

STATE OF NEW YORK : DEPARTMENT OF ENVIRONMENTAL CONSERVATION
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In the Matter of the Petition of

RICHARD BOOTH, et al.,

For a Declaratory Ruling

DECLARATORY
RULING

24-07

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Questions of law put in issue here the status of aquatic pesticides. Carefully crafted inquiries seek to use the procedures of a petition for a Declaratory Ruling to extend wetlands and water permit authority into the realm of pesticide regulation, while at the same time narrowly construing New York's pesticide regulations so that they would prohibit the application of chemicals in streams for control of a noxious fish species. For the reasons set forth below, the Petition for the ruling is granted and the use of the aquatic pesticides deemed lawful.

It is not the place of the Declaratory Ruling to make value judgments as to whether or not the fish species here is undesirable, either scientifically or aesthetically. Nor can this ruling legislate upon whether or when society should destroy a species interfering with human activities; this ruling cannot opine upon factual issues such as whether or not to bar pesticides near places where people live. Other authorities make these judgments. "Pesticides are useful and necessary in modern society. They are also dangerous. Most labels carry the skull and crossbones and warnings. All of them are, of course, poisonous to some extent; that is their function. The very

dangerous and extremely poisonous pesticides are not distributed to the general public and rarely contaminate the environment." John and Mildred Teal, Life and Death of the Salt Marsh at 217 (1969). The pesticides described herein are used in discrete quantities as part of a carefully designed and monitored scientific experiment to control a widely acknowledged aquatic pest. This ruling is limited to restating the applicability of rules and statutes enforceable by the Department of Environmental Conservation.

On September 2, 1983, Richard Booth, and 22 other residents of Ithaca, Robert Dein, Patricia A. Dekar, Leslie Dingle, Douglas Fowler, Daniel Hoffman, Laura Holmberg, Nancy Jaqua, Mary Kahn, Frank Keil, Kristi Keil, Dooley Kiefer, Libby Leonard, James O'Donnell, Brian Smith, Frank Smithson, Kimberly Snow, Peter M. Cohen, Sally P. Cohen, Martin Harwit, Marianne Harwit, Walter J. Wiggins, Joyce Wiggins, together with three civic associations, Cornell Environmental Law Society, Ecology Action of Tompkins County and the League of Women Voters of Tompkins County ("Petitioners"), petitioned for a Declaratory Ruling pursuant to §204 of the State Administrative Procedure Act ("SAPA") and 6 NYCRR Part 619. They seek to determine the legality of the Department of Environmental Conservation's application of chemicals in tributaries of Cayuga Lake and Seneca Lake to control the population of sea lamprey (Petromyzon marinus), an exotic, parasitic fish introduced to the Lakes originally via the Erie Canal. The sea lamprey victimize the other fishes in the

lakes, particularly salmonids. They affix themselves like leeches to other fish, impairing the fishery and interfering with recreational angling.

Since 1980, the Department of Environmental Conservation ("DEC") has proposed an experimental program to control sea lamprey in the Cayuga Lake and Seneca Lake watersheds with the chemicals 3-trifluoromethyl-4-nitrophenol ("TFM") and 5 percent granular 5,2'-Dichloro-4'-nitrosalicylanilide ("Bayluscide" formerly "Bayer 73"). These lampricides have been chosen for their selective control of the sea lamprey in their larval stage; the larvae largely are found clustered in the beds of streams where TFM is effective, or in small areas of lakes, where Bayluscide is effective. TFM, which is federally registered for lamprey control, was first registered with the Department of Environmental Conservation in 1972 and has been registered for that purpose continuously since that date. Bayluscide is federally registered for sea lamprey larvae surveys and has been registered by this Department for lamprey control since 1982 under a special local needs registration pursuant to 7 U.S.C. §136v(c)(1).

The DEC determined that the proposed application of the lampricides required the preparation of environmental impact statements under the State Environmental Quality Review Act ("SEQRA"), Article 8 of the ECL. In undertaking these applications as scientific experiments, the DEC program staff applied for and was granted by the Commissioner of Environmental

Conservation a permit to apply chemicals for the control of undesirable fish, in accordance with §15-0313(4) of the Environmental Conservation Law ("ECL") and 6 NYCRR Part 323 ("Piscicide Permit," occasionally also termed an "Aquatic Use Permit").

Petitioners present three legal questions with respect to DEC's lampricide applications. They inquire (a) whether DEC Staff should also have obtained a freshwater wetlands permit as provided for in ECL Article 24, (b) whether the Piscicide Permit should have been denied as not in compliance with 6 NYCRR §328.4(b)(4) and as being in violation of §328.4(b)(5), and finally (c) whether DEC Staff should have obtained a State Pollutant Discharge Elimination System ("SPDES") Permit for the lampricide applications under ECL Article 17, Titles 7 and 8.

The factual premise for this Petition is set forth in the record underlying the Piscicide Permit, including the review pursuant to SEQRA. This is not, however, a review of that record. These same Petitioners have commenced an appeal before the Freshwater Wetlands Appeals Board to review the issue of whether or not a Freshwater Wetlands Permit should have been sought on the instant record; Petitioner Libby Leonard has commenced litigation to review part of the actual record, In the Matter of Leonard v. Williams, petition dated September 22, 1982 (Sup.Ct., Tompkins County). These Petitioners also may bring a special proceeding pursuant to Article 78 of the Civil Practice Law and Rules, if they wish to contest the rulings of the law contained in this Declaratory Ruling.

Rather than a review of past agency action, under §204 of SAPA, the three questions presented here determine "the applicability to any person, property, or state of facts" of the statute and regulations which are enforceable by DEC. This statutory authority "permits rulings on any state of facts described by a Petition. Because there is no requirement that the agency determine the accuracy of the facts as stated in the Petition, it follows that an agency may ... issue a declaratory ruling based upon an assumed set of facts ... As with any factually based ruling, however, the binding effect of the ruling will be limited by its assumed fact predicate." In The Matter of PASNY v. NYS DEC, 8 N.Y.2d 427, 461 N.Y.S.2d 769 (1983).

Petitioners have not provided a full and careful detailed description of all relevant facts and circumstances as required by 6 NYCRR §619.1. Rather, they rely upon the environmental impact statements and other documents in the record of DEC's experimental lampricide program. While DEC could exercise its discretion to decline to issue the declaratory ruling sought here, the policies of both SAPA and SEQRA are furthered through clarifying the legal authority under which the lampricide project is proceeding and through enabling both the Department Staff and the public to understand better the provisions of the Environmental Conservation Law which the Petitioners have put in question.

Moreover, under the doctrine of primary jurisdiction, interpretations of the Freshwater Wetlands Act and its

regulations are DEC's initial responsibility. The Freshwater Wetlands Appeals Board, as a quasi-judicial body, or a court, is competent to review how DEC exercises that responsibility. See generally Capital Telephone Co., Inc. v. Pattersonville Telephone Co., Inc., 56 N.Y.2d 11, 451 N.Y.S.2d 11 (1982). The instant Petitioners simultaneously have sought rulings of law on the Freshwater Wetlands Act through a Petition for a Declaratory Ruling, an appeal to the Freshwater Wetlands Appeals Board, and a special proceeding. The Commissioner has requested that the Freshwater Wetlands Appeals Board defer ruling on the merits of that appeal until the General Counsel makes the instant Declaratory Ruling. Booth, et al v. Williams, FWAB-1983-2 (Respondents' Applications Pursuant to 6 NYCRR §647.9, September 12, 1983). As the Court of Appeals has advised, "The doctrine of primary jurisdiction is intended to coordinate the relationship between courts and administrative agencies to the end that divergency of opinion between them not render ineffective the statutes with which both are concerned, and to the extent that the matter before the court is within the agency's specialized field, to make available to the court in rendering its judgment the agency's views concerning not only the factual and technical issues involved but also the scope and meaning of the statute administered by the agency." Capital Telephone v. Pattersonville Telephone, supra.

Accordingly, this Declaratory Ruling should also be issued to advance a coordinated resolution of the Petitioners' questions

by DEC, the Freshwater Wetlands Appeals Board, and ultimately the courts, as well as to further the prompt disposition of the questions for the benefit of the public and the Department's Staff. The assumed factual predicate for this Ruling shall be the Facts contained in the record for the piscicide permit allowing aquatic use of the lampricides. These facts will be briefly restated below as the controlling state of facts which serves as the foundation for this Declaratory Ruling's legal determinations.

I. DESCRIPTION OF ALL RELEVANT FACTS

The record compiled in the decision-making process for the Piscicide Permit and as referenced in Petitioners' request, includes both the Final Environmental Impact Statement (FEIS) by the New York State Department of Environmental Conservation (entitled Use of Lampricides In An Experimental Program To Reduce Sea Lamprey Abundance In Seneca Lake, New York, May 1981) and the FEIS prepared by the Department as a supplement to the May 1981 document (entitled Use of Lampricides To Reduce Sea Lamprey Abundance In Cayuga Lake, New York, June 1983). The record also consists of public hearing transcripts, various official notices published for the benefit of the public, numerous comments by the public with responses from the Department, the SEQR Findings for the FEIS on Seneca Lake (September 1, 1981), the SEQR Findings for the Supplemental FEIS on Cayuga Lake (Identifying Number PM-01 dated July 28, 1983),

and a Final Programmatic Environmental Impact Statement concerning the use of pesticides for the removal of undesirable fish (entitled Undesirable Fish Removal By The Use Of Pesticides Under Permit Issued By The Department Of Environmental Conservation - Division of Lands and Forests, Bureau of Pesticides Management, March 24, 1981).

There are twenty-three primary statements of fact from this record upon which the legal questions presented here can be determined. The Cayuga and Seneca lampricide control experiments described in this record reflect one portion of an international cooperative program between the United States and Canada to control sea lamprey throughout the Great Lakes and related areas. This international program has been under study and experimentation for over twenty-five years. It has attracted substantial public attention among scientists, citizens, fishing interests and governmental agencies. The full and detailed description of all relevant facts and circumstances, as required by 6 NYCRR §619.1, is the following:

A. Facts Set Forth by Petitioners

1. Applications of lampricides in the Cayuga Lake watershed can affect the ecology of regulated freshwater wetlands or pass within 100 feet of wetlands tentatively designated in the Tompkins County Freshwater Wetlands Inventory (see Wetlands Numbers 374-697.2, 374-697.1, 373-694, and 371.5-693).

2. DEC's final environmental impact statements ("EISs") for the planned lampricide applications identify some impacts upon wetlands. In particular, the Seneca Lake Final EIS (May 1981) states the following:

- TFM at stream treatment rates may suppress growth of some algae and higher plants... (page 16)
- Stream treatments with TFM as proposed would kill some aquatic worms, leeches, blackflies and mayflies. Fewer numbers of other invertebrates would be killed... (page 16)
- Some insects have been observed to experience premature emergence following TFM treatments. Mortalities to the above-sensitive organisms are occasionally significant in treated areas, especially immediately below chemical application points where TFM concentrations are highest. (page 17)
- Both TFM and Bayer 73 are toxic to amphibians in the use patterns proposed. (page 18)

The Cayuga Lake Final EIS states:

- Mortality to a small number of weakened fish cannot be avoided. (page 15)

3. The pesticide TFM moves as an identifiable "chemical block" as it proceeds down a watercourse (see Seneca Lake Final EIS, page 12, and Cayuga Lake Final EIS, page 11).

4. DEC has not sought a permit under the Freshwater Wetlands Act for the planned lampricide applications in either the Cayuga Lake or Seneca Lake watershed basins.

5. DEC obtained from itself an Aquatic Use or Piscicide Permit for the planned lampricide applications in the Cayuga and Seneca Lake watersheds, under 6 NYCRR Part 328. DEC

did not seek agreements from all water users for the lampricide applications.

6. The Cayuga Lake applications involve only partial treatment of Cayuga Lake and will leave several lamprey populations untreated. (Cayuga Lake Final EIS page 5).

7. The proposed lampricide applications in both watersheds involve treatment of streams or parts of streams. (Cayuga Lake Final EIS pages 7-8; Seneca Lake Final EIS pages 10-11).

8. Both watersheds involve extensive tributaries which are impracticable to treat totally, and which may be subject to reinfestation by lamprey because of the absence of downstream barriers. The use of effective downstream barriers which would isolate Cayuga Lake and Seneca Lake from reinfestation from downstream is not yet contemplated. Both lakes are connected to the Atlantic Ocean by the Hudson River and the Erie Canal. Lamprey infestation in both lakes appears to have occurred by this route. (Seneca Lake Final EIS page 2; SEQR Statement of Findings for Cayuga Lake, dated July 28, 1983, page 2; and SEQR Statement of Findings for Seneca Lake, dated September 1, 1981, reprinted at page 40 of the Cayuga Lake Final EIS).

9. DEC did not apply for SPDES permits to discharge pollutants from outlets or point sources for said lampricide applications. (See Cayuga Lake Final EIS at pages 11 and 12; Seneca Lake Final EIS page 14).

L. Relevant Facts From the Record

Final Programmatic EIS on Undesirable Fish Removal By The Use Of Pesticides Under Permit Issued By The Department Of Environmental Conservation - Division Of Lands and Forests - Bureau of Pesticides Management (March 24, 1981) provides as follows:

10. Prior to treatment, various physical, chemical and biological characteristics of the stream are determined, including water flow, temperature, pH, alkalinity, fish populations and major invertebrate populations.

Because the toxicity of TFM and TFM-Bayer 73 are strongly influenced by water hardness and pH bioassays are conducted at each site to determine:

- a. Minimum concentration of chemicals required to kill all of the test larval lampreys.
- b. Maximum allowable concentration which will kill no more than 25 percent of rainbow trout or other local important fishes.
- c. Concentrations of TFM or TFM-Bayer 73 combinations which are most desirable.
- d. Duration of exposure required for effective results.

Exposure time is usually from 8 to 26 hours, but may be as long as 36 hours.* (pages 10-11)

11. TFM was developed as a sea lamprey larvicide in the late 1950s. The following are statements

* See also Programmatic EIS on Fish Species Management Activities of the Department of Environmental Conservation, Division of Fish and Wildlife, June 1980, and Environmental Assessment - Great Lakes Sea Lamprey Control Program prepared by the U.S. Fish and Wildlife Service, dated 1976, pursuant to the National Environmental Policy Act ("NEPA"), 42 U.S.C. §4321. Both documents are reference materials to the DEC record compiled for the proposed lampricide applications.

incorporated in the above captioned DEC programmatic FEIS (pages 18-28) as initially set forth in the 1975 draft EIS on the Great Lakes Sea Lamprey Control Program by the U.S. Fish and Wildlife Service:

The very low concentrations of TFM required to kill larval lampreys in streams is [sic] harmless to wildlife and livestock.

Field observations of TFM during experimental treatment indicated that most invertebrates were not adversely affected by treatment. Some immediate decline was noted, but partial recovery occurred in six weeks with full recovery within a year.

The results of studies indicate that the use of TFM and Bayer 73, when properly applied, would not pose any hazard to man, domestic animals, fish and wildlife, or to the environment.

No evidence of biomagnification was noted and residues in all major components of the stream ecosystem were reduced by 93 to 99% in 96 hours.

12. The Department's Final Programmatic EIS included a bibliography citing 31 scientific publications in support of the proposed activities necessitating preparation of this comprehensive assessment. The life cycle of sea lamprey include a larval stage when the larvae cluster in concentrated groups embedded in the sediment of a water body, primarily in streams and tributaries.

The DEC Final EIS on Use of Lampricides In An Experimental Program To Reduce Sea Lamprey Abundance In Seneca Lake, New York (May 1981) further provides that:

13. A high degree of technology and skill has been developed in application procedures with about 1400 treatments

having been done since 1958 in Canada and the United States. A thorough review of these techniques can be found in "Control of the Sea Lamprey (Petromyzon marinus) in Lake Superior, 1953-1970" by B.R. Smith, J.J. Tibbles and B.G.H. Johnson in Technical Report No. 26, Great Lakes Fishery Commission, 1451 Green Road, Ann Arbor, Michigan. Following are some of the features of this methodology that would tend to insure a high degree of environmental safety in the proposed treatments:

- a. With regard to TFM application to streams, definitive pre-treatment surveys with electro-fishing equipment to determine the exact extent of sea lamprey infestation so that treatment of uninfested areas is minimized;
- b. Bioassays with stream water, sea lampreys and non-target fish (usually juvenile rainbow trout) to determine the range of effective but "safe" concentration of TFM for each stream;
- c. Delayed release of active ingredient (Bayluscide) only in the bottom two inches of water. Because of this, it has a high degree of selectivity and its effects are restricted primarily to those benthic organisms that are sensitive to it. Free swimming fish and other organisms not bound to the

bottom are simply not exposed to harmful concentrations. (pages 23-25)*

14. As a requirement of EPA registration, the Great Lakes Fishery Commission (GLFC) conducted exhaustive research on the effects of TFM on non-target organisms and the environment. Results of that research, much of which is referenced herein, indicate that its prescribed use represents no significant threat to man or the environment. (page 25)

15. In Seneca Lake, both TFM and Bayluscide treated water will be rapidly diluted many times. Assuming shoreward drift, the dilution factor for TFM would be approximately 100 times a mile away from stream mouths (vertical x horizontal mixing). These are minimum dilutions since actual mixing would more likely be in more directions than assumed in this calculation. The Catherine Creek TFM dilution would be further increased by the Seneca Canal which could render water non-toxic before it enters Seneca Lake. (pages 27-28)

16. Under "Degradation and Persistence" (pages 29-30), it is concluded that there appears to be no long-term persistence of TFM in animals or the environment AND that Bayluscide rapidly

* Preliminary conclusions from a 1982 Seneca Lake study of Bayluscide residues in water appears to indicate that Bayer 73 levels were greater than 40 parts per billion ppb throughout the water column in the treated areas and that maximum concentrations occurred near the substrate 2.5 hours after application. These as yet unpublished research findings have been conducted by the N.Y. Cooperative Fishery Research Unit at Cornell University.

disappears from organisms and the environment following prescribed treatments.

17. The Department's Final EIS included a bibliography of 60 scientific publications supporting the activity proposed.

Moreover, the DEC Final Supplemental EIS on Use of Lampricides to Reduce Sea Lamprey Abundance In Cayuga Lake, New York (June 1983), recites that:

18. Fears that the use of chemicals as proposed would disrupt other aquatic communities, i.e., insect life, are unfounded. TFM, the principal chemical involved, is selectively toxic to sea lampreys and has been used in streams for about 25 years in upwards of 2000 treatments with no lasting effects on the populations of any organisms. There is nothing unique about Cayuga Inlet or its organisms that would encourage alternate expectations.

Bayluscide, proposed for use in the lake, has been used (1) as a synergist (at 2 percent) for TFM in many of the 2000 treatments; (2) for lamprey surveys for about 15 years, including those in Cayuga, where the chemical is applied, at the same rate as proposed, to 1/10 acre to 1/7 acre plots, and (3) for sea lamprey control in Seneca Lake and Canadian waters. Again, there have been no lasting effects on the populations of any organisms. The 22-acre plot proposed for treatment with Bayluscide represents 0.05 percent (five hundredths of 1 percent) of the area of Cayuga Lake. (See Appendix VIII C, Issue #9 at p.314).

19. The impact of the proposed lampricide treatments on non-target organisms and factors that tend to mitigate them are discussed in pages 16-19 and 30-31 in the Seneca Lake FEIS and on pages 14-15 and 25-26 in the Cayuga Lake FEIS. Essentially, these passages summarize impacts varying from insignificant to significant in fish and amphibians, but recovery of populations is rapid and net loss is inconsequential. Effects on plants, birds and mammals is negligible primarily because of tolerance of these groups to the chemicals. No information has been found pertaining to adverse effects on reptiles. (See Appendix VIII C, Issue #12 at page 322).

The SEQR Statement of Findings to FEIS on Seneca Lake dated September 1, 1981, concludes that:

20. In October 1979, DEC found that four major infestations of sea lamprey annocoetes were in the Seneca Lake system. In addition, three major and six minor infestations were found in the Cayuga Lake system. Lake trout and rainbow trout in both lakes showed a high incidence of attack by sea lampreys, and more than 90 percent of fish larger than 20 inches had been attacked one or more times. (Facts and Conclusions at page 2, paragraph 3).

21. No adverse effects are expected to mammals, birds or reptiles exposed to either compound at proposed treatment rates whether by direct exposure to treated water or indirect

exposure from eating organisms killed by TFM or Bayluscide.
(Facts and Conclusions at page 4, paragraph 8).

Finally, the SEQR Statement of Findings to the Supplemental FEIS on Cayuga Lake dated July 28, 1983, concludes that:

22. The Seneca Lake lampricide/evaluation recommendation was put into a formal proposal through the SEQR system resulting in a positive finding dated September 1, 1981. The generic issues concerning the use of TFM and Bayluscide for lamprey control were addressed in those Findings.

23. The Department found that the requirements of 6 NYCRR Part 617 had been met and that the proposed action:

- (1) responds to public demand and a lawful DEC mandate to protect and efficiently manage the fish resource in Cayuga Lake;
- (2) is the only clearly viable alternative for addressing the need within a reasonable time;
- (3) does not make a commitment to a long-term program, but will provide information necessary for the formulation of a long-term lamprey control strategy and plan;
- (4) will not have significant or irreversible impact on the environment or non-target organisms exposed to the lampricides;
- (5) is consistent with social, economic and other essential considerations to the maximum extent practicable, potential adverse environmental effects revealed in the environmental analysis will be minimized by the mitigative measures identified;
- (6) will avoid human exposure to the lampricides through measures identified in the EIS and approved by local health authorities.

II. APPLICABILITY OF THE FRESHWATER WETLANDS ACT

Petitioners contend that DEC is required to obtain permits under the Freshwater Wetlands Act, ECL Article 24, for its proposed administration of lampricides. Petitioners allege that the lamprey control project and the application of the pesticide TFM requires an Article 24 permit because the "pesticide will pass through and adversely affect the ecology of, or pass within 100 feet of, freshwater wetlands...." Petitioners contend that the facts summarized above demonstrate "impacts intended to be regulated under the Freshwater Wetlands Act" and that TFM constitutes "pollution" as the term is defined in the Freshwater Wetlands Act. ECL §24-0107.8 defines "pollution" to mean :

"... the presence in the environment of man-induced conditions or contaminants in quantities or characteristics which are or may be injurious to human, plant or wildlife, or other animal life or to property."

Petitioners offer no legislative history, analysis of prior Freshwater Wetlands Appeals Board rulings or court cases in support of their suggestion that the lampricide application in streams and not in wetlands, requires a permit. There is no showing of fact that any of the wetlands values enumerated in the Act at ECL §24-0105(7) will be impaired. At most there is a possibility that temporary and small impacts on wetlands biota may result. The experiment in lamprey control contemplates documentation of any such impacts, if they appear. No applications of the lampricide in wetlands are contemplated.

Since final wetlands maps have not yet been filed, and only tentative maps exist for Cayuga and Seneca Lakes, under the Freshwater Wetlands Act the only permit presently required would be that specified under ECL §24-0703(5). Since the lampricide project is not conducted "on freshwater wetlands" under ECL §24-0701.1, nor will "impinge* upon or otherwise substantially affect the wetlands" under ECL §24-0701.2, nor will be conducted or have any substantial effects within 100 feet of a wetlands under ECL §24-0701.2, as a matter of law no Article 24 Freshwater Wetlands Permit is required for the lampricide applications.

On the facts presented for this Declaratory Ruling, where no wetlands activity is contemplated and no wetlands impact likely, there is no legal requirement to obtain any Freshwater Wetlands Permit.

III. THE REQUIREMENTS FOR THE PISCICIDE PERMIT.

Petitioners' second question addresses whether or not DEC (a) improperly has issued the permit for the use of chemical lampricides and, (b) has failed to fulfill its obligation as a permittee to obtain agreements to the lampricide treatment from water users whose use may be restricted.

* Impinge is a strong term, from the Latin root, impingo, impingere. There must be a demonstrable striking or impact, here from the lampricide, against the freshwater wetlands in terms of the legislative values set forth in §24-0105. Were the encroaching of lampricide to have an impact on statutory wetland values, an Article 24 Permit would be required.

ECL §15-0313.4 authorizes the DEC to require a permit for any use of chemicals for the control or extermination of undesirable fish in any waters of the state. DEC has implemented this authority and set forth the permit requirements in Part 328 of Title 6 of NYCRR. In undertaking the experimental application of the lampricides TFM and Bayluscide, DEC is subject to these permit requirements. DEC Staff obtained the necessary permits from the appropriate DEC regional offices.

The Petitioners' first issue concerns the Department's alleged failure to comply with the requirements set forth at 6 NYCRR §328.4(b)(5), which states:

The commissioner, or his designated representative, shall reject the application and issue no permit when the application involves:

- (i) only partial treatment of a lake or pond;
- (ii) treatment of a stream, or part of a stream or a small pond in the course of a stream;
- (iii) treatment of a pond or lake with a tributary system so extensive that their treatment is impracticable or where the tributaries are not to be treated in whole or in part because permission cannot be obtained from the owner or owners;
- (iv) treatment of a pond or lake with no barrier to prevent repopulation from downstream and such a barrier cannot feasibly or legally be provided.

The Petitioners allege, and the Department acknowledges, that the proposed applications in question involve partial treatments of tributaries, and involve treatments of streams where no repopulation barriers exist. However, other portions of this same section vary this specific requirement, 6 NYCRR

§§328.4(a)(2), 328.4(a)(3) and 328.7. All portions of Part 328 must be read together, and not in isolation as Petitioners contend. These provisions authorize DEC to

"issue special permits for operations relating to the control of undesirable fish by State and Federal agencies, which permits are subject to conditions and limitations consistent with the other sections of this Part, 6 NYCRR 328.4(a)(2);"

and to

"issue special permits for controlling undesirable fish involving chemicals, dosages, methods or areas other than those provided for herein, provided such issuance will not be at variance with these regulations and the regulations relating to restricted use pesticides." 6 NYCRR 328.4(a)(3)

In addition, there is the following authorization to vary the specific terms of the permit:

"In addition to the authorized chemicals and specifications, permits may be issued for other chemicals and specifications, without the necessity of adding them to the list, when it is evident that their use will conform with the intent and purpose of the law and this Part. Only chemicals labeled for the intended use, registered in the State of New York and not in conflict with the regulations relating to restricted use pesticides may be authorized for use pursuant to this section." 6 NYCRR 328.7

These regulations authorize the Commissioner to grant special Piscicide Permits, such as those for the experimental Cayuga and Seneca lampricide applications, when conforming to the intent and purpose of the Environmental Conservation Law. The statutory authority for the regulations, ECL §15-0313.4, is set forth within a statement of DEC's powers and responsibilities to control water pollution; the deliberate use of chemicals in water to control undesirable fish is a legislatively sanctioned

modification of water quality. The power is in furtherance of DEC's mandate for "the efficient management of the fish and wildlife resources of the state." ECL §11-0303. The Legislature vests the Department with discretion for the care of natural resources and the responsibility for protecting water quality, the values of streams and wetlands and fish species. SEQRA reinforces this mandate and acknowledges the Commissioner's discretion to balance competing natural resource needs.

DEC's regulations are designed to identify and minimize the adverse effects of efforts such as the control of sea lamprey. The instance lampricide projects are carefully designed scientific experiments; they are not wholesale pest control programs. They are structured to avoid or mitigate any secondary impacts on natural resources other than the sea lamprey larvae, and to protect public health. They are consistent with the conditions of the regulations for several reasons.

Although the regulations only authorize by name the use of "rotenone" for undesirable fish permits, this limited authority reflects the historic fact that in 1964 when these regulations were promulgated, "rotenone" was the only known and legally accepted piscicide in New York State; "rotenone" was not in fact a lampricide. The Department's Staff anticipated further expansion of the scientific knowledge of fish control and the further development chemical control products. Recognizing also that unique factual circumstances would arise, the regulations recited above expressly declined to require repeated regulatory

amendments to permit the use of new piscicides, especially for purposes of scientific experiments. Special permits were to be fashioned to meet new circumstances.

Efforts to control sea lamprey populations employing TFM and Bayluscide represent exactly the circumstances envisioned. TFM, which is federally registered for lamprey control, was first registered with this Department in 1972 and has been registered for that purpose continuously since that date. Bayluscide is federally registered for sea lamprey larvae surveys and has been registered by this Department for lamprey larval control since 1982 under a special local needs registration pursuant to 7 U.S.C. §136v(c)(1). Both can be applied to preserve water quality and still control sea lamprey. Use of such chemicals is recognized in Federal law.*

Where the goal of a piscicide application is complete eradication of the fish population, as is the case when rotenone is employed, the complete treatment provisions of 328.4(a)(5) are

* Federal registration entails, inter alia, a finding by the Administrator of the U.S. Environmental Protection Agency that the pesticide "will perform its intended function without unreasonable adverse effects on the environment" and "will not generally cause unreasonable adverse effects on the environment". 7 U.S.C. §136a(c)(5). Congress acknowledged a place for carefully controlled chemical agents for pest control; it defined "unreasonable adverse effects on the environment" to mean "any unreasonable risk to man or the environment, taking into account the economic, social and environmental costs and benefits of the use of any pesticide". 7 U.S.C. 136(bb). Congress expressly allows field experiments by permit even without registrations, so that a basis for such a finding can be established. 7 U.S.C. 136(a).

an appropriate requirement in order to ensure effective application without re-treatment. However, the control of sea lamprey populations recognizes a more sophisticated and selective control methodology than a total water body application; the life stage characteristics of lampreys present an effective alternative to complete treatment. In their larval stage, sea lampreys cluster in concentrated groups embedded in the sediment of the water body, primarily in streams. Thus, focused and partial treatments of lampricides, when applied in accordance with their manufacturer's label requirements and under scientific direction, can have the effect of controlling the parasitic stage of the sea lamprey for an entire water body.

This variance from the complete treatment requirement is consistent with the intent and purpose of the law and Part 328, and conforms with the requirements relating to restricted use pesticides. Accordingly, the Commissioner has the authority to exercise his discretion under DEC's permit regulations to issue the Piscicide Permits for TFM and Bayluscide.

Petitioners' second issue contends that consent of affected water users must be obtained prior to conducting the proposed treatment and that no such consent has been obtained. There are no presently identified "affected water users," whose water use demonstrably will be directly curtailed during the lampricide applications. Nonetheless, even if there were, the Petitioners' contention would not render the special Piscicide Permit

unlawful. Petitioners again have based their contention on only a partial reading of the relevant regulatory requirement.

Section 328.1(b) provides:

"Such permit may be issued for the use of chemicals in the control or extermination of undesirable fish, subject to such limitations as may be considered necessary to safeguard water quality. For the protection of riparian uses, no such permit shall be issued except where the applicant has certified that the affected riparian users have agreed to temporary curtailment of their uses incidental to treatment or unless the applicant demonstrates to the satisfaction of the commissioner that any non-consenting riparian users will not be significantly adversely affected by the use of the chemicals subject to such limitations as are set forth in the permit. Such limitations shall prescribe what chemical or chemicals may be applied to the waters under stipulated conditions to protect the public health, safety or welfare, and terrestrial and aquatic life or the growth and propagation thereof, other than fish contained in the water for which chemical treatment is proposed." [Emphasis added]

This provision permits the Commissioner to issue the Piscicide Permit upon the Commissioner's Finding that the limitations to be employed in the treatment preclude any significant adverse effect to only non-consenting water users. As evidenced in the SEQRA findings, based on a full record, the Department Staff's showing here satisfied the Commissioner that non-consenting riparian users would not encounter any significant adverse effect.

DEC provided extensive public notice of the proposed treatment, including the environmental impact statements and supplements and Findings. Those documents, available to the public and subjected to extensive public comment, set forth extensive precautions developed in conjunction with appropriate health authorities. The SEQRA process enabled the Department

Staff to modify and refine the lampricide experiments; the precautions identified were in turn set forth as conditions in the special Piscicide Permit. The Commissioner's finding that water users will not suffer significant adverse impacts is summarized in paragraph 23 of the Facts (supra).

Thus, since the necessary demonstration required by 328.1(b) has been made, the permitted lampricide treatment may go forward despite the possible objection of affected water users.

IV. APPLICABILITY OF THE SPDES PERMIT.

Petitioners' third question asks whether DEC is required to obtain a State Pollutant Discharge Elimination System ("SPDES") permit for the proposed lampricide applications in the Cayuga and Seneca Lake watersheds. SPDES permits are required for discharges of pollutants or wastes into the waters of the State. At issue here is whether the application of the lampricide is the discharge of such a pollutant or wastes.

Petitioners urge that a SPDES permit is required by both Title 7 and Title 8 of Article 17 of the ECL. ECL §17-0803 makes it "unlawful to discharge pollutants to waters of the state from any outlet or point source without a SPDES permit...."

"Pollutant" is defined by §17-0105.17 of the ECL as follows:

"Pollutant means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand and industrial, municipal and agricultural wastes discharged into water."
(Emphasis added).

Relevant to the lampricide applications at issue here is the inclusion of the phrase "chemical wastes" in the definition of "pollutant". Lampricides are not chemical wastes in that they are not being discarded as waste products into the Seneca and Cayuga watersheds.* Instead, they are commercially obtained chemical products being deliberately and carefully applied to stream bottoms for purposes of an experimental program to destroy an aquatic pest. Under such circumstances, a lampricide is not a waste product for which a SPDES permit is required, but a beneficial chemical used for resource control purposes. Such a use is expressly provided for by a separate aquatic use permit under ECL §15-0313.4. Read in pari materia with §15-0313.4 of the ECL, the statutory provisions establish that the lampricide application is not a pollutant, but a separately allowed and regulated water quality modification for the stated purpose of controlling a noxious and alien predator.

Insofar as the SPDES process seeks to protect water quality, that end is also realized separately since the Piscicide Permit process is required to comply with SEQRA. Water quality issues were covered in the thorough environmental reviews and were

* The only Federal case on pesticides as "pollutants", under the analogous National Pollutant Discharge Elimination System Permit of the Federal Clean Water Act, 33 U.S.C. §1251, et seq., involved Endrin and Heptachlor which were deemed to be waste products of a manufacturing process discharged into a sewer system and into protected waters. These pesticides were not intentionally applied to water for beneficial purposes, but were discarded as waste materials. U.S. v. Velsicol Chemical Corp. 438 F. Supp. 945 (1976).

addressed in the conditions to the permit as a direct result of the SEQRA environmental studies.

Petitioners avoid confronting this primary definition of "pollutant" and instead concentrate selectively on the definition of "toxic pollutant" under §17-0105.19. This section provides that:

"'Toxic pollutant' means those pollutants, or combination of pollutants, including disease causing agents, which after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment or indirectly through food chains, will, on the basis of information available to the department, cause death, disease ... in such organisms or their offspring."

The Petitioners essentially argue that because a substance is toxic it is a fortiori a pollutant. However, the plain meaning of this definition is that a substance must first be a pollutant, i.e., a waste, before it is described by the adjective "toxic" to become part of the subclass of pollutants which are toxic pollutants. Since lampricide is being applied under the terms of a Piscicide Permit, as a beneficial chemical in Seneca and Cayuga watersheds, the lampricide does not fall under the definition of a pollutant or under the subclass of toxic pollutants.*

* Under facts different than those presented here, unplanned runoff or waste presence of lampricides could be considered the discharge of pollutants. For instance, if instead of permitted application by DEC State employees in an experimental study to decrease the sea lamprey population, lampricides in the lakes were to be discharged as a constituent of wastewater from a chemical manufacturing plant located on those lakes, the lampricide residue in the wastewater would be a discarded material. Under such circumstances, the lampricide residue would be a waste product discarded into the environment.

Petitioners further urge that a SPDES permit is required by the language of Title 7 of Article 17 of the ECL. While Title 7 refers to Title 8 for purposes of clarifying that it is a SPDES permit which must be issued, Title 7 recites separately in §17-0701 that a SPDES permit is required for any action which would "use any outlet or point source for the discharge of sewage, industrial waste or other wastes or the effluent therefrom, into the waters of this State...." Thus, instead of referring to a "pollutant", Title 7 refers to "sewage, industrial waste or other wastes". The definition of "other wastes" is found both in §17-0701.2(b) and §17-0105.6. That definition recites as follows:

"'Other wastes' means garbage, refuse, decayed wood, sawdust, shavings, bark, sand, lime, cinders, ashes, offal, oil, tar, dye stuffs, acids, chemicals, and all other discarded matter not sewage or industrial waste which may cause or might reasonably be expected to cause pollution of the waters of the state in contravention of the standards adopted as provided herein." (Emphasis added).

The definition of other wastes refers to chemicals in the context of "all other discarded matter". Following the maxim of statutory construction, noscitur a sociis, it is evident that this definition deals with discarded matter, not the careful and deliberate application of a beneficial chemical for a natural resource modification. As with the definition of a "pollutant", the definition of "other wastes" involves useless or discarded or excess material. Additional support for this interpretation can be found in §17-0701.1(c) which requires a SPDES permit to

"...increase or alter the content of the wastes discharged...."
[Emphasis added]. None of the lampricides in DEC's scientific experiments is waste. All of it is part of the scientific experiment to control the sea lamprey. Accordingly, there is no legal requirement for the DEC Staff to have sought a SPDES permit for the subject lampricide applications.

V. CONCLUSIONS

On the facts as set forth above, summarized from the record, there is no legal requirement that the DEC program staff obtain from the Commissioner of Environmental Conservation either a Freshwater Wetlands Permit or a SPDES permit. The Commissioner's permit to apply the lampricide to stream beds for control of a clearly undesirable fish, the sea lamprey, is lawful when the permit conditions are consistent with the intent and purposes of §15-0313.4 and of 6 NYCRR Part 328.

The Commissioner's decision to grant to DEC's Staff the Piscicide Permit is buttressed by SEQRA. In the SEQRA review, any impact on freshwater wetlands or water quality needed to be addressed. Thus, although as a matter of law there is no need for Freshwater Wetlands or SPDES Permits, nonetheless the comprehensive SEQRA process requires that all possibly affected natural resources be examined. The record reflects that DEC Staff adhered to SEQRA over the course of preparation of three related environmental impacts statements for the lampricide program since 1980.

After the finalization of each impact statement, and prior to the undertaking of any activity, the Commissioner was obligated to make an explicit finding, pursuant to ECL 8-0109(8), that all procedural requirements have been met and that consistent with social, economic and other essential considerations, to the maximum extent practicable, adverse environmental effects revealed in the EIS process will be minimized or avoided. The Commissioner undertook this "balancing" process for all three statements. Petitioners have not questioned the applicability or appropriateness of the SEQRA reviews which as a matter of law were part of the special Piscicide Permit process.

New York's Legislature and the federal Congress have structured a role in our society for the use of chemicals such as lampricides at issue here. In a democracy, everyone need not agree with the legislator's decisions that pesticides are necessary. Indeed, the Commissioner's conclusion in the Findings made following the SEQRA balancing process for the FEIS for Seneca Lake (Facts and Conclusions, page 5, paragraph 14) candidly notes as follows:

"Recent history has shown the danger and consequences of indiscriminate introduction of various chemicals into the environment and proved the wisdom behind programs and policies aimed at keeping these under reasonable control. At the same time, it is an inescapable conclusion that a wholesale ban on the use of chemicals is incompatible with modern human needs and public demand determined by the democratic process. The obvious alternative is a system of deliberate and intelligent compromise incorporating public involvement. This has been provided by the SEQRA process. The use of lampricides in Seneca Lake now, and in other New York State waters now and in the

future, qualify as materials whose use is acceptable under this process."

To the extent that Petitioners disagree with the use of chemical lampricides or with the way the Commissioner weighed competing considerations in decision-making for lamprey control on Seneca and Cayuga Lakes, the proper forum for expressing those disagreements is elsewhere. Where one segment of our society seeks to oppose the lawful and carefully controlled application of chemicals to enhance fisheries which are critical to another segment of the society, their efforts more properly belong in the halls of our legislature than in requests for Declaratory Rulings of law.

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