list.

LWVMN is sending a Master copy to: the Social Studies Department of every secondary (middle, Jr. and Sr. High) school in the state; 50 community groups for copying or reproducing in their newsletters (environmental, religious headquarters, power associations and cooperatives, legislative leaders); all Minnesota university and college libraries; all regional library centers (for their reproduction and distribution to their branches); metro area Chamber of Commerce groups; 65 public affairs or community relations directors of major corporations in Minnesota; and each of the 94 Univer-

(over)

sity County Extension Agency Directors in Minnesota. All of these recipients will be urged to reproduce the booklet and will be informed that local Leagues throughout Minnesota have additional resources or distribution ideas. In addition to the LWVUS publication mentioned in the June cover letter, there is now a 16mm film available from LWVEF, "The Nuclear Debate: Fiction and Fact." In order for your local League to act as facilitator for community discussions on the nuclear issue, you could put together a "nuclear energy education" package of information including all these resources.

SPECIFIC REPRODUCTION IDEAS:

One method that may increase distribution would be to ask a business or industry, foundation, or organization in your area to consider printing or reproducing a number of booklets, with their own identifying information added to the large blank space on the back cover--"Printing and distribution of this publication provided by (donated by) the XYZ Company." Some businesses which may not contribute at Finance Drive time might consider a project such as this. Costs of reproduction or copying will vary with the method used but should range from 20¢ to 50¢ per copy (the more copies printed, the less the cost per copy). If your League can make a trip to the LWVMN office in St. Paul, bringing enough volunteers to run, collate, and staple, we will be happy to have our copying machine used, at cost. Those copies would be in the 26¢ range for runs over 100. If you would like to consider such an arrangement, please call several days in advance of your arrival (612-224-5445) to be sure there will be no conflict over machine use.

An assessment form will be sent to each local League in the August BOARD MEMO mailing asking about the use and distribution of the booklet. We know how clever and innovative Leaguers are, so we really expect to see the state papered with "A Minnesota Citizen's Introduction to Nuclear Power."

TO: The Board
FROM: Jeanne Crampton
RE: "The Great Lakes Conservation Council"(or whatever)
DATE: May 24, 1982

I just returned from 3 days spent on Mackinac Island - a most exciting three days! As some of you know, the conference was by invitation only, determined by written nomination or application. I was lucky enough to wangle an invitation, and have a short paper selected for presentation. (All expenses were paid; the conference was funded by a grant to the Michigan United Conservation Clubs by the Joyce Foundation. Conservation is one of six areas for which the Joyce Foundation commits money.) Attached you will find the final statement approved by the participants. Ten persons were elected to the Charter Committee, and will hold their first meeting in Detroit within the next 4 to 6 weeks. If I am in Michigan at the time the meeting is held, I intend to go as an observer, since no one from Minnesota (or Wisconsin, either, I think) is on the Charter Committee. (Charter Committee members had to donate their time and all expenses.)

There were two major questions on which the conference nearly came to blows: Should it be an "advocacy" organization; and, should any group or individual that cared to, be allowed to join? On the question of advocacy, the League spoke with the same voice as the labor union representative: (Ohio and Wisconsin had League persons there). We urged that it be an informational and educational group, since our organizations would find it difficult to ally themselves with it if it were active in lobbying. And as a number of other persons pointed out, a group that would include Canadian members as well as those from eight or more states, ranging from the mouth of the St. Lawrence River to Minnesota, might find it nearly impossible to gain approval of its statements in time to do any good. Better to play watchdog and be in a position to alert local and regional organizations already in place. A number of the more activist types present felt we were wasting such a group by binding its hands, but they reluctantly were persuaded to our point of view. (Incidentally, one of the activists present was "Barry Freed", now residing in the Thousand Islands, where he has gained quite a name for himself as an enthusiastic environmental community organizer. Some of you may remember his original name: Abby Hoffman.)

Discussion was heated on the second question: Should those sly, sneaky, industrial types be allowed to join (undoubtedly with intention to subvert) the organization or not? There were impassioned speeches on both sides at the end of the Friday session, and there was some speculation that the whole conference was going up in smoke. My natural inclination is never to exclude anyone, although I recognize that members to whom money is no problem can at times use it to the detriment of the organization. (The kid who owns the bat and ball may decide not to play unless we use his rules.) Saturday afternoon we split into 4 groups and, lo and behold, when we reconvened, each group had decided we should not be exclusionary, beyond asking that persons or groups who joined should be willing to support the principles laid out in the Charter.

Bill was able to go with me, and we drove to and from St. Ignace - it's just a little over 500 miles. Beyond having the power steering go out up in Lindstrom, MN (it resembles Siberia as far as car parts availability) and Bill leaving all his cash home in his shirt pocket, we had a great time. Although we are both ex-Michiganders, neither of us had visited the Island previously. With no motorized vehicles on the Island, it's like stepping back to 1890. (They do fudge a bit - there's a fire engine and ambulance, hidden in a garage.) Bicycles provide mobility - even the Seniors ride them, and then there are the horses and carriages, as well. They do provide atmosphere with a capitol A! (They could run the Island on solid waste, if they'd just invest in a good Methane digester.) The Grand Hotel is; we stayed at the Island House, the "oldest" hotel. The Conference ended with a boat ride under the Mackinac Bridge at sunset. Very Fitting!!

A GREAT LAKES CHARTER

WHEREAS, the Great Lakes are the greatest fresh water system on earth; and

WHEREAS, 50 million people live within and influence the Great Lakes ecosystem and millions more receive economic, recreational and spiritual benefits from them; and

WHEREAS, there is a need for economic strategies compatible with maintenance of the natural system; and

WHEREAS, there is a need for cooperative and coordinated citizen action on behalf of the Great Lakes; and

WHEREAS, we have agreed on the need for such action on the critical issues of:

- Water quality;
- Hazardous and toxic substances;
- Atmospheric deposition;
- Regulation of levels and flows including diversions;
- Fish and wildlife management and habitat protection;
- Energy development and distribution;
- Land quality and land use practices;
- Navigation issues such as winter navigation, additional locks, channel modifications, etc., and
- Public support for Great Lakes ecosystem research, education and management;

THEREFORE, we resolve to establish a Great Lakes organization to provide an information exchange and a forum for working together on these issues.

We recommend that a formal, non-exclusionary, organization be established; that all members support the Charter, pay minimum dues, and support issues as desired within their own organizations. A charter committee of ten members is to be elected, and will report to those attending this meeting and others who have indicated interest, within 90 days with recommendations for a final Charter and bylaws.

The above was approved with no dissent by over sixty participants to "A Great Lakes Federation" meeting on Mackinac Island, May 20-22, 1982.

(A tentative name for the group is "The Great Lakes Conservation Council")

(My hope is that the LWVMN will be able to join when the time comes.)

CLEAN WATER ACT - HR 3282

LWVUS POSITION: Action for improvement of water quality, and planning and management of water resources to meet regional needs and the national interest (1960, 1967).

WHAT THE BILL WILL DO: HR 3282 is the reauthorization of the Clean Water Act bill that was marked up and released from Committee (House Public Works) in late May. This bill is a disaster. The version of HR 3282 passed by the Public Works Committee contains numerous provisions that would weaken existing law. For example:

- *It would allow ten-year industrial discharge permits (from the present five), a real slap in the face to well-meaning industries that have already met pollution requirements. At the same time, states are required to meet stream upgrading guidelines - in some cases an impossibility if dischargers are allowed to continue at the old limits.
- *Allows electroplaters at least an additional year to clean up toxic discharges - even though they have had almost 5 years to comply. (And many have - which again brings up the fairness question.)
- *Allows reopened, unreclaimed mines to avoid pollution controls currently required under the Clean Water Act and the Surface Mining Control and Reclamation Act.
- *Delays deadlines for tightening controls at "toxic hotspots." (Again rewarding polluters who have defied the law.)
- *It would remove requirements that all firms remove (or pretreat) conventional pollutants in their wastewater before discharging it into a municipal sewage treatment system.
- *Allows collector sewers to be once again eligible for federal funding. (This provision was ended in 1981, because construction of collector sewers has frequently served to stimulate development into prime farmland, or stimulate development and urban sprawl, rather than correct existing wastewater problems.)
- *Specifically exempts two Alaska pulp mills from EPA's request that they meet "best practicable control technology (BPT) for effluent limitations. This is a real "pork barrel" bailout aimed at only two companies.
- *The bill authorizes nearly \$2.2 billion for new programs over the next five years, many of which are very desirable and could produce real improvements in the nations water quality if they were adequately funded. Unfortunately, similar existing programs have not received adequate funds from Congress and it seems unlikely, what with the deficit, that these would be either.

It is the contention of the environmentalists that we would be better off with no bill at all, than to pass the present one. Rep. James Oberstar and Rep. Vin Weber (we know about these two - there may be others in the MN delegation) are pledged to work for the amendment of the present bill, or to see it defeated. Action is expected in the House before the first of July. (The Clean Water Act Reauthorization bill in the Senate is fairly acceptable - particularly when compared to the House bill. It is similar to the original "Howard" or House bill.)

WHAT TO DO: Please write or call your MCs and suggest they support the amendments to be offered by Oberstar and Weber. If the amendments fail, urge defeat of the bill. Clean Water has bipartisan support!

Please fill out the following questions for the city or cities in your membership area. All data will be compiled and returned to you for background information for a meeting on water resources. Mail questionnaire to; Barb Maher, 217 Viola, Mankato MN. 56001 by Dec. 20th.

1. What is the source of your municipal water supply?
2. How is your water treated before it reaches the resident or industry?
3. What is the per capita residential water use? Please include population and year.
population _____ year _____ per capita use _____
4. What is the volume of industrial-commercial water use?
_____ gallons of water for _____ (year)
5. What is the present unit cost for residential water?
6. Does the city staff foresee any water shortages in the next 10 years? If so, how are they addressing the problem.
7. Have there been any contamination problems with the water in your area? Please explain.
8. List any special water concerns your League or community has.

This is not going on DPM
November 4, 1983

Approved League Agreement on the
Midwest Interstate Low-level Radioactive Waste Compact

The League of Women Voters within the eleven eligible midwestern states supports the proposed Midwest Low-level Radioactive Waste Compact while raising eight concerns that should be addressed. The proposed compact provides a framework for the cooperative management and sound disposal of low-level wastes (LLW) generated by the affected states. The compact should establish a process designed to ensure safe management and disposal of regional LLW in a manner which protects public health and the environment.

The League recognizes that the Midwest Compact is not a perfect document. It is the product of a difficult negotiation process. The compromises it contains were made to meet state concerns and were based on available information. Changes may be proposed which would not unduly delay full ratification and implementation, but would provide for a safer, more effective means of achieving environmentally sound management and disposal of LLW.

The League has identified some areas of concern within the proposed Midwest Compact. These include:

1. Improving public participation opportunities on all levels of the decision-making process. Adequate funding should be provided.
2. Permitting the Compact Commission to fund R & D on LLW Management technology, while recognizing that the lead responsibility rests with the federal government.
3. Providing that the Compact Commission aggressively pursue waste reducing policies.
4. Providing that management of LLW be accomplished in an environmentally sound manner taking into account economic and social impacts and with the aim of minimizing shallow land burial.
5. Providing a uniform system of liability that is equitable and adequate to ensure that sufficient funds will be available for clean-up and compensation during operation and after closure.
6. Clarifying the process by which a host state is selected with consideration for establishment of incentives to host state(s).
7. Clarifying the inconsistencies in the compact provisions whereby a state may withdraw from a compact.
8. Establishing a process to amend the Compact.

TO CONTAINER CONSERVATION COALITION MEMBERS AND SUPPORTERS: Following is an article that can be carried in your newsletters or other publications to members. If you would prefer to write your own, and need information, please contact Jeanne Crampton at (612)926-8760, or 4330 Wooddale Ave. S. St. Louis Park, MN. 55424.

HOW TO ANSWER ARGUMENTS OPPOSING CONTAINER DEPOSIT LAWS

"Now is the time to talk to legislators about a container deposit law," urged Rep. Kathleen Vellenga and Senator Eric Petty. "Right now, legislators have the time to give reasonable attention to an issue, but after the session begins, reflective time drops to zero." Petty and Vellenga, chief authors of the deposit bill filed during last session remarked that the labor and industry opposition have paid lobbyists who are at the Capitol daily—to counter that opposition, we need cards, letters, calls, and personal visits from constituents who are interested in reducing the waste stream to our landfills.

How to answer the opposition's arguments? Following are some examples:

- 1) "We're recycling so much now, we don't need a deposit law."
Aluminum cans are being recycled in the Metro area, depending on the source of information, at a rate of between 35 to 50 percent. In most non-urban areas of the state, cans go to the dump. Glass and plastic fall far below those figures, in any area. Glass is recycled at 4 percent or less, plastic at less than 1 percent. The opposition is quoting an 85 percent recovery figure. Ask for a breakdown on those figures! ("Selective statistics.")
- 2) "Jobs will be lost if a deposit law passes, particularly in the glass industry."
Why? Two hearings were held this fall on the deposit bill, and that argument was advanced at both, but in neither case were those testifying able to document a specific, unrefutable example. The glass industry is going to lose jobs—but because of enthusiastic consumer acceptance of the plastic container. (See the attached sheet). Rather, jobs will be gained in the areas of transportation, retail handling, and recycling.
- 3) "I'd vote for a law that was comprehensive; one that includes wine, liquor, milk, bottles, paper litter, etc."
Great! We'd love to see all those things recovered too, and if enough of the Legislature feels that way to pass such a bill, we're all for it. However, there is such a thing as "killing with kindness,"—which, by adding the liquor and dairy lobby to our opposition, it might do. We think a simple deposit bill on beverage containers is passable, and can point the way to bigger things. (Iowa, incidently, does have a return on wine and liquor bottles—but those items are sold only in state-owned stores there.) We think citizens will become more recycling minded once a deposit law passes. (And there is a comprehensive bill already filed that would dovetail with S.F.741 and H.F. 682.)
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150

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- 4) "Small retailers will be hurt by having all those dirty containers around, and no place for storage."
The law proposed for Minnesota allows any retailer or redeemer to refuse any container that is in an unsanitary condition. Checks of states that already have deposit laws reveal no sanitary problems in storage areas. Redeemers will receive compensation for each container they handle, and the proposed law allows the establishment of redemption centers. (Retailers discover in a hurry, however, that people returning containers often stay to purchase goods!) One thing that is not often mentioned is that once a deposit law is passed, beverage distributors vie with one another to service retailers in setting up a redemption process, quite often simply coming in and establishing the whole process at no cost to the retailer. (Miller Brewing has a pamphlet that essentially says to the retailer, "Relax---we don't like deposit laws, but we can function very well when they are in place, this is what you do....etc.")

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Before You Discard That Soda Can, You Might Look for This Machine

By PAUL A. ENGELMAYER

Staff Reporter of THE WALL STREET JOURNAL

The way the world has worked for years and years, one put his money in a vending machine and a can of soda popped out.

But that's changing. With a new contraption, one puts the can in the machine, and money pops out.

The new machine looks like an ordinary soft drink vending machine. It takes an empty can, crushes it, and returns either a nickel or a penny, depending on the location. When a machine reaches its capacity of 1,

000 machines a year, and that competitors are planning to enter the market.

Renting one of the devices costs \$4,750 a year. Most customers are retailers worried that they'll be deluged with returned soft-drink cans. As the machine crushes the cans, it can help save space. Besides, retailers usually get about a half-penny per crushed can from a recycling operation, and some get two cents if they help ship the cans to the recycler.

And then there's the promotion angle: Some of the machines print discount coupons for products in the store when cans are

Minneapolis Tribune
Sunday, October 23, 1983

Study says 75 pct. of world's trash is not being recycled

Associated Press

Washington, D.C.

Despite decade-old pleas to recycle trash, three-fourths of the world's paper, aluminum and steel is still being thrown away instead of reused, according to a recently released study.

"This rate could be doubled or tripled for each material, but steps must be taken to increase collections of recycled materials and develop additional markets," the report said.

Japan, the Netherlands and Mexico now recycle half the paper they use, compared with 26 percent in the



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The Plastic Bottle Reporter

Published By: Plastic Bottle Information Bureau

PET Beverage Bottle's Market Share Tops 20% Five Years After Debuting

Only five years after its introduction, the plastic soft drink bottle by 1982 was the container of choice for 21.4 percent of all packaged soft drink gallonage purchased nationally, according to figures compiled by the National Soft Drink Association.

In the same five-year span, the gallonage of soft drinks in New York City had more than 50 percent in plastic bottles and, in New York State, nearly 30 percent.

The rapid growth in consumer preference for soft drinks in polyethylene terephthalate (PET) plastic bottles has not been slowed by deposit laws. The curve continues upward in both deposit and nondeposit states.

While deposit laws make the purchase of beverages inconvenient and more expensive for consumers, many apparently feel that the plastic bottle's light weight and break-resistance make it an easier container to return for refund than heavier glass bottles.

Another influencing factor in deposit states is the amount of beverage versus the amount of deposit. Depending on the state, consumers pay a five or ten-cent deposit for a two-liter plastic bottle, compared with 30 to 60-cents deposit for a six-pack of 12-ounce cans or glass bottles. The two-liter bottle contains only 4.4 fewer ounces of beverage than the six-pack.

In Massachusetts, a deposit state, most bottlers now are supplying soft drinks only in cans and plastic bottles. In the Boston area, soft drinks are almost entirely in plastic bottles or cans. A major New England supermarket chain, Stop and Shop, carries soft drinks only in cans and plastic bottles in deposit states.

In New York City, under the New York deposit law which became effective September 12, a similar pattern to the Boston experience may develop. One metropolitan bottler has switched mostly to cans and plastic bottles, others may follow suit, and some grocery chains are stocking soft drinks only in plastic bottles or cans.

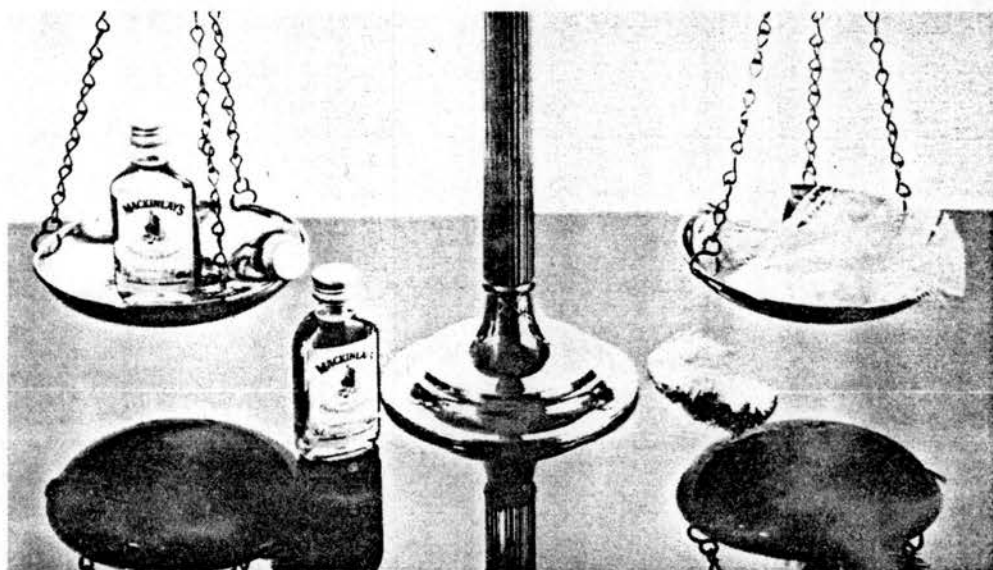
The new half-liter PET soft drink bottle is expected to gain more widespread use in the coming months. Soft drinks in half-liter PET bottles are on store shelves in Massachusetts, and some beverage is now in New York City in half-liter PET bottles, with more brands expected to appear this fall. More carbonated beverages also are expected to be packaged in the one-liter PET bottle in both deposit and nondeposit states.

Airline Switch To Plastic Liquor Bottles Will Trim Fuel Costs

The British are coming, not by land or by sea, but by air, carrying aboard Boeing 747s liquor packaged in miniature plastic bottles instead of glass bottles. British Airways is the first carrier to switch to the new-sized PET (polyethylene terephthalate) bottle, initially for Scotch whiskey. The distiller, Scottish and Newcastle Breweries, reports that three years of testing show no difference in taste or quality between plastic and glass bottles.

The airline told **The Plastic Bottle Reporter** that switching a 747's entire normal flight complement of 1,000 miniature bottles of liquor from glass to plastic will save about \$25,000 per year for each of the airline's 26 jumbo jets used on transatlantic flights.

The miniature plastic bottle weighs only nine grams, or 600 percent less than a typical 63-gram miniature glass bottle. British Airways estimates that



Feather weight miniature plastic liquor bottles, substituted for glass bottles, will save \$25,000 in fuel costs per year for each of its 747 jumbo jets used on transatlantic flights, according to British Airways.

every pound of weight reduction on a 747 saves about \$82 (current exchange) per year in fuel.

In addition to carrying the miniature PET liquor bottle for in-flight drinks, British Airways also will offer, for passenger purchase, duty-free liquor pack-

aged in half-liter plastic bottles, another first. Overseas airlines usually carry about 100 of these small bottles of liquor on board the aircraft. In plastic bottles instead of glass, this represents a further saving in fuel over a year's time.

How Do Companies Benefit By Packaging In Plastic Bottles?

The reasons why consumers select products packaged in plastic bottles are well documented — light weight, won't break, easy to transport and handle.

The Plastic Bottle Reporter asked a sampling of companies what special benefits they derived by packaging their products in plastic bottles.

- A major cooking oil producer reports that 20 percent more product per truckload can be shipped with the oil packaged in plastic instead of glass bottles. Since there virtually is no breakage with plastic bottles, the company says that it also saves in the amount of corrugated packing required for shipping and storage.
- Production Manager Gary Martin, LaPaz Products, says that plastic bottles for their Quick Way brand cocktail mix "has reduced breakage and provided freight savings, too." He points out that a case of cocktail mix in plastic bottles weighs 14 pounds less than a comparable case in glass bottles. That, Martin says, means that the firm can ship 33.3 percent more product per truckload. LaPaz also gains 40 percent more warehousing space per

pallet load. Production time is speeded up, too, Martin says. "With breakage eliminated on the filling line, no longer is time wasted to stop the machinery to clean up."

- The additional product which can be shipped per truckload is even greater for Suntime Products, now that the firm packages its lemon juice in plastic bottles. Vice President and General Manager Robert Held says that 37.5 percent more product is shipped per truck than was possible when the product was in glass bottles.

"Our customers like the economic advantages of plastics, too," said Held, referring to retail grocery customers. "We cut down on freight in shipping to the customer's warehouse, and, in turn, they save in transporting the product to their individual stores."

- LaPaz's Martin cited another benefit — noise reduction on the bottling line. "The plastic bottles are so quiet that people in the front office can never be sure whether the line is running or shut down. We always knew when the line was running with glass."

Plastic Bottle Reporter is a quarterly report from the PLASTIC BOTTLE INFORMATION BUREAU. The purpose is to provide you with pertinent information on a wide range of subjects relating to plastic bottles.

The Reporter will cover recycling activities and technology, new plastic bottle applications, and environmental issues impacting on plastic bottles. You also will be alerted to new literature available from the Plastic Bottle Institute and the Plastic Beverage Container Division of The Society of the Plastics Industry, Inc. We welcome your comments and questions, which will help to make **The Reporter** a more valuable communications medium.

Feel free to use any of the material in **The Reporter**. We would appreciate copies or tear sheets if it is used in print.

Address all correspondence to:
Plastic Bottle Information Bureau
Society of the Plastics Industry Inc.
355 Lexington Avenue
New York, NY 10017
Phone: 212/573-9468



To: Local Leagues
From: Jeanne Crampton, N.R. Chair

"FOR YOUR INFORMATION"

On December 9, at the State Capitol, Room 15, 9:00AM to 12:30PM, a hearing will be held by Congressman Sikorski and Waxman on H.R. 3400, The National Acid Deposition Control Act of 1983. The Sikorski-Waxman-Gregg bill provides the framework for House action on acid rain. It controls the two major causes of acid rain, by achieving net reductions of approximately 7-8 million tons of sulfur dioxide, and 4 million tons of nitrogen oxides annually. It does so in a manner that will preserve jobs, and without imposing unreasonable costs on consumers." (From LWVUS testimony on the bill.)

Leaguers are urged to attend the hearing, and to once again indicate to their MC's our strong support for action on the acid rain problem. The LWVMN will testify at the hearing on Dec. 9, if feasible., but will probably submit written testimony to be included in the hearing record. Written testimony can be sent to Rep. Waxman's office, or submitted at the hearing on 12/9--- we urge anyone to do so.

**See note below.

At the November Board meeting, the LWVMN Board agreed to co-sponsor two informational meetings on H.F. 695 and H. H. 1361, along with the bill's author, Rep. Darby Nelson, and, tentatively, the Sierra Club. One of these meetings will be held in Greater Minnesota and one in the twin cities area. The thrust of these bills would accomplish one of the major intents of the League's state and national positions on solid waste---encourage recycling and reduce the waste stream. H.F. 695 is called a "comprehensive resource recovery program," and H.F. 1361 relates to a landfill surcharge. Leaguers should understand that there are portions of both bills that we do not have positions on, and would be unable to support. We are in the process of determining just which parts we can support, and which we would need to remain neutral on.

The meetings will be held near the end of January, in locations yet to be determined. Although the bills have been filed, numerous amendments have been suggested by the author and others, in response to constituent suggestions, and the purpose of the meetings is to further explore whether the components of the bills will do what is expected of them.

League responsibility for the meetings only extends to providing a moderator, and a statement of our support of container deposit legislation, as a component of the entire solid waste reduction picture.

**A call from Rep. Sikorski's office urges 6th district constituents to attend a pre-hearing meeting with Rep. Sikorski on Thursday, Dec. 1, 7:30-9PM, at the Bunker Hill Activity Center, 550 Bunker Lake Blvd. (off Highway 65, north of Coon Rapids) Anyone is welcome. Also, if anyone submits written testimony, Rep. Sikorski would like to see a copy of it, and he urges everyone to send a copy to their own MC.

Meeting Notes
Water Study Committee
July 28, 1983

- I. Sally Sawyer, Executive Director, handed out expense vouchers and explained office procedures. Big point to remember is that all work must be funneled through Sally.
- II. Discussion of topics to be covered by the study - an attempt to focus the study:
 1. Katie Fournier reported on conversations with Jack Dittmore of the Water Planning Board and Christine Olsenius of the Gray Freshwater Foundation about Minnesota's water problems as they see them. Possibilities for study in those conversations included: Financing water protection, inter-basin transfer, effects of water use (stress) on aquifers, education on water conservation (combatting the "water is free" idea), long-term water use planning, sharing of water information among decision-making bodies, roles of various governmental levels in management of water, limiting effects of degraded groundwater, problems of infrastructure (institutional problems) in protecting water.
 2. Barb Akre noted that LWVUS had studies and position on conservation and groundwater protection. Discussion followed in which interest in almost every topic was expressed. Eventually the group decided to begin by identifying the water rights (or responsibilities) situation in Minnesota. Using an outline by Barb Akre the topic was divided as follows:

Historical rights (east-west) - Julie Copeland, Katie Fournier
International rights - Joan Peterson
Federal rights (interstate) - Lois Mann, who will also check on Red River problems
Minnesota - Teresa Clark
Local - Barb Maher, Mabel Spear

In addition Joan Delich volunteered to do a glossary for the Minnesota VOTER.
 3. Goals discussion: In discussing the committee's involvement with the March FOCUS meeting, the group decided to change the topic of the meeting from water diversion to water rights, with diversion as a subtopic. If possible, a Facts and Issues publication would be prepared to accompany that meeting (hence the initial research focus on rights). This publication would probably be more facts than issues with an issues publication to follow later.

A lot of questions about the final study publication or publications and schedule were left for further discussion.
 4. Other suggestions: a.) get some basic information to members about water in the VOTER, perhaps by means of a water quiz; b.) ask local Leagues for copies of any water studies they may have done the last five years; c.) VOTER article inviting more participants for next VOTER (Katie Fournier will do; d.) need for representation from western Minnesota.
- III. Organizational decisions: The group will continue to meet from 4-8 p.m. on weeknights, with members arriving as soon as they can. A speaker will be invited to the next two or three meetings.

Testimony presented to the
Joint House and Senate Hearing on Mandatory Beverage Container Deposits
Re HF 683, SF 741
by Nancy Grimsby, Natural Resources Co-Chair
League of Women Voters of Minnesota
September 22, 1983

The League of Women Voters of Minnesota supports the passage of Container Deposit bills SF 741 and HF 683. LWVMN along with our national League, has supported deposit legislation since 1973, when we adopted our position that calls for a reduction in the amount of solid waste needing disposal.

In the past several years, partially as a response to threatened deposit laws, the beverage and container industries have increased their efforts to extend voluntary recycling of containers - and we applaud those efforts. Industry reports a range of figures about the return rates they are presently achieving, with aluminum cans making the best showing - possibly close to a 50% return rate in the Twin Cities area. Glass and plastic returns are far less and redemption in Greater Minnesota is spotty at best. The fact remains that the return of containers in deposit states achieves a return rate of 85-95% of all varieties of containers - glass, metal or plastic. That rate of retrieval can be achieved in less than a year's time with the passage of a deposit law.

At the time these present bills were introduced last spring, the LWVMN held a news conference and announced that a deposit law in Minnesota would increase jobs in several areas, such as recycling, transport and food retailing. Although the economy is supposedly recovering, employment figures are not increasing at a similar rate, and we still have areas in this state suffering from a 15-20% unemployment rate. Why, instead of artificial jobs programs designed to last only months, don't we seriously consider passing a deposit law and creating jobs in the areas mentioned above? The State of Michigan picked up over 4,000 jobs when their deposit law went into effect. Labor organizations complain that such jobs are minimum wage, and we agree that for the most part they are, although not all by any means, particularly those in the transport field. But they are real jobs, and they are on-going. We are

convinced that with a guaranteed return of recyclable material, markets and industries would be developed for using these materials. This has already occurred in states that have had deposit laws for several years.

At a hearing in Duluth on August 15th, the Can Manufacturers Institute passed out a flyer entitled, "Forced Container Deposit Laws Cost Consumers." This flyer contained scare statements about increases in the price of beer and soft drinks in states that have adopted container deposit laws. The flyer also included quotations from three newspapers. Maine, Michigan, Connecticut and Iowa are all cited as having had increases in either beer and soft drinks, or both. Brands are not identified, so there is no easy way to substantiate those statements. We have no intention of insisting that a deposit law can be established with absolutely no rise in price. (We happen to think it's possible, but not probable, given industries' stance.) What we do say is that any price increase should be fairly minimal (in the range of 12-15¢ per six-pack for either beer or soft drinks), and that we think consumers are ready to consider such a price increase as a cost of package retrieval. Consumers are beginning to realize that when they purchase a beverage, in most cases the package is costing them more than the product inside. We think they are also beginning to realize that internalizing the cost of retrieval of that container costs less in the long run than paying for its disposal (as waste or litter) somewhere down the line. One thing to keep in mind when the industry talks about huge price increases is that in every case, beer prices rose (substantially in some cases, such as Michigan) more than soft drinks. Why? Faced with precisely the same problem (container retrieval), why was the soft drink industry able to practice economies that evidently escaped the beer people? The Monsma Committee of the Michigan State Senate was unable, after investigation, to establish why beer prices rose. Following is a quotation from the New York Report on deposit laws entitled, "Mandatory Deposit Legislation: Benefits and Costs for New York," which reveals what the Monsma Committee did find:

"A major advertising war, which saw Miller Beer climb from #3 to #1 in the Michigan market, took place at great expense.

Retail margins on beer have shown a larger increase than can be attributed to handling charges alone.

...(they) discovered that local, non-premium beers, which did not compete with the 'price leader' (Miller), did not increase in price to the same extent as the premium beers."

We have copies of two ads from a Massachusetts' liquor store, "before and after"

the deposit law took effect and we think you will find them interesting. We are also including a copy of an editorial, "Cheaper in Vermont," from the Valley News, which serves White River Jct., Vermont and Lebanon/Hanover, N.H., and three pages of representative soft drink ads clipped from grocery ads in an area of the northwest lower peninsula of Michigan within the past month. Take them with you when you shop and compare prices. We don't think threats of price increases (which can become a reality whenever the industry sees fit) should be allowed to hold a deposit law hostage. There is no indication in states presently with deposit laws that the rules of product competition and supply and demand don't continue to operate. The deposit itself is just that - it is returned to the consumer when the empty container is redeemed. And in case the consumer heaves it out an automobile window, a littering fee has been paid by that person, and a more responsible citizen right behind will pick the container up and return it for the deposit.

Unemployment, as we mentioned earlier is not a specter to be brushed lightly aside, least of all by the League of Women Voters and the other members of the Container Conservation Coalition. There has been no widespread loss of jobs in any state that had adopted a deposit law. There have been jobs lost that were attributed to deposit laws by the industry, but in some cases that interpretation was open to question. Following are a few comments from the New York Report previously mentioned, in a chapter entitled "The Jobs Impact of Mandatory Deposit Legislation", which was included in the packet committee members received in May:

"The experience of other states indicates that job losses have not been as severe as originally predicted, and further indicates that deposit laws may have been used as a scapegoat for general industry trends, particularly production declines due to other causes.

-In Michigan, the National Can Company closed a plant in Livonia, with a loss of 75 jobs 'as a direct result of the deposit law'. However, Stroh's Brewery had decided to produce its own cans instead of purchasing them from National, and opened a modernized competing facility in Fremont, Ohio. A contract loss cannot be attributed to the deposit law...

-At the Glass Container Corporation in Dayville, Conn., according to the New York Times, 700 workers lost their jobs because of the deposit law. In fact, the 700 were only laid off temporarily over two holiday weekends. Temporary lay-offs are not uncommon in the glass industry...

-In Massachusetts, where the deposit law controversy...raged for years,

the American Can Company threatened to close its Needham plant in 1975 if such legislation were passed. The legislation failed. The plant closed the following month." (Mass. passed their law in 1982.)

The report goes on to discuss the fact that free market choices have contributed to declines in glass or metal container industries, as the plastic bottle becomes more and more popular, for instance. Trying to sort out fact from fiction when it comes to deciding whether a deposit law caused a particular job to be lost is not an easy question.

We would like to acknowledge that the persons most effected by a deposit law are retailers who act as container redeemers. The proposed law lessens the burden on retailers by providing for the establishment of redemption centers. However, whether the individual retailers are aware of it or not, help from the beverage industry is just around the corner. Although they don't advertise the fact prior to the enactment of a deposit law, once a law is established, the industry moves in quickly to assure their customers in the retail businesses that all will be well, deposit law or no. They stand ready to help retail establishments plan and execute container sorting and handling procedures, advise on costs (which, according to some of the material we have seen, is less than that quoted at legislative hearings) and in some cases, actually take over the container handling processes.

The question of cleanliness in container handling areas always seems to come up - why we aren't sure, since that question seems to be one for which there is no basis in fact. None of the states presently administering the law have any record of sanitation problems. The proposed Minnesota law would permit a redeemer to refuse an unclean container.

Last October Colorado held a referendum on container deposits, and it was turned down, partially in response to a heavily financed "anti" campaign. The retail grocers associations leaned heavily on the inability of retail establishments to provide for redemption and storage of containers without extensive and costly remodeling. Five months after the turn-down of the referendum, the "King Soopers" (similar to our PDQ) took out a full-page ad to urge their customers to voluntarily bring in all their empty beverage containers. They would redeem each one, glass, plastic or metal, for 1¢ each. At that price the store is subsidizing the glass and plastic. What was impossible in November, was in April, in one chain of stores at least, presumed to be a customer drawing card!

Nine states now have deposit laws. New York's law began final implementa-

Testimony, Joint House and Senate Hearing on Mandatory Beverage Container Deposits
by Nancy Grimsby, September 22, 1983 (page 5)

tion on September 12th. Citizens of deposit states are convinced that they are
desirable and environmentally beneficial. Two states, Maine and Massachusetts,
have actually voted to retain their laws a second time, after opponents forced
a reconsideration. Let's make Minnesota number ten.

STATEMENT PRESENTED TO THE
LEGISLATIVE COMMISSION ON WASTE MANAGEMENT,
IN SUPPORT OF THE ENVIRONMENTAL RESPONSE AND
LIABILITY ACT, H.F. 76,
BY JEANNE CRAMPTON, NATURAL RESOURCES CO-CHAIR
LEAGUE OF WOMEN VOTERS OF MINNESOTA
FEBRUARY 1, 1983

The League of Women Voters of Minnesota supported efforts at the federal level to establish the "Superfund" and we favored the passage of the Legislature's hazardous waste cleanup bill during 1982. If there is imminent danger to the environment or to human welfare, the state needs the power and the financial resources to contain and recover or neutralize spilled or dumped hazardous substances, and to then be reimbursed by those responsible for the improper handling. The League of Women Voters supports the strict liability concept but recognizes the need to protect by certain exemptions those persons or entities who may, through no fault or intention of their own, be involved in illegal hazardous waste disposal. We feel H.F. 76 adequately addresses that situation.

H.F. 76 is an attempt to solve a recognized problem in this state. We urge your support.

Testimony presented to the
Senate Agriculture and Natural Resources Committee
in support of the Environmental Response and Liability Act, SF 220,
by Jeanne Crampton, Natural Resources Co-Chair,
League of Women Voters of Minnesota
February 15, 1983

The League of Women Voters of Minnesota supported efforts at the federal level to establish the "Superfund" and we favored the passage of the Legislature's hazardous waste cleanup bill during 1982. If there is imminent danger to the environment or to human welfare, the state needs the power and the financial resources to contain and recover or neutralize spilled or dumped hazardous substances, and to then be reimbursed by those responsible for the improper handling. The League of Women Voters supports the strict liability concept "...strictly liable, jointly and severally..." but recognizes the need to protect by certain exemptions those persons or entities who may, through no fault or intention of their own, be involved in illegal hazardous waste disposal. We feel SF 220 adequately addresses that situation.

We need the guidelines and system that this Act would establish to cope with hazardous waste sites that have occurred already, whether by thoughtlessness, negligence, stupidity or outright illegal actions. The number of such sites recognized in Minnesota grows each year and it is imperative that the state establish legal authority to respond to such disclosures and to cleanup releases or accidents in the future.

Further, we need to establish a fund that could be used for the 10% state match required by the federal "Superfund" law as a condition for receiving federal cleanup money.

We urge your support for SF 220.

Testimony presented to the
House Environment and Natural Resources Committee
in support of the Environmental Response and Liability Act, HF 76,
by Katie Fournier,
League of Women Voters of Minnesota
February 17, 1983

The League of Women Voters of Minnesota supported efforts at the federal level to establish the "Superfund" and we favored the passage of the Legislature's hazardous waste cleanup bill during 1982. If there is imminent danger to the environment or to human welfare, the state needs the power and the financial resources to contain and recover or neutralize spilled or dumped hazardous substances, and to then be reimbursed by those responsible for the improper handling. The League of Women Voters supports the strict liability concept "...strictly liable, jointly and severally..." but recognizes the need to protect by certain exemptions those persons or entities who may, through no fault or intention of their own, be involved in illegal hazardous waste disposal. We feel HF 76 adequately addresses that situation.

We need the guidelines and system that this Act would establish to cope with hazardous waste sites that have occurred already, whether by thoughtlessness, negligence, stupidity or outright illegal actions. The number of such sites recognized in Minnesota grows each year and it is imperative that the state establish legal authority to respond to such disclosures and to cleanup releases or accidents in the future.

Further, we need to establish a fund that could be used for the 10% state match required by the federal "Superfund" law as a condition for receiving federal cleanup money.

We urge your support for HF 76.



**LEAGUE OF WOMEN VOTERS
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UPDATE ON NATURAL RESOURCES

June 1, 1983

CONTAINER DEPOSIT LEGISLATION: HF 683 and SF 741 will probably receive interim hearings, but whether that will be in the summer or the fall or winter is uncertain at this point. At the same time, hearings will be heard on a range of recycling issues, including Rep. Darby Nelson's comprehensive recycling/solid waste bill. Final determination will be made during the 1984 session of the legislature, which looks like a short one. (March 6th to April 20th is the present plan.)

As you know, support for deposit legislation has been a position long held at the national League level and one on which LWVMN has worked for at least 10 years, off and on. A survey conducted by LWVMN two years ago showed that a majority of local Leagues were still interested and wished to pursue adoption of a deposit law by Minnesota. After overcoming some initial stumbling blocks (loss of an author, delay in writing the bills) LWVMN is now the proud stepparent to HF 683 and SF 741, which would institute a 5¢ deposit on all non-refillable pop and beer containers in Minnesota. While passage of the bills in this session was always considered unlikely, we had hoped for committee hearings. However, delay until the next session does give us the opportunity to arouse even more citizen support and educate legislators to the benefits of deposit laws. The CONTAINER CONSERVATION COALITION has been formed by the League and has already started the laborious process of education. Some of the feedback that we have had from local Leagues indicates that information is badly needed, particularly in two areas: Deposit laws do not automatically cause job loss, even in container industries. States that have such laws have gained jobs in several areas. Secondly, deposit laws do not cause a loss of recycling programs. Again, states that have deposit laws have discovered that recycling programs usually benefit. Recyclers discover that the guaranteed amounts of material returned under a deposit law allow them to contract for long-range markets and purchase capital-intensive handling equipment. The general public becomes much more conscious of the benefits of recycling reuse. The largest recycling programs in Minnesota are run by the soft drink industry, in direct response to earlier threats of deposit legislation. The League is very willing to support a comprehensive recycling approach to solid waste problems in Minnesota but we sincerely believe that deposit legislation needs to be a part of it simply because it can do, for the entire state, in one or two year's time, what it will take voluntary recycling five to ten years time to do. (Mandatory recycling, such as the program in St. Cloud is another answer but we think passing a statewide law to that effect would be even harder than passage of a deposit law. Container deposit is not the entire answer by any means but it is a place to start!)

WHAT DO WE DO NOW? Now is the time to work at gaining support in our own communities, making sure that legislators are aware of that support. It seems redundant to make a lot of suggestions here - local Leagues have been achieving support for their positions for years, in a multitude of ways. New petition forms (reflecting the actualities of the bill) are forthcoming. The ones already signed are valid, so no work has been lost and we think clever Leaguers will be able to get the word out in lots of other ways. Why not start with a letter to the editor in your local paper? In case you may not have noticed, deposit laws are very popular with the general public, as opposed to some other topics we've addressed this year. Give us a call if this issue is one you'd like to spend a little more time on. What about a weekend clean-up of local roadsides and waterways - with a count of containers?

WATER DIVERSION: In March, 1984, LWVNM will present a Focus Meeting on Great Lakes Water Diversion, and water diversion generally, and will issue a "Facts and Issues" type of publication at the same time. In addition, water diversion and ground water issues are one of the five non-recommended items for program adoption this year at Convention. (Water rights and uses adopted as LWVNM study on 6/4/83 by Convention delegates.) Diversion is becoming a very hot item - nationwide as well as in states contiguous to the Great Lakes. Missouri League of Women Voters has already done a lot of study and some action, with other states in the Missouri River Basin, on diversion of water from the Missouri River. If Diversion should become a state study item, there is no question but that it would be a timely topic. The Lake Michigan Inter-League Organization (Leagues of Wisconsin, Illinois, Indiana and Michigan) is studying diversion this year and plans a two-day conference on the topic next October 14 and 15, at the Zion State Park in Illinois. While many people ridicule the idea that water-poor western states might ever try to obtain water from the Great Lakes, one such proposal has already been made, although it remains just a suggestion. The Powder River Coal Company made an initial proposal for a "loop" coal slurry pipeline from Montana to Wisconsin, using water from Lake Superior. They have dropped that idea, because of the cost, but are now discussing a straight pipe that would terminate in Duluth, leaving the area with billions of gallons of dirty water which would need disposal. (And the unanswered question of where Montana is going to get the necessary water.) The big question is: Where do the legal right lie? Does the federal government or the states have the right to approve diversions or transfer of inter-basin water? (At the moment, legal precedence seems to favor the federal government.)

ACID RAIN: This is an item that isn't going to go away very soon. Canada is becoming increasingly upset over the United States' "it needs more study" response. Leagues need to be aware of the problem; what it is, what causes it and what Minnesota is doing about it. We are the only state in the nation with an Acid Deposition Act. The Minnesota Pollution Control Agency has just completed its initial study of acid-sensitive waters and soils in the state and will be moving into the second phase the act calls for: development of a plan or plans for emission reduction in the sensitive areas. There are a number of good films and slide shows on this topic - great for membership or general meetings or just a good way to meet the public. (The Canadian films, such as "Requiem or Recovery," have proved to be great attention-getters since the federal administration labeled them "propaganda" and caused a disclaimer to be attached! Nothing like an "X" rating!) Incidentally, in answer to a question I received from a Leaguer a while back, LWVNM does take action in favor of acid rain component reduction, under the national Clean Air position. Each League recently received, in one of the third class mailings, a copy of an Izaak Walton League publication entitled, "The Only Fish That Thrives in Acid Rain--Red Herring--Myths and Facts about Acid Rain." These flyers are available in reasonable numbers free from Izaak Walton and are attractive and informative. Watch "Report From the Hill" and national LWVUS publications for information too.

HAZARDOUS WASTE FACILITY SITING: The League position supports the siting of such a facility in a safe manner, and it was hoped that the process mandated by the Legislature in the 1980 Waste Act would achieve that. Now that the Waste Management Board is coming down to the wire on making an initial selection of four sites, it is apparent that the process, heavily weighted in favor of citizen involvement, may suffer the fate of previous programs, and the whole thing may still end up in the courts. We urge Leagues in areas that might be selected to try and keep on top of the pros and cons of such selection and to be well-informed on the physical properties of any site selected in their area. See page 46 of Impact on Issues - 1982-84 for criteria on site selection or call us for help.

GROUND WATER PROTECTION: LWVUS has just produced a "Groundwater Kit," result of a grant from the William and Flora Hewlett Foundation. The state has received one copy. (We can reproduce it for sale for \$5.00.) It is approximately 31 pages long, including bibliography, with chapter heading of "Pollution, Use and Overuse, Management Options, Regional Conditions, Key Questions and Resources." Also, there are two new groups in Minnesota interested in ground water problems. The first is, "Minnesota Ground Water Association," P.O. Box 3362, St. Paul, MN 55165. They have a newsletter and seem to have approximately 95 members at present but I have no information about dues, etc. If you are interested, drop them a line and inquire about becoming a member or at least getting the newsletter. The other group goes by the acronym of MIST, Minnesotans for Improvement of Sewage Treatment, described as a group of volunteer environmental activists. Their concern is somewhat narrower than the other group. They are concerned about federal cutbacks in funding for sewage treatment in Minnesota. The effects of such cutbacks are wide-ranging: lessened ground water testing, communities unable to afford sewage treatment or unable to afford the systems they have, as well as increased pollution in ground and surface waters. Write or call: Harriet Lykken, 4600 Emerson Avenue S., Minneapolis, 55409, (612) 827-3402.

LOW-LEVEL RADIOACTIVE WASTE DISPOSAL: Another great topic, somewhat akin to hazardous waste. In 1980, Congress passed PL 96-573, which said: 1) Each state is responsible for the commercial LLRW generated within its borders; 2) Regional disposal sites are the most safe and efficient option; 3) States may enter into compacts to establish and operate regional disposal sites; 4) Compacts must be consented to by Congress. If a state is going to enter into a regional compact, the decision must be made by July, 1983. Minnesota has passed a law making it an eligible voting member of the Midwest Interstate Low-Level Radioactive Waste Compact. Eligible party states, besides Minnesota are: North Dakota, South Dakota, Iowa, Missouri, Illinois, Wisconsin, Michigan, Indiana, Ohio, Kentucky, Virginia, Delaware and Maryland. Minnesota was also eligible to enter a compact known as the "Central State Compact," but to those eligible, the Midwest Compact had one outstandingly attractive feature: The State of Illinois is eligible for Midwest and the overt thinking is that, "Of course Illinois will be the site for the disposal facility." Now exactly why this appears to be a given isn't exactly clear. True, Illinois already has waste sites of diverse types but exactly why they might want more is a bit vague. I have talked to my NR counterpart in Illinois (Judy Beck) and she tells me that the Illinois Governor and Legislature have not yet made a firm decision on whether to join any compact. As of May 10th, Illinois bills to join the Midwest compact had moved out of committee to the House floor. The Illinois LWV was recommending that the bill not be passed until it was amended to address the concerns of shared liability and citizen participation. Rep. Phyllis Kahn, House author of the Compact bill here, felt the Minnesota bill was a good one and adequately protected the state and its citizens. (The Compact language is the same in all states but each state can also pass additional language to address concerns of a purely state interest.) More on this later, as the ramifications of the bill that was passed become available.