

APPENDIX XI

DEC Responses to Public Comment
on the Draft EIS on
Proposed Policy on Contaminants in Fish.

INDEX OF ISSUES AND COMMENTS

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1. ISSUE: Regulatory authority for taking actions involving chemically contaminated fish and commercial fisheries.

Positions:

1. Chemical contamination of fish is not disease in fish as specified in the Environmental Conservation Law (ECL) 11-0325.
United Fishermen's Association of New York State, Inc.
East Hampton Town Baymen's Association, Inc.
2. The Department is prejudging U.S. Food and Drug Administration and NYS Department of Agriculture and Markets response to fish contamination.
United Fishermen's Association of New York State, Inc.
East Hampton Town Baymen's Association, Inc.
3. The Department is attempting to circumvent legal statutes.
United Fishermen's Association of New York State, Inc.
East Hampton Town Baymen's Association, Inc.
4. "[C]ertification can be made only when a disease is certified to present a threat to human health."
United Fishermen's Association of New York State, Inc.
East Hampton Town Baymen's Association, Inc.
5. Impact studies are required prior to taking an action affecting commercial fishermen.
United Fishermen's Association of New York State, Inc.
East Hampton Town Baymen's Association, Inc.
6. Conflict of interest exists when the Department is charged with managing and promoting fisheries and also assuring public well-being.
Natural Resources Defense Council, Inc.
Environmental Planning Lobby
United Fishermen's Association of New York State, Inc.
East Hampton Town Baymen's Association, Inc.

Discussion:

Appendix II of the Draft Environmental Impact Statement (DEIS) provides the specific language of the Department's legal authority to control dangerous disease. Page 6 of the DEIS states that the Department has taken the actions appropriately following the required certification from either the Department of Health or Department of Agriculture and Markets. Human health consideration is but one aspect of the law.

Disease is a term with a broad meaning. As found in Webster's unbridged dictionary, disease is:

"an impairment of the normal state of the living animal or plant body or of any of its components that interrupts or modifies the performance of the vital functions, being a response to environmental factors (as malnutrition, industrial hazards, or climate), to specific infective agents (as worms, bacteria, or viruses), to inherent defects of the organism (as various genetic anomalies), or to combinations of these factors".

This Department and the Department of Health has historically considered chemical contaminants as disease causing agents. With respect to fish for human consumption this action dates back to the finding of mercury in fish during the period 1969-71. The presence of chemicals on or in foods has been the basis for federal law and regulations (and concurrently state responsibility) since enactment of the Federal Food, Drug and Cosmetic Act of 1938 (and as amended periodically including the Miller Pesticides Amendment of 1954 which established the ability to set tolerances for pesticides in or on food). A brief discussion of actual or potential impacts of specific chemicals on humans and/or other surrogate organisms is provided in Appendix III of the DEIS.

The DEIS provides a generalized approach to measuring potential impacts of the proposed policy on fisheries and associated industries. Specific impacts, where considered significant, must be addressed in regulatory impact statements and other required evaluations of a proposed action. These statements are available from the Department at the time of the proposed regulatory action is published in the State Register.

The Departments of Health and Agriculture and Markets use federal tolerances and action levels unless more restrictive formal guidelines are adopted. While federal law applies to foods, including fish in interstate commerce, the state applies these limitations to intrastate commerce. Thus the actions taken based on these chemical limits are consistent. The Department of Environmental Conservation's response, upon certification, only transfers the location of enforcement from the marketplace to the producer, thus regulating the contaminated fish at its source.

Response:

The Department, has not and will not attempt to circumvent its legal mandates. However, the policy statement is modified to specifically make reference to those mandates. The Department has appropriately responded to chemical contaminants situations involving commercial fisheries when they have occurred.

With respect to conflict of interest allegations, it is recognized that the Department does have conflicting responsibilities which are explicitly outlined in ECL (sections 1-0101 and 3-0301). It is also noted that ECL provides for a weighing of considerations including social, economic and environmental concerns (section 8-0103). The proposed policy has attempted to provide such balancing of factors in its derivation.

2. ISSUE: Imposition of "catch and release" regulations on recreational fisheries containing elevated levels of chemical contaminants.

Response:

The issue of "catch-and-release" fishing in contaminated waters was a major element at several hearings. The EIS has been modified (pages 30-32) to incorporate a discussion of the topic and rationale for not accepting catch-and-release regulations as a viable alternative.

3. ISSUE: Standards for judging when a fishery is contaminated. This issue includes definition of an adequate sample size, methods for collection and analyses of data, and standards against which contaminant levels are measured.

Positions:

1. There is inadequate definition of the standards to be used.

NYS Department of State
NYS Legislative Commission on Water Resource Needs of
Long Island

2. There are no demonstrated human health effects caused by consumption of fish which contain chemical contaminants.

United Fishermen's Association of New York State, Inc.
East Hampton Town Baymen's Association, Inc.

3. There is an inadequate basis for evaluating human health threat posed by contaminated fish.

United Fishermen's Association of New York State, Inc.
East Hampton Town Baymen's Association, Inc.

4. Use of the 95% certainty guideline is arbitrary and imposes guidelines more restrictive than FDA standards for reopening a fishery.

East Hampton Town Baymen's Association, Inc.
United Fishermen's Association of New York State, Inc.

5. Use of the 95% certainty guideline is unnecessary and arbitrary when contaminant levels exceed a guideline.

East Hampton Town Baymen's Association, Inc.

6. The standards applied to fisheries are more stringent than those applied to other commodities such as beef, poultry and dairy products.

United Fishermen's Association of New York State, Inc.
East Hampton Town Baymen's Association, Inc.

Response:

The allegation that a demonstrated human health effect from consumption of contaminated fish must be present is unfortunate. It purports that human death or other serious disease must be diagnosed as due to this source of exposure before an action is to be taken. This goes far beyond what is or would be considered acceptable public exposure to a toxicant, particularly where a toxicant's effects may require a long interval of time to become evident. It is basic to food and drug law (as upheld by court challenges) that health authorities are not required to establish that a poisonous or deleterious substance will affect public health but only that those substances may affect public health. The activities are designed to prevent disease before they occur. Appendix III of the DEIS presents information showing either an effect on human health due to exposure to several toxic substances mentioned or a potential to affect human health based on results of animal studies. Based on these types of information and other scientifically derived information, health authorities have the responsibility to establish appropriate human health guidelines for protection of public health.

Polychlorinated biphenyls are transported across the human placenta to the unborn child and via maternal milk to nursing children (Jacobson et. al, 1984a; Ando et. al, 1985). With respect to consumption of fish, Jacobson et. al (1984b) showed that infants of women consuming PCB contaminated fish tended to have reduced birthweight and/or be born early, demonstrate greater amounts of startle response, were more abnormally weak (hypoactive) and showed motor response immaturity. These findings suggest a link between consumption of PCB contaminated fish and human health effects.

The standards to be used for evaluating chemical contaminants in fish are those of the U.S. Food and Drug Administration or where more restrictive, the limits formally established by the NYS Department of Health or Agriculture and Markets. The current limits are included as Table 8. A statement to these effects is included in the policy statement.

For fish or any other commodity in interstate commerce, FDA can, will and does seize and condemn a product lot or shipment based on analyses of one or more samples where a contaminant exceeds a tolerance. The tolerances used are absolute thus eliminating the need for judgement in enforcement at the market place.

New York believes, that due to the vagaries of sampling, judgement must be a factor when examining contaminants in environmental samples such as fish. Use of 95% certainty factors or confidence limits are standard techniques for statistical evaluation of data. However, an inequality of fisheries treatment arises due to the method and policy as originally proposed based on prior contaminant history (Figure 3).

A fishery with a history of closure (population 4 above) would remain closed when fisheries with comparable contaminant levels (populations 2 and 3 above) would remain open. This is undesirable thus a modification of policy has been adopted to eliminate this inconsistency and to provide greater flexibility and consideration of existing regulations.

"Chemical Contamination of Commercial Fisheries

- a. Chemical contamination of fisheries will be evaluated using guidelines formally adopted or established by USFDA, DAM, or DOH. Preparation of fish and analytical methodology will be consistent with or comparable to that used by USFDA.
- b. Statistical analysis and interpretation of data will be based on analytical results for legally marketable fish, or a strong rationale will be provided if concentrations in other fish are considered.
- c. Commercial fishing will be closed if the fishery is found to exceed the guidelines specified in 3.a. above. Appropriate statistical analysis will be conducted to identify when such a guideline has been exceeded. Such an action will require:
 - i. consultation with DOH and DAM;
 - ii. certification as required by ECL 11-0325.1;
 - iii. consideration of alternatives partial closures if justified by the data; and
 - iv. assessment of economic impacts and other pertinent factors necessary for the development of a regulatory impact statement.
- d. A commercial fishery closed because of chemical contamination will be reopened when appropriate statistical analysis demonstrates that these guidelines are no longer exceeded. Such an action will require:

- i. consultation with DOH and DAM;
- ii. certification by DOH or DAM that conditions requiring the closure are no longer met;
- iii. consideration of alternatives including partial reopening if justified by the data; and
- iv. assessment of economic impacts and other pertinent factors necessary for the development of a regulatory impact statement."

The FDA guidelines for fish are much more lenient than similar guidelines for other commodities such as poultry, beef, pork and milk (Table 8). Since most of the compounds listed in Table 8 are fat soluble, the most logical application of the standard is to fat contained in the consumer product. Based on Environmental Protection Agency calculations, for DDT and dieldrin an estimated 99 and 94 percent, respectively, of the human intake of these contaminants originate from consumption of fish (David DeVault, EPA, Chicago, personal communication). It is anticipated that similar human intake patterns would be associated with the remaining chemicals in Table 8.

Reference Cited

- Ando, M., H. Saito, and I. Wakisaka. 1985. Transfer of polychlorinated biphenyls (PCBs) to newborn infants through the placenta and mothers' milk, Arch. Environ. Contam. Toxicol. 14: 51-57.
- Jacobson, J.L., G.G. Fein, S.W. Jacobson, P.M. Schwartz, and J.K. Dowler. 1984a. The transfer of polychlorinated biphenyls (PCBs) across the human placenta and into maternal milk. Am. J. Public Hlth. 74(4): 378-379.
- Jacobson, J.L., S.W. Jacobson, G.G. Fein, P.M. Schwartz, and J.K. Dowler. 1984b. Prenatal exposure to an environmental toxin: A test of the multiple effects model. Developmental Psychology 20(4): 523-532.

Figure 3: Comparison of population treatments based on originally proposed contaminants policy.

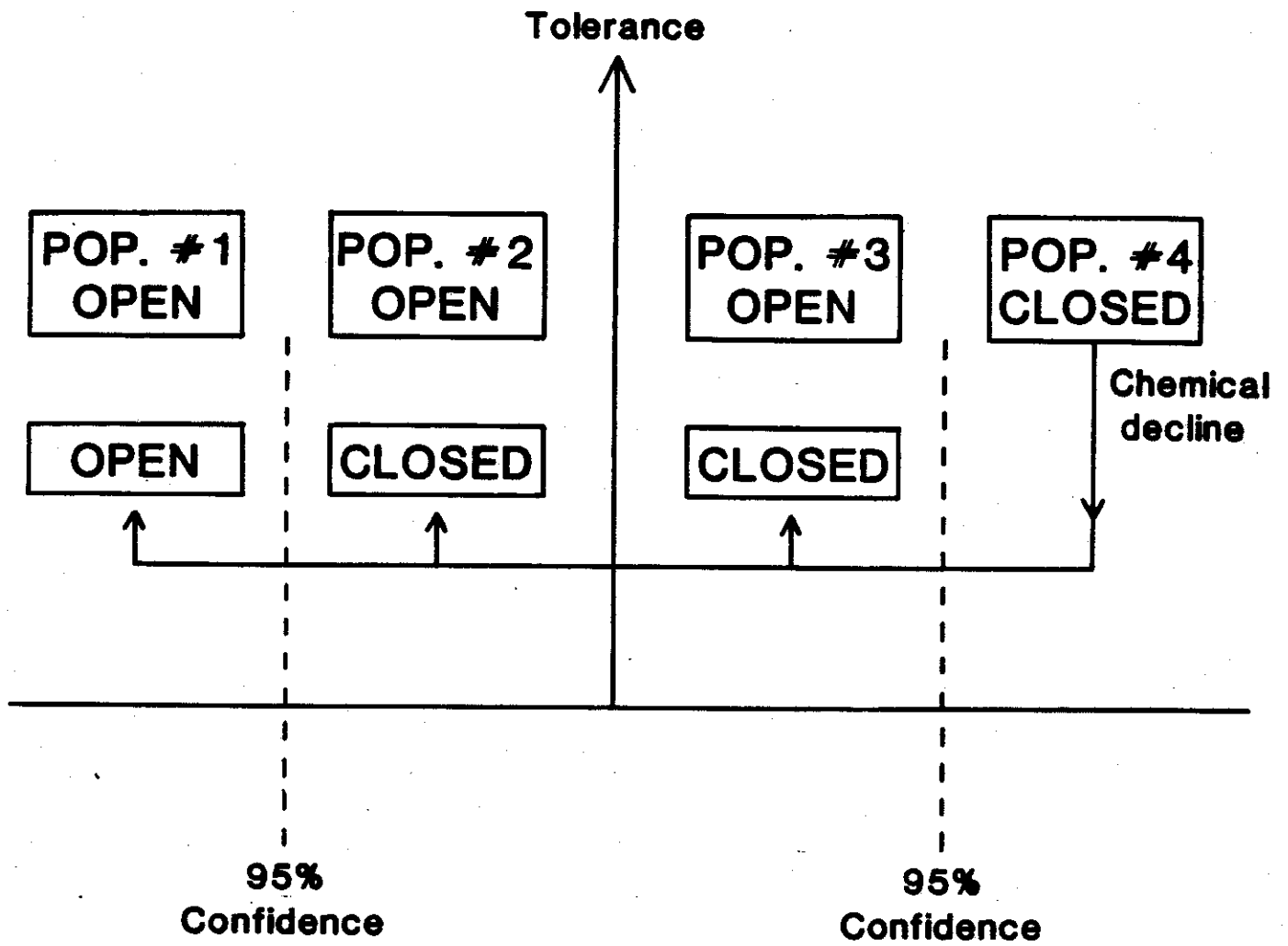


Table 8: Comparative allowable levels of chemical contaminants in fish, poultry, beef, pork, and milk.

Chemical	Concentration in parts per million				
	Fish		Poultry	Beef & Pork	Milk
	Wet Weight Basis	Fat* Basis	(fat basis)	(fat basis)	(fat basis)
PCB	2.0	40	3.0	5.0	1.5
DDT & metabolites	5.0	100	5.0	5.0	0.05
Chlordane	0.3	6	0.3	0.1	-
Aldrin & Dieldrin	0.3	6	0.3	0.3	0.2
Toxaphene	5.0	100	7.0	7.0	0.05
Mirex	0.1	2	0.1	0.1	0.1
Heptachlor & HE	0.3	6	0.3	0.3	0.3
Endrin	0.3	6	0.3	0.3	0.3
2, 4-D	1.0	20	0.05	0.2	0.1
Simazine	12.0	240	0.02	0.02	0.02
Lindane	-	-	4.0	0.03	0.2

* Allowable levels assuming 5.0% fat for fish. FDA regulations for poultry, beef and pork are based on fat concentrations of most contaminants. For fish, regulations is based on edible flesh which is not comparable to other animal products. Therefore, existing wet weight (edible flesh) allowable levels were converted to a fat basis to obtain comparability with other animal products listed.

4. ISSUE: Data disclosure

Position:

The Department has omitted or refused to disclose data relevant to the contaminants policy. This position stated by:

People Against Chlordane
 United Fishermen's Association of New York State, Inc.
 East Hampton Town Baymen's Association, Inc.

Response:

The Department has a large amount of chemical contaminants data for fish which amounts to about four file cabinets full. The data is available to the public in summary fashion in a variety of reports and scientific publications. A knowledge of the data base is implicit in the considerations entering into the formulation of policy. However, a data summary for a policy addendum is thought to be too voluminous for meaningful information sharing with the general public. However, on an

individual water or for several waters, information can be made available upon request. Based on Department experience, most members of the public desire information on a very general basis (e.g. health advisories) rather than specific data.

5. ISSUE: Adequate samples

Position:

The term "adequate sample" needs definition.

NYS Department of State

Response:

The term "adequate sample" is a relative term which is dependent on the water and the fishery being sampled and the contaminant being analyzed. One can readily appreciate that a small waterbody or a species in limited numbers will require much less sampling and analysis than large waters or significant fisheries such as Lake Ontario or striped bass in marine waters. Similarly, collections must be moderated by analytical cost and time considerations. For instance, the Department can conduct more PCB analyses than dioxin analyses for the same cost since the following costs (therefore time and difficulty of analyses) apply:

<u>Chemicals</u>	<u>Approximate Cost/sample</u>
PCB	\$100
Dioxin	\$1,000 to \$2,500

Therefore, professional judgment becomes a factor in determining if a sample is adequate.

6. ISSUE: Lack of opportunity to respond to the draft environmental impact statement.

Position stated by:

United Fishermen's Association of New York State, Inc.
East Hampton Town Baymen's Association, Inc.

Response

According to the Department's records, these organizations were sent the draft EIS at the same time as the approximately 1200 other members on the mailing list. The mailing occurred approximately four weeks prior to public hearing and seven weeks prior to the final closure of the hearing record on March 20, 1985.

7. ISSUE: Striped bass size regulations.

Position:

The Department should permit capture and sale of striped bass in the 18" to 24" size range in the marine district. This is due to lower contaminant levels in this size fish.

United Fishermen's Association of New York State, Inc.
East Hampton Town Baymen's Association, Inc.

Response:

This matter is not pertinent to the development of policy on contaminants in fish. The question may have relevance in the implementation of policy. However, in any event, the current size limit for marine striped bass is 24 inches.

8. ISSUE: Public health emergencies

Positions:

1. The definition of "public health emergency" is not provided.

New York State Legislative Commission on
Water Resources Needs of Long Island
Westchester County Department of Health

2. The Department of Environmental Conservation should not defer to the Department of Health for declarations of public health emergencies.

Natural Resources Defence Council, Inc.
Environmental Planning Lobby

Response:

The term "public health emergency" has been eliminated. The policy has been modified as follows:

"DEC will not prohibit recreational fishing as a consequence of chemical contamination unless the Commissioner of Health certifies in writing that a condition exists that dictates the need for such an action".

The Department of Environmental Conservation lacks the legal authority to make such a designation. That authority is vested with the Department of Health.

9. ISSUE: Posting of waters with restrictive health advisories on fish consumption.

Discussion:

A number of organizations and individuals (see ISSUE 23) expressed the opinion that posting is a necessary action when reopening waters closed to fishing due to chemical contaminants. Two organizations expressed the opinion that any water with a restrictive health advisory should be posted.

They were: New York Chapter of Trout Unlimited
NYS Legislative Commission on Water
Resource Needs of Long Island.

Other organizations stated greater consideration should be given posting including:

Westchester County Department of Health
Natural Resources Defense Council, Inc.
Environmental Planning Lobby

In addition, a number of organizations and individuals recognized the need for consistency of regulation which would apply to this issue as well as others.

The alternative policies for posting waters containing chemically contaminated fish are outlined on page 63 of the DEIS.

Table 9 provides an estimate of the total shoreline mileage that may require posting based on posting of any water with an "eat none" health advisory or any water with an advisory as restrictive or more restrictive than one meal per month. If only Onondaga Lake and the Hudson River between Troy Dam and Fort Edward plus other waters for which an "eat none" advisory were issued for all species were to be posted, then approximately 117 miles of shoreline would be affected. However, the latter alternative would lack consistency and equality of treatment of the public. This is due to lack of posting of other waters containing fish having the "eat none" advisory

Another alternative, posting only waters closed or formerly closed to fishing would currently affect 105 miles of shoreline. It is recognized that a form of on-site notification is necessary for waters reopened to fishing to assure that the public does not misinterpret the fishing regulations change. Such notification would be appropriate for a period of two to three years to imbue the appropriate message. Thereafter, continued inclusion, as necessary, in normal publications would provide the public's notification.

The last alternative - not posting any waters - is the current position of the Department. However, this position would be abandoned if posting would occur on waters that are closed to fishing or reopened to fishing.

Response:

In recognition of the need to properly inform the public that no substantive change has occurred relative to chemical contaminant levels in fish which would permit consumption of these chemically contaminated fish, and the need to apply contaminants policy in a uniform manner, the Department will adopt posting of Onondaga Lake and the Hudson River between Fort Edward and the Troy Dam. This policy will be applied to any water closed to fishing due to chemical contaminants or subsequently reopened to fishing. In the latter case, posting would be instituted for a defined period of time of two to three years at which time future posting would be terminated. Notification of the public via various printed media will continue to occur, where appropriate.

Table 9: Shoreline mileage of waters affected by health advisories for chemically contaminated fish.

<u>Water</u>	<u>Shoreline Mileage*</u>		<u>Total</u>
	<u>Eat None Advisory</u>	<u>1 Meal/Month Advisory</u>	
<u>Marine District</u>			
Region 1	900	450	1350
Region 2	200	-	200
Subtotal	1100	450	1550
<u>Freshwaters</u>			
Canadice Lake	7	-	7
Canandaigua Lake	-	36	36
Fourth Lake	10	-	10
Hoosic River	-	63	63
Hudson River	385	300	385
Keuka Lake	-	58	58
Kinderhook Lake	-	7	7
Lake Ontario	356	356	356
Mohawk River	45	-	45
Niagara River	48	14	48
Onondaga Lake	11	-	11
St. Lawrence	-	27	27
Sawmill River	-	10	10
Schroon Lake	-	25	25
Sheldrake River	-	20	20
Stillwater Reservoir	-	48	48
Other small waters	20	11	25
Subtotal freshwater	882	973	1181
Total	1982	1423	2731

* Excludes tributaries and islands (except major islands) but includes both shorelines of rivers (except St. Lawrence and Niagara Rivers).

10. ISSUE: The basis for evaluating public health risk and the fisheries restrictions which may result should be based on scientific evidence rather than response to public perception or pressure.

Position adopted by: NYS Department of State
NYS Legislative Commission on Water
Resource Needs of Long Island
Natural Resources Defense Council, Inc.
Environmental Planning Lobby
People Against Chlordane

Response:

The Department agrees that to the extent possible, scientific evidence should be the measure for evaluating public health risks due to exposure to chemical contaminants. It is our understanding that the Department of Health does weigh health risks but it (as well as DEC) must be cognizant of existing federal regulations also. Federal tolerances and action levels for chemicals in fish or other food products reflect a weighing of health risks, economics, analytical capabilities and other factors. Therefore, the limits established are not solely based on scientific evidence. Similarly, the Department of Environmental Conservation must weigh factors other than scientific evidence in its decision-making. Environmental Conservation Law section 8-0103, paragraph 7 states:

"It is the intent of the legislature that the protection and enhancement of the environment, human and community resources shall be given appropriate weight with social and economic considerations in public policy. Social economic, and environmental factors shall be considered together in reaching decisions on proposed activities."

11. ISSUE: Toxicology, human health and health risks.

Positions:

1. The Department has inappropriately questioned the use of toxicological studies on animals which are used as the basis for assessment of potential human health effects. Position adopted by:

Natural Resources Defense Council, Inc.
Environmental Planning Lobby
People Against Chlordane
Hudson River Sloop Clearwater, Inc.
New York State Legislative Commission on Water Resource
Needs of Long Island

2. The Department should conduct an in-depth review of the health risks of consuming contaminated fish.

New York Department of State

3. The Departments of Environmental Conservation and Health cannot properly justify exposing any persons to carcinogens on the basis of purported economic or recreational benefits.
Position adopted by:

People Against Chlordane

Responses:

The Department did not intend to imply that they questioned extrapolation of human health effects from studies on animals. We agree that the only acceptable means of assessing chemical carcinogenicity or other chemical effects on humans is through exposure of surrogate organisms. However, the relative degree of assurance and reliability of the data will be less certain than similar exposure to the human organism since by their very nature the surrogates are non-human and may respond somewhat differently than man.

The Department of Health by law is delegated the responsibility of assessing potential human health risks posed by consuming contaminated fish which is appropriately their responsibility. The cooperative efforts of DEC and DOH provide a means of sharing pertinent information on contaminants in fish and their potential impacts on humans.

A number of the chemical compounds analyzed in fish are admittedly suspect human carcinogens. However, exposure to these compounds is permitted by the very existence of tolerances or actionable levels for these compounds as established by the U.S. Food and Drug Administration. Scientific evidence, economic considerations and other factors do play a role in the establishment of these limits. The important factor which must be considered by the Department of Health is what level of additional risk to the fish consuming public is thought to be excessive. In those instances where risk is excessive then restrictive actions must be taken (e.g. advisories, closures, etc.).

12. ISSUE: Voluntary versus involuntary risks.

Positions:

1. The comparison of human health effects caused by consumption of contaminated fish versus smoking or drinking alcohol is at best arbitrary and should not be used as a basis for policy.
2. Health risk ranking should not be the province of the Department.

Natural Resources Defense Council, Inc.
Environmental Planning Lobby

Discussion:

The concepts of voluntary and involuntary risks are briefly described in the EIS on pages 7-9. By definition then:

- Voluntary risks are risks which a person accepts voluntarily to subject themselves to (e.g. smoking, driving).
- Involuntary risks are risks over which an individual has no control over exposure or of which the individual cannot be aware (e.g. disease, catastrophic events).

Examples of these two types of risks and the associated risk of death is provided in Table 10. Government will cause the reduction of risk when taking voluntary risks in the event that those risks are considered too great (e.g. seat belt law). Government informs people about the risks and they may cause reduction of risk through imposition of safety standards where practical. Government regulates commodities where the public is unaware of risk, e.g. contaminants in food in the marketplace. In addition, government sponsors research and development for discovering causes of illness and methods for their control.

The types of risk assumed by the public through consumption of fish are no different than other risks. People in the marketplace purchasing fish are unaware of any chemical contaminant levels those fish may contain albeit the chemical concentrations are purportedly below tolerances (involuntary risk). Conversely, people fishing in contaminated waters, where they have been informed, knowingly are exposing themselves to risk (voluntary risk) if they subsequently consume the fish caught. Further, they knowingly are exposing other consumers of their catch and are willing to assume the associated risk. The key becomes public information in the case of recreational fisheries.

Table 10: The risk of death associated with various voluntary and involuntary risks.

<u>Type of Risk</u>	<u>Risk of Death in NYS</u> <u>Chances per lifetime per million</u>
<u>Voluntary:</u>	
Smoking - 1 pack per day	40,000
- 1 cigarette per day	2,000
Motor vehicle accident*	17,500
Drowning	2,300
Air travel - all types	700
- commercial aircraft	5
<u>Involuntary:</u>	
Cardiovascular disease	270,000
Cancer**	140,000
Stroke	50,000
Pneumonia	20,000
Lightning	35
Hurricane	28
Diphtheria	≤ 5
Acute polio	≤ 5
Rubella (German measles)	≤ 5

* Risk of injury in a lifetime due to motor vehicle accidents is over 100% based on 1978 data.

** Cancer induced by the voluntary risk of smoking is included.

Source: Kim, N.K., and D.W. Stone. 1980. Organic Chemicals and Drinking water. NYS Dept. of Health, Albany, New York 132 p.

Response:

The classification of risks due to consumption potentially contaminated or contaminated fish into voluntary and involuntary risks based on mode of acquisition can be made. The concepts of these risks is applied as the basis of regulation of food in commerce and may be applied to fish harvested from the wild by recreational fishermen. However, the mechanisms for controlled use are broader for recreational fisheries and require evaluation by the regulating agency on a case by case basis within constraints as outlined in the DEIS. Consistency of regulation is the desired norm.

The Department has not attempted to rank risk other than to note that the risk is minimized through the process of enforcement of certain standards of quality and purity of the fish product to be consumed.

13. ISSUE: Proper samples and proper methods for preparation and analyses of fish samples for chemical contaminants.

Position:

1. The numbers of fish analyzed in each sample are not representative of the population of fish.

United Fishermen's Association of New York State, Inc.
East Hampton Town Baymen's Association, Inc.

2. The Department has taken improper samples of fish for analyses.
3. Improper methods of sample preparation are used by the Department for fish analyses.
4. The Department may use methods of analyses inconsistent with U.S. Food and Drug Administration guidelines.

United Fishermen's Association of New York State, Inc.
East Hampton Town Baymen's Association, Inc.

5. The Department used or uses antiquated equipment for chemical analyses.

United Fishermen's Association of New York State, Inc.
East Hampton Town Baymen's Association, Inc.

Discussion:

The Department is engaged in a large fish collection and analyses effort as described in the DEIS on page 17. Sampling ranges from survey work for the Toxic Substances Monitoring Program to intensive monitoring where contaminant problems have been identified (e.g. Hudson River, Lake Ontario, marine striped bass). Samples taken are representative of the fisheries being examined at the time of sampling.

Samples analyzed are normally standard fillets (DEIS page 17). Exceptions occur where the program purpose is not designed for examining relationship to human health, the fish are too small to analyze by standard fillets, or for certain species (e.g. catfish, bullhead, American eel). In the latter case, the skin is removed since people prepare fish with skin off. These practices comply with U.S. Food and Drug Administration (FDA), guidelines for fish sample preparation.

Analytical techniques may be those within FDA's Pesticide Analytical Manual or standard techniques which can be documented to produce comparable results. It is recognized that modern equipment will be more efficient in its operation and will be less subject to malfunction. The age of analytical equipment is irrelevant provided reliable results, as determined by a quality assurance program, are produced.

The Department currently operates two laboratories conducting fish flesh analyses. They are the Coxsackie Analytical Laboratory in Coxsackie, New York and Hale Creek Field Station in Gloversville, New York. In addition, chemical analyses are conducted on a contract basis with Hazleton Laboratories America, Inc. in Madison, Wisconsin. Specialized analyses are conducted by the N.Y.S. Department of Health on limited numbers of samples.

Response:

The Department's sampling and analysis program provides results which are reliable and conform to the standards and requirements of FDA and other authorities. The criticisms levied were unique to the Stony Brook Laboratory. Appropriate methodological changes were made following the criticism (Fred M. Gretch memoranda of May 25, 1977 which was attached to comments by United Fishermen's Association of New York State, Inc.) and were no longer valid thru the time of laboratory closure in 1983.

14. ISSUE: Valuation of New York State recreation and commercial fisheries.

Position:

The economic value of commercial fisheries is not an accurate reflection of the value of fisheries as provided in the DEIS.

East Hampton Town Baymen's Association, Inc.

Response:

The economic value of commercial fisheries (EIS, Table 7) reflects the value of the fish and shellfish in the retail marketplace. The marine values were derived from exvessel (dockside) value reports from the National Marine Fisheries Service. The exvessel values were expanded to marketplace values by use of multipliers for reporting errors by commercial fishermen and for processing, transportation and profit margins for each step between capture and the marketplace. Variability may occur due to under-reporting or year-to-year variations in catch and pricing.

Table 7 estimates were designed to represent values to the consumer either from the marketplace or as the angler takes the fish from water for consumption. Therefore, it is believed the estimates are a fair representation of the fisheries values as they occurred in 1978.

15. ISSUE: Enforcement of regulations on fishing contaminated fisheries.

Position:

1. Enforcement problems are an insufficient reason to permit fishing in contaminated fisheries.

NYS Legislative Commission on Water Resource Needs of Long Island

Scenic Hudson, Inc.

East Hampton Town Baymen's Association, Inc.

United Fishermen's Association of New York State, Inc.

Natural Resources Defense Council, Inc.

Environmental Planning Lobby

2. There is no indication of enforcement effort, if any, that has been taken. Further, no indication of the problems encountered were documented.

Natural Resources Defense Council, Inc.

Environmental Planning Lobby

3. The Department is acceding to freshwater Lawbreakers East Hampton Town Baymen's Association, Inc.
4. The Department should increase Law enforcement efforts rather than seek regulations repeal.

People Against Chlordane

Discussion:

In the Department's decision-making process, enforcement is only one of the considerations that must be addressed. As noted in the DEIS, a number of factors are weighed including:

1. Consistency of decisions
2. Human health considerations as provided by the Department of Health
3. Economic impacts
4. Impacts on the resources being managed
5. Enforcement, if regulations are involved.
6. Public perception and awareness

Enforcement problems by themselves are seldom the basis for changing the Department's position or policy on specific issues. A combination of factors is normally required.

The Department has encountered opposition to enforcement of fisheries closures involving recreational fisheries as described below. Enforcement opposition involving commercial fisheries has not been encountered due to clear Federal guidance and enforcement capability for fish involved in interstate commerce and the adoption by the State of these guidelines for intrastate commerce.

For recreational fisheries, enforcement has had a mixed response as illustrated by experience for individual waters.

1. Hudson River from Fort Edward to the Troy Dam - The 1976 total fisheries closure (no fishing regulation) was enforced by local environmental conservation officers. In presenting the summons to local magistrates in most towns, the charges were dismissed without any prosecution of the case in most instances. This effectively negated effective enforcement of violations. Fortunately, the majority of fishermen respected the regulation. However, violations of the restriction continue without effective enforcement.
2. Lake Ontario - The imposition of no harvest regulations for salmonids and other species in 1976 resulted in a very substantial public outcry against the Department until the regulations were repealed in 1978. The Department shifted a number of enforcement personnel to the area to effectuate enforcement. The effort was

successful and case prosecution was proceeding. As a result of the two Department actions, the local economies suffered substantially as illustrated in the DEIS (page 24). Faced with these impacts, the state legislature threatened withholding or withdrawal of Department funding for enforcement if the enforcement staff in the Lake Ontario area was not reduced to normal levels. The Department complied leaving about one conservation officer per county along Lake Ontario to accomplish enforcement. While enforcement was still accomplished, the effectiveness was substantially muted.

3. Onondaga Lake - The lake was closed to fishing in 1971. We are not knowledgeable of enforcement problems which may have occurred at that time. Since 1974, enforcement has not been a significant problem since the public generally recognizes the contaminant situation as being a serious concern.

Response:

By experience, the Department is aware that enforcement must be a substantial component of any regulation if the regulation is to be effective in obtaining the desired result. In at least two instances above, enforcement efforts of the Department on recreational fisheries closed due to contaminants were effectively negated by actions originating outside the agency. This demonstrates a lack of support of these particular Department actions which were basically the only recreational fishery closures due to contaminants that have ever been imposed.

While enforcement of regulations have been a problem, they are but one reason out of several for considering permitting fishing in contaminated fisheries. Other reasons for permitting fishing, including consistency of management of fisheries, have been discussed in the DEIS.

16. ISSUE: Equality of treatment of different segments of the fish consuming public.

Positions:

1. The policy may provide unequal treatment of the fish eating populace. This position was stated by:

NYS Department of State
Natural Resources Defense Council
Environmental Planning Lobby
United Fishermen's Association of
New York State, Inc.
East Hampton Town Baymen's Association, Inc.

Response:

There are a number of factors which impinge on the decisions and regulatory actions which are taken by the Department. These have been mentioned within the DEIS but they are summarized below and more specifically in Table 11.

1. Differing regulatory responsibility for the regulated fisheries and the affected public.
2. As a result of 1. above differing regulatory framework for a commercial and recreational fisheries.
3. Differing public perceptions about the risk they are willing to assume.

As a result of differences in legal mandates and risks which the public is willing to assume, the response to chemical contamination of the two types of fisheries must necessarily be different. However, within commercial fisheries or recreational fisheries, the Departmental response must be consistent. This policy attempts to provide consistency in decision-making within each type of fishery.

We do not purport that decisions affecting a recreational and/or commercial fishery must be equivalent.

In freshwaters, sale of fish taken by angling is prohibited (Environmental Conservation Law 11-0107.2). In marine waters, sale of fish taken by anglers is permissible without license (except sale of striped bass requires a striped bass permit). These latter sales are considered commercial sales even when the primary purpose of taking the fish is for recreation.

Table 11: Comparison of perceived risks and the legal responsibilities of the Department relevant to chemical contaminants in fish.

Recreational Fisheries	Commercial Fisheries
1. Voluntary exposure to chemical contaminants where public is informed. Involuntary exposure occur where the public is uninformed of risks.	1. Involuntary exposure to chemical contaminants by the public. Also applies to sales of fish by marine recreational anglers.
2. Laws designed for promotion of beneficial use and management of resources while simultaneously assuring consumer well-being.	2. Laws designed for consumer protection. These laws are superimposed on laws to promote beneficial use and management of resources while simultaneously assuring consumer well-being.
3. Mandated to take appropriate measures on taking, possession and transportation of fish where disease is certified to present a potential or actual threat to public health.	3. Mandated actions to restrict commercial sale of adulterated fish (and other commodities).
4. Public notification assumed as a responsibility of the Department.	4. Public notification not required but is practiced.

17. ISSUE: Adequacy of water quality standards to mitigate threats posed by chemical contaminants in fish.

Position:

1. The water quality standards will not fully mitigate public health threats posed by chemical contaminants. This is due to the lag time required for implementation and the period the compounds reside in the environment (e.g. sediments or leachates from disposal areas).

Discussion:

Water quality standards provide a basis for regulating the entrance of waste chemical compounds into the State's waters. It is the program with most direct impact on fisheries although it is recognized that chemicals may enter the water via other routes.

Further, we recognize that once in the aquatic ecosystem, chemicals may reside there for long periods of time. The Department has worked and is continuing to work on these issues separate from this policy formulation.

Response:

The issue is not a matter for consideration in this policy.

18. ISSUE: Adequacy of public information about chemical contaminants in fish.

Positions:

1. Segments of the public are uninformed or ill-informed about the risks of consuming fish from contaminated waters. This opinion was expressed by:

NYS Department of State
NYS Legislative Commission on Water Resource Needs of
Long Island
Scenic Hudson, Inc.
United Fishermen's Association of New York State, Inc.
East Hampton Town Baymen's Association, Inc.
Natural Resources Defense Council, Inc.
Environmental Planning Lobby

Response:

The Department clearly recognizes the need to inform the public of known fish contamination and the risks associated with consumption of those fish (EIS section I.F. on pages 6 and 7). Current methods of informing the public are provided on DEIS pages iii and 31. We recognize certain segments of the population are ill-informed or uninformed about the risks of consuming contaminated fish (EIS page 34). One commitment of the Department is to increase public awareness of these hazards. This will be more explicitly incorporated in the statement of policy (Section I.G.) and appropriate action will be taken. The Department solicits suggestions for means to accomplish appropriate public notice.

19. ISSUE: Fish stocking policy for contaminated waters.

Positions:

1. The issue is not discussed in the policy or draft environmental impact statement and should be addressed.

N.Y.S. Legislative Commission on Water Resource
Needs of Long Island

Response:

Stocking of fish is addressed in The Final Programmatic Environmental Impact Statement on Fish Species Management Activities of the Department of Environmental Conservation's Division of Fish and Wildlife dated June 1980. In that statement, in relation to chemical contaminants, it states:

"DEC will not initiate stocking of an urban water if the Health Department certifies that a significant risk to human health may exist if fish from that water are ingested."

No specific reference was made to other waters of New York State, therefore, it must be inferred that stocking may continue in contaminated waters other than urban waters. As outlined in the FPEIS, the decision to stock contaminated waters will be made on a case by case basis giving due consideration to a variety of factors which are presented in the FPEIS.

Stocking of Pacific salmon was addressed in The Final Environmental Impact Statement on Pacific Salmon Stocking in Lake Ontario (issued April 1981). The statement documents the rationale and decision-making process leading to resumption of salmon stocking in Lake Ontario as ordered by DEC Commissioner Robert Flacke on April 18, 1979.

20. ISSUE: Contaminant elimination from fishes.

Position:

1. Contaminant elimination rates are important variables when evaluating contaminant levels.

United Fishermen's Association of New York State, Inc.
East Hampton Town Baymen's Association, Inc.

Discussion:

Fish establish a relative equilibria with the chemicals to which they are exposed within their environment. Only when fish live in a contaminant free environment, or exposed to an environment with much reduced levels of contaminants compared to previous exposure, can they experience reduction of body burdens of the contaminant. This may be either through depuration and/or dilution by growth.

Contaminants in fish analyzed by the Department represent the chemical concentrations of those contaminants which were present in fish at the time of taking from the environment. They would be the same as those to which the consumer would be exposed. Therefore, the question of contaminant elimination is irrelevant.

Response:

The issue is irrelevant and not pertinent to the policy.

21. ISSUE: Enforcement of restrictions on commercial fisheries which are imposed due to chemical contaminants.

Positions:

1. There is inadequate explanation of how enforcement will be accomplished.

NYS Department of State

2. There is no explanation of how regulations would be applied to uncontaminated fish originating from other states but which are sold in New York State. Conversely, there is inadequate explanation of how contaminated fish in NYS will be regulated.

NYS Department of State
United Fishermen's Association of New York State
East Hampton Town Baymen's Association, Inc.

Response:

The provision of unadulterated foods to the populace is accomplished by both the Federal and State governments. For foods involved in interstate commerce, the mechanisms of Federal enforcement in the marketplace (along with the NYS Department of Agriculture and Markets as an agent) are outlined in the EIS (pages 6 and 7).

For closed commercial fisheries, enforcement by Department environmental conservation officers is effected in the waters where the fish would be taken. The actions include confiscation of catch and equipment, monetary penalty, and possible license revocation.

Where fish species may originate from other states as well as New York, the practice currently being used is a tagging and certification program which must be administered by the State of origin.

22. ISSUE: Public opinion as surveyed or ascertained from specific public groups.

Positions:

1. The 1976-77 angler survey may be a valid reflection of collective ignorance of the public and, therefore, has no other validity.

Natural Resources Defense Council, Inc.
Environmental Planning Lobby

2. The public lacks sufficient knowledge about chemicals to make informed judgement about State policy.

Natural Resources Defense Council, Inc.
Environmental Planning Lobby

3. The 1976-77 angler survey is not a valid reflection of anglers in the marine district.

East Hampton Town Baymen's Association, Inc.

Response:

The 1976-77 angler survey represents the opinions of freshwater anglers on a variety of questions as well as a reflection of angler fishing effort, fishing success and certain demographic factors. The survey is considered a valid reflection of opinion at the time of the survey. It is recognized that due to the survey's age it may not be a true reflection of current attitudes and opinions. However, it is the only survey of such opinions available for New York State.

We do not intend to imply that a survey of freshwater anglers would be representative of marine fisherman. Marine anglers have not been similarly surveyed in New York State.

23. ISSUE: The proposed regulations for reopening closed fisheries on Onondaga Lake, the Hudson River between Fort Edward and the Troy Dam, and the removal of restrictions on possession of American eels in the Hudson, Harlem and East Rivers.

Positions:

1. The following groups and individuals supported the proposal to reopen the fisheries without noting necessity for restrictions.

Ken Petronis, Stillwater Town Justice
Utica Bass Brigade
Thousand Island Bassmasters
Rochester Bassmasters
Janice Bovat, Councilwoman, Town of Schaghticoke
Wayne DeSorbe, Stillwater Town Police
Bill Lipe, Onondaga County Legislator
Robert Ripberger, Syracuse, N.Y.
Mr. Mangicaro, Onondaga County Commissioner of Jurors

2. The following groups and individuals supported the proposal to reopen the fisheries provided posting of appropriate health advisories is undertaken, or adequate notice of advisories is provided.

Onondaga County Environmental Management Council
Donald Feck, Oswego, N.Y.
Central New York Regional Planning and Development Board
Crown City Bassmasters
Capital Area Bassmasters
Helderberg Bassmasters
Albany Area Bassmasters (testimony)
Patrick Sullivan, Liverpool, N.Y.

3. The following groups and organizations support reopening the aforementioned fisheries but with imposition of "catch and release" regulations.

Saratoga County Council of Fish and Game Clubs, Inc.
Stillwater Sportsmen Club
United Mobile Sportfishermen, Inc.
Albany Area Bassmasters (petition)
Neil H. Ringler, Baldwinsville, N.Y.
Rip Van Winkle Bassmasters
Taylor and Vadney Sporting Goods
Town of Stillwater
Village of Stillwater
James Peluso, Mechanicville Commissioner of Finance
Mechanicville Chamber of Commerce

4. The following groups and individuals opposed reopening one or more of the aforementioned fisheries.

East Hampton Town Baymen's Association, Inc.
Linda C. Dittrich, Syracuse, N.Y.
Neil H. Ringler, Baldwinsville, N.Y.
John Zwolak, Camillus, N.Y.
People Against Chlordane
Atlantic States Legal Foundation, Inc.
Hudson River Sloop Clearwater, Inc.
Scenic Hudson, Inc.
Jim Tormey, Onondaga County Legislator

5. The following individual and organization supports allowing fishing but on whatever basis is necessary for public protection.

Robert D'Andrea, NYS Assemblyman
Northern Bass Anglers Associates

Discussion:

Those in favor of reopening fisheries which are currently closed due to chemical contaminants have cited a variety of reasons for their support including: (1) providing additional recreational opportunity; (2) providing an economic stimulus to a local area; (3) providing consistent treatment of waters and fisheries which contain elevated levels of chemical contaminants; and (4) allowing an activity which will provide aesthetic and psychological fulfillment. A number of commentators expressed concern for potential adverse human health consequences of reopening a contaminated fishery, however, they believe that proper posting of health advice and/or permitting only "catch and release" fishing would provide adequate protection of the fishing public and potential fish consumers. The principal theme of these latter proponents is that the public should be informed of the potential risks to which they may be exposed and, if necessary, impose restrictions on possession of fish while retaining the opportunity to enjoy the sport of fishing. This would permit the individual to make an informed choice about taking a risk.

Opponents to reopening recreational fisheries closed due to chemical contaminants also cite a variety of reasons. They include: (1) a false sense of security would be engendered, (2) inadequate information is available to the public about the risks of consuming contaminated fish, (3) public demand is an insufficient reason for opening a fishery, (4) problems with enforcement are insufficient reasons for repeal of regulations, (5) the public will be exposed to added risks if they choose to consume the fish and this is considered unacceptable, (6) clean up of contaminant problem should occur prior to reopening a fishery, (7) no discussion of carcinogenicity was provided for nine compounds known to have carcinogenic potential thus a proper evaluation cannot be made, (8) the action would reduce the momentum for clean up of contaminated fisheries and environments, (9) the draft environmental impact statement fails to comply with the requirements of the state environmental quality review act, (10) the DEIS is written in misleading language, (11) the DEIS selectively deletes information available to DEC, (12) the DEIS minimizes adverse health effects, (13) the DEIS omits evidence of other routes of chemical exposure, (14) the policy would pre-empt FDA action levels for contaminants, and (15) the policy overlooks the DEC mandate to protect human health.

Response:

The proponents positions are generally recognized in the EIS (pages i-iii, 1,7,26,27,29,30,32). The provision of an activity which fulfills the aesthetic and psychological needs of people had not been recognized and is a point well taken.

The opponents rationale are addressed individually and in order presented above:

1. We do not deny that a false sense of security may be engendered in some individuals. However, public notification through a variety of mechanisms will be implemented to assure proper public awareness and minimize any misconception.
2. This point is addressed in ISSUE 18.
3. This point is addressed in ISSUE 10.
4. This point is addressed in ISSUES 15 and 18.
5. With the opening of closed fisheries the public will indeed be exposed to an additional risk. However, since a public health emergency was not declared, if the fishery is opened, the public will have the choice of determining whether the risk is acceptable or not. Peoples attitudes on what is acceptable do vary, thus, it would be presumptuous of state government to prejudge acceptability in the absence of a public health emergency. However, as stated in the EIS (pages 8 and 33) the Department is clearly responsible for informing the public of the risk to which they may be exposed.
6. Clean up of contaminant problem cannot be a pre-requisite to opening any fishery except when the contaminant problem is of such a magnitude that public health could be severely impaired. This event is recognized by imposition of fishery closures. However, where a contaminated fishery is identified, contaminant source identification and appropriate regulatory actions must be taken by the Department to eliminate the identified problem. Progress and success of the actions will continue to be monitored by the several contaminant surveillance programs of the Department.
7. Carcinogenicity is mentioned as a potential effect in brief descriptions of impacts of certain compounds included as Appendix III of the EIS. Carcinogenicity is a pertinent aspect when developing criteria for chemical compounds. However, it was not considered appropriate to enter a discussion of carcinogenicity as part of this proposed policy and its EIS. (See also ISSUE 11).
8. We believe the momentum for clean-up of contaminated environments would be maintained. Indeed, the identification of contaminant problems leads to a systematic response to the problem designed to eliminate or control the contaminant source.
9. We believe the EIS, as modified per response to public review, does meet the requirements of the state environmental quality review act. No specifics were provided to support the allegation.

10. Actions and interpretations made by the Department must be consistent with rules and regulations which are in effect at the time of the action. The example of misleading language, i.e. interpreting 1983 Hudson River striped bass data using the new PCB tolerance effective August 20, 1984, provides a prime example of obfuscation of facts. It is recognized that the structure of an EIS does, at times, make it difficult to ascertain readily all pertinent information. However, there has been no deliberate attempt to mislead the public.

11. The Department has a large volume of chemical contaminants information for fisheries to which the public may have access (over four file cabinets full). No attempt was made to purposely delete pertinent information.

The commentor has cited chlordane and PCB information obtained for Long Island and New York City ponds and lakes in 1977. The then existing PCB tolerance was 5.0 ppm. The FDA action level for chlordane of 0.3 ppm was not established until January 15, 1980. In the absence of a chlordane limit and no clearly excessive PCB concentrations, the Department could take no regulatory action. In addition, the data for 1977 was an analyses of one sample per water body which is generally considered inadequate sample size. Current advisories for these waters are based on more recent data, where available, or will be based on data for recent collections.

12. This point addressed in ISSUE 11.

13. The several routes of exposure to chemicals are regulated separately by the several government agencies, both Federal and State. In the derivation of criteria, health authorities consider the several routes of human exposure thus, limits established should reflect those considerations as well as others. The actions of this Department is a method of implementing the limits established.

14. As described on page 10 of the EIS, the Department of Health establishes human health advisories for recreational fisheries. The Food and Drug Administration action limits or tolerances are intended for foods in interstate commerce only. New York State uses these limits for foods in intrastate commerce. In addition, the Department of Health uses these limits for guidance as one basis for determining human health advisories for recreational fisheries. Therefore, the application of FDA limits to recreational fisheries is an unintended usage of those values from a federal perspective. However, the limits provide a convenient guidepost in state deliberations about chemical contaminants in recreational fisheries. The allegation that the state has pre-empted FDA action levels is false.

15. The allegation that the DEC overlooks its mandate to protect human health is untrue. As stated in the EIS (page i, 6-9) the Department consults with the Department of Health when human health is of concern. The gist of the commentors argument revolves around proper public notification. This latter concern is addressed in ISSUE 18.

In conclusion, it is the opinion of the Department that the closed fisheries of Onondaga Lake be opened to recreational fishing. However, the health advisory to consume no fish from Onondaga Lake should remain in effect. It is further recommended that posting of the advisory be accomplished for onondaga Lake.

For the Hudson River between Fort Edward and Federal Dam at Troy, the Department of Health has determined that a condition, i.e. excessive PCB concentrations, continues to exist which prevents reopening the recreational fishery. No commercial fishery exists in this river segment. Posting of the no fishing recommendation is to be accomplished.

American eel fisheries in the Hudson, Harlem and East Rivers are closed to both commercial and recreational taking. Similarly, commercial harvest of American eel from Lake Ontario is not permitted due to excessive PCB and mirex contamination. The Department of Health must provide a determination on these fisheries with respect to this policy in the near future.

STATE OF NEW YORK
DEPARTMENT OF HEALTH  OFFICE OF PUBLIC HEALTH

CORNING TOWER

THE GOVERNOR NELSON A. ROCKEFELLER EMPIRE STATE PLAZA

ALBANY, N.Y. 12201

DAVID AXELROD, M.D.

Commissioner

LINDA A. RANDOLPH, M.D., M.P.H.

Director

WILLIAM F. LEAVY

Executive Deputy Director

May 10, 1985

RECEIVED

ENVIRONMENTAL PROTECTION

Dr. Edward Horn, Chief
Bureau of Environmental Protection
Department of Environmental Conservation
Room 530
50 Wolf Road
Albany, New York 12223

Dear Dr. Horn:

Either a member of my staff or I attended each of the public hearings on the Draft Environmental Impact Statement (EIS) for Proposed Policy on Contaminants in Fish. After considering the comments on these issues, I would like to make some recommendations.

Although the proposed policy recommends that posting be reserved for waters closed to fishing due to a public health emergency, it does not recommend posting of waters which have restrictive advisories (no consumption or one meal per month). Despite the recognized problems of maintenance, updating, language, etc., posting of restricted waters is an additional means of informing anglers of an advisory. Posting has the distinct advantage of providing information at or near the area where people fish and would alert those individuals, such as unlicensed fisherman, who may not have ready access to or do not recall the health advisory. A posting and information program should be developed even though we recognize that many problems accompany such an endeavor.

The policy states that, "Unless a public health emergency is certified by DOH or DAM as a consequence of contamination of fish, recreational fisheries will not be closed." In the DEIS, the health risks posed by contaminants in fish is contrasted with those posed by microbiological contaminants in shellfish. Although the risks from contaminant exposure do not usually result in acute health effects, chronic health risks could be of sufficient concern, based on an evaluation of the level of risk and the potential adverse health effect being considered, to necessitate closing a recreational fishery. The upper Hudson River (from Troy Dam upstream to Fort Edward and tributaries in this section to first barrier impassable by fish, Mohawk River below Rt. 32 bridge) is an example of a stream which the Department of Health would recommend be kept closed to recreational fishing except in well controlled instances where the consumption advisory can be well publicized.

The policy states that commercial fishing will be closed when the chemical concentration of an adequate sample of fish exceeds established guidelines with 95% certainty and reopened when the contamination is below the guidelines with 95% certainty. Although there is a need to provide a rationale for opening and closing commercial fisheries, the use of a rigid, mathematical construct eliminates professional judgement. In many cases, the interpretation and evaluation of monitoring data do not lend themselves to a strictly mathematical analysis. Certain frequency distributions could reasonably be expected for which the statistical analysis would not meet the proposed criteria, but scientific judgement would necessitate a specific action. The proposed criteria should not be interpreted as absolute, but rather used as a guide leaving some flexibility to allow for scientific judgement.

Please contact me if any questions arise on these comments.

Sincerely,



Nancy K. Kim, Ph.D.
Director
Bureau of Toxic Substance Assessment

cc: Dr. Stasiuk
Dr. Huffaker
Dr. Grey

STATE OF NEW YORK
 DEPARTMENT OF HEALTH  OFFICE OF PUBLIC HEALTH

CORNING TOWER

THE GOVERNOR NELSON A. ROCKEFELLER EMPIRE STATE PLAZA

ALBANY, N.Y. 12237

DAVID AXELROD, M.D.
Commissioner

LINDA A. RANDOLPH, M.D., M.P.H.
Director

WILLIAM F. LEAVY
Executive Deputy Director

June 19, 1985

RECEIVED

Dr. Edward Horn, Chief
 Bureau of Environmental Protection
 NYS Department of Environmental
 Conservation
 50 Wolf Road, Room 530
 Albany, New York 12233

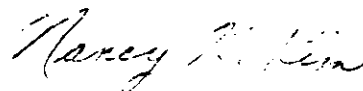
OFFICE OF
 ENVIRONMENTAL PROTECTION

Dear Dr. Horn:

Our recent joint review of chronic health risks associated with the consumption of contaminated fish has provided a useful opportunity to reassess our strategies for limiting any additional accumulation of toxic substances to existing body burdens. While we may have difficulty in quantifying the precise incremental risk of each additional exposure, we remain committed to a public policy that minimizes the potential for such additions.

A review of the most current monitoring data on PCB contamination for Hudson River fish fails to provide any effective rationale for a change in public health policy for the advisory in place for the upper Hudson River. Any change in current restrictions on the taking of fish from that portion of the Hudson River would be interpreted as an indication of some lesser risk than has previously been the case. In view of the accumulated knowledge concerning the toxicity of PCBs and related chemicals, and the continued evidence for median levels of PCBs many times greater than would otherwise be acceptable for interstate commerce, we do not believe that any change in existing recommendations is appropriate.

Sincerely,



Nancy K. Kim, Ph.D.
 Director
 Bureau of Toxic Substance Assessment

STATE OF NEW YORK  DEPARTMENT OF HEALTH
 CORNING TOWER • THE GOVERNOR NELSON A. ROCKEFELLER EMPIRE STATE PLAZA • ALBANY, N.Y. 12237

DAVID AZELROD, M.D.
 Commissioner

July 2, 1985

Dr. Edward Horn
 Chief
 Bureau of Environmental Protection
 Dept. of Environmental Conservation
 Floor 530
 50 Wolf Road
 Albany, New York 12233

Dear *Ed* Horn:

We have reviewed the most recent data available to us on contaminant levels in fish taken from Onondaga Lake. Given average mercury levels not much greater than levels otherwise acceptable for interstate commerce, we do not believe that recreational fishing should be closed. However, the present advisory to refrain from ingesting fish taken from this lake should remain in effect until additional monitoring data become available. Efforts, including posting, should be taken to insure that the public and individuals in high risk categories are aware of the continuing advisory. My staff and I are available to work with you on this matter.

Sincerely,

Nancy K. Kim

Nancy K. Kim, Ph.D.
 Director
 Bureau of Toxic Substance
 Assessment

NK:dm

cc: Dr. Randolph
 Dr. Stasiuk
 Dr. Huffaker
 Dr. Gray

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JUL - 5 1984

ASSISTANT COMMISSIONER