

STATE OF NEW YORK  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
625 Broadway  
Albany, New York 12233-1550

In the Matter

- of the -

Proposed Amendments to Title 6 of Codes,  
Rules and Regulations of the State of  
New York (6 NYCRR) Parts 700 through 704

SUMMARY HEARING REPORT

- by -

/s/

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Daniel P. O'Connell  
Administrative Law Judge

March 16, 2007

## PROCEEDINGS

A legislative hearing to provide the public with an opportunity to comment about a proposal by Staff from the New York State Department of Environmental Conservation, Division of Water to amend portions of Parts 700 through 704 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) convened on February 5, 2007 at 2:00 p.m. in Public Assembly Room 129 A and B at the Department's Central Office located at 625 Broadway, Albany, New York.

The Division of Water requested an administrative law judge (ALJ) from the Department's Office of Hearings and Mediation Services to conduct the legislative hearing. The matter was assigned to ALJ Daniel P. O'Connell.

The Hearing Notice was published on December 13, 2006 in the Department's *Environmental Notice Bulletin (ENB)* and in the *New York State Register*. A Supplemental Notice appeared in the Department's *ENB* on January 10, 2007. In addition, the Hearing Notice was published in the following newspapers on or about December 20, 2006 and January 2, 2007. The exact dates of publication in the individual newspapers are noted below.

Publication	Location	Date
Adirondack Daily Enterprise	Saranac Lake	12/21/06
Albany Times Union	Albany	12/20/06
Amsterdam Recorder	Amsterdam	12/21/06 and 1/2/07
Auburn Citizen	Auburn	12/20/06 and 1/2/07
Buffalo News	Buffalo	12/21/06 and 1/2/07
Cortland Standard	Cortland	12/20/06 and 1/2/07
Daily Courier-Observer	Ogdensburg	12/20/06 and 1/2/07
Daily Freeman	Kingston	12/20/06
Daily Gazette	Schenectady	12/20/06 and 1/2/07
Daily Sentinel	Oneida Co.	12/21/06 and 1/2/07
Daily Star	Oneonta	12/20/06 and 1/2/07
Dunkirk Observer	Dunkirk	12/20/06 and 1/2/07

Elmira Star-Gazette	Elmira	12/20/06 and 1/2/07
Glens Falls Post Star	Glen Falls	12/20/06 and 1/2/07
Journal News	Westchester Co.	12/21/06 and 1/2/07
Malone Telegram	Franklin Co.	12/20/06 and 1/2/07
Newsday	Suffolk Co.	12/20/06 and 1/2/07
Niagara Gazette	Niagara	12/20/06 and 1/2/07
Oswego Palladium-Times	Oswego	12/20/06 and 1/3/07
Poughkeepsie Journal	Poughkeepsie	12/20/06 and 1/3/07
Press-Republican	Plattsburgh	12/21/06 and 1/2/07
Press & Sun Bulletin	Broome Co.	12/20/06 and 1/2/07
Rochester Democrat-Chronicle	Rochester	12/20/06 and 1/2/07
Syracuse Post-Standard	Syracuse	12/20/06 and 1/2/07
Time Herald-Record	Middleton	12/20/06 and 1/2/07
Utica Observer-Dispatch	Utica	12/20/06 and 1/2/07
Watertown Daily Times	Watertown	12/20/06 and 1/2/07
Wall Street Journal	New York	12/20/06 and 1/3/07
Wellsville Daily Reporter	Wellsville	12/20/06 and 1/2/07

Prior to the legislative hearing on February 5, 2007, Department staff conducted public informational meetings about the proposed amendments. Public information meetings were held in Suffern (January 9, 2007), Stony Brook (January 10, 2007), Rochester (January 16, 2007), Utica (January 17, 2007), and Albany (January 22, 2007).

In addition to providing for the legislative hearing on February 5, 2007, the Hearing Notice provided members of the public with the opportunity to file written comments about the proposed amendments to 6 NYCRR parts 700 through 704. Oral statements made at the legislative hearing are weighed equally with written comments. Written comments were due by February 14, 2007, and were submitted to Scott Stoner, Chief, Standards and Analytical Support Section, Bureau of Water Assessment and Management from the Department's Division of Water. The Office

of Hearings and Mediation Services received the stenographic transcript from the February 5, 2007 legislative hearing on March 1, 2007.

The legislative hearing was held pursuant to Environmental Conservation Law (ECL) Article 3, Title 3; Article 15, Title 3; Article 17, Title 3; and Article 70; as well as Section 303(c) of the federal Clean Water Act and its implementing regulations at 40 CFR 131.

### **Summary of Oral Statements**

The following is a brief summary of the statements made at the legislative hearing on February 5, 2007. As noted above, written comments were filed with Mr. Stoner. The Division of Water will be preparing a responsiveness summary with respect to all comments received.

At the public hearing, **Mr. Stoner** represented Department staff from the Division of Water. Mr. Stoner stated that the public hearing is part of the Department's review of its water quality regulations. The federal Clean Water Act requires states to review their surface water standards every three years. The Department completed its last review in 1998.

According to Mr. Stoner, the parameters considered in the proposed rule-making include ammonia, dissolved oxygen, metolachlor, acetaldehyde, formaldehyde, carbon disulfide, iron, turbidity and flow. In addition, the proposed rules would revise the procedures used to develop future standards in order to protect the environment and human health.

The proposed rule would establish, among other things, a new standard for ammonia concentrations in marine waters. Mr. Stoner explained that the new ammonia standard is necessary to protect marine species that have commercial and recreational significance.

With respect to the proposed dissolved oxygen standard for marine waters, Mr. Stoner explained that two formulas were inadvertently omitted on page 20 of written materials distributed at the Department's informational presentations. This error has been corrected, and a corrected page is available on the Department's web site:

<http://www.dec.state.ny.us/website/dow/bwam/propwqsreg.html>.

**Kirt Mayland**, Trout Unlimited, New York Council. According to Mr. Mayland, Trout Unlimited is a national not-for-profit organization with about 160,000 members in 450 chapters. In New York State, there are 8,500 members in 36 chapters. Mr. Mayland said that the mission of Trout Unlimited is to conserve, protect, and restore North America's cold water fisheries.

Trout Unlimited supports the proposed provision that would be identified as 6 NYCRR 701.2, which would provide a narrative ambient standard for maintaining stream flow. According to Mr. Mayland, the proposed flow standard would prohibit alterations to flow that would impair waters for their best usage.

Mr. Mayland noted that stream flow has been a long standing concern in the western United States where weather conditions are drier compared to the eastern United States. He noted further that the proposed rule concerning flow is not as protective as existing flow regulations in New England. Mr. Mayland said that regulations presently in effect in New England have numerical flow standards to assure the survival of cold water fish species. According to Mr. Mayland, the number of cold water fish species are declining, and other species favoring pond conditions are increasing. On behalf of Trout Unlimited, Mr. Mayland encouraged Department staff to develop more stringent flow standards that would limit water withdrawals.

Mr. Mayland stated that Trout Unlimited would also favor limitations placed on ground water withdrawals given the hydrological connection that frequently exists between ground water sources and surface water sources.

**Dirk Gouwens**, President, Ski Areas of New York (SANY). Mr. Gouwens explained that SANY is a not-for-profit organization that represents the interests of the ski industry in New York State. According to Mr. Gouwens, there are 51 ski areas operating in the state, and that many of these ski areas are small businesses located in rural areas. About four million people visit these areas annually, and the economic benefit of the ski industry is in excess of one billion dollars. At one time, Mr. Gouwens noted there were as many as 117 ski areas in the state.

Mr. Gouwens commented about the proposed narrative ambient standard related to flow because many ski areas in New York State withdraw water from streams and other waterbodies for snowmaking purposes. SANY's members would be adversely affected by the proposed narrative flow standard. He observed that ski areas are important to the local economy of upstate areas. Mr. Gouwens

stated that Department staff should have conducted a job impact analysis because hundreds of jobs at ski areas would be adversely impacted if snowmaking capabilities are curtailed by the proposed regulations. SANY requested that Department staff reconsider the proposed regulations that would limit flow.

**Thomas S. West**, Esq., The West Firm, Albany, New York. Mr. West is legal counsel for SANY. Mr. West said that Hunter Mountain is a member of SANY, and that Hunter Mountain has been dealing with issues related to water withdrawals since the early 1980's. In addition, Mr. West explained that Hunter Mountain has been studying the effect of wintertime water withdrawals from the Schoharie Creek since the 1990's. Based on these studies, Mr. West reported there was no demonstrable impact to the fisheries related to wintertime water withdrawals. Mr. West also stated that Department staff has conducted some studies, which show no adverse impact. Mr. West concluded there appears to be no scientific basis to limit commercial water withdrawals for snowmaking purposes.

Before Department staff can promulgate the proposed narrative flow standard, Mr. West stated that the New York State legislature must act to provide statutory authority for the proposed regulation. According to Mr. West, no legal authority exists for Department staff to limit commercial water withdrawals. Referring to Environmental Conservation Law (ECL) article 15, Mr. West acknowledged there is statutory authority to regulate water withdrawals for potable purposes. Under these circumstances, Mr. West explained that ECL article 15 requires a weighing between potential fisheries impacts from water withdraws against the need for potable water sources and that, as a matter of public policy, the balance tips should favor potable water needs. Mr. West noted further that if there are competing recreational uses, such as fishing and skiing, then a balancing needs to take place to determine which use would be favored.

Mr. West listed other specific authorizations concerning the regulation of water flow and water withdrawals. They include interstate transfers of water by pipe, and transfers by vessels. Pursuant to the Great Lakes Compact, Mr. West said that New York State requires entities to register when water withdrawals exceed 100,000 gallons per day for more than 30 days.

According to Mr. West, Department staff should have undertaken a job impact analysis pursuant to the State Administrative Procedure Act (SAPA) § 201-a given the potential adverse impact that the proposed regulation may have on ski

areas, and other industrial or commercial water users. In addition, Mr. West said that Staff should have undertaken a regulatory flexibility analysis and rural area flexibility analysis pursuant SAPA § 202-b and § 202-bb, respectively, because ski areas are small businesses with less than 100 employees that are located in rural areas. Given the potential adverse economic effects on rural communities, Mr. West also recommended an analysis concerning potential impacts to community character pursuant to the State Environmental Quality Review Act (SEQRA).

Mr. West concluded by commenting about the purpose of the proposed regulations. According to Mr. West, 6 NYCRR parts 700 through 704 are intended to maintain water quality by regulating end-of-pipe discharges. Mr. West noted that discharge requirements are specific, objective standards, and that future regulations should provide the same kind of standards. Mr. West said that the proposed narrative ambient standard that would regulate flow would not control end-of-pipe discharges, and is neither specific nor objective.

**Charles Breckenridge**, Ph.D., Global Risk Assessment Methodologies, Syngenta Crop Protection, Inc. Dr. Breckenridge's comments included a Power Point presentation, and printed copies of the slides shown during his oral presentation were also filed. Dr. Breckenridge said that Syngenta is the primary manufacturer and registrant of metolachlor. Metolachlor (CAS No. 51218-45-2) is an herbicide.

Dr. Breckenridge commented about the proposed rule that would establish a surface water and ground water ambient standard, and a ground water effluent limitation for metolachlor. The proposed ambient standard for metolachlor would be 9 micrograms/liter ( $\mu\text{g/L}$ ), and the proposed effluent limitation would 9  $\mu\text{g/L}$ .

Dr. Breckenridge noted that the federal standard for metolachlor is 70 parts per billion, and that the health advisory level established by the US Environmental Protection Agency (US EPA) is also 70 parts per billion. The proposed state standard in 6 NYCRR part 700, therefore, would be about 10 times lower than the federal standards.

According to Dr. Breckenridge, metolachlor and its isomers have been thoroughly investigated with respect to potential mutagenic impacts, and that the results of these studies show no negative effect. Dr. Breckenridge acknowledged there are some

studies that show a positive effect where metolachlor damaged chromosomal DNA. Dr. Breckenridge stated, however, that some of those studies did not follow a standard protocol. In addition, other studies used plant models. He explained that chromosomal damage to plant DNA would be expected for metolachlor to be considered an effective herbicide.

Dr. Breckenridge explained that Department staff has concluded that the chemical is potentially mutagenic because metolachlor may break down into a compound called aniline, which is a known carcinogen. According to Dr. Breckenridge, there are studies (both chemical and animal bioassays) which show that metolachlor does not biotransform into aniline. Dr. Breckenridge said that metolachlor has a molecular feature that blocks the dealkylation process and, thereby, prevents the formation of aniline. Dealkylation is the process of removing chlorine side-chains from an organic compound.

According to Dr. Breckenridge, herbicides like alachlor and acetochlor do break down into aniline, and then subsequently into quinone imine, which is also carcinogenic. Dr. Breckenridge pointed out, however, that the molecular structures of alachlor and acetochlor are different from that of metolachlor. During his presentation, Dr. Breckenridge identified animal studies which showed that the rate of nasal turbinate tumor formation by metolachlor is statistically similar to the rate in the control.

Dr. Breckenridge acknowledged that high doses of metolachlor triggered a slight increase in liver tumors in rats. Dr. Breckenridge explained that Syngenta conducted two studies. With high doses of metolachlor at 3,000 parts per million, there was an increase in liver tumors compared to the controls. Dr. Breckenridge observed that liver tumors are rather rare in rats, and characterized the increase in tumor formation, which was reliably replicated in the second study, as marginal. Dr. Breckenridge concluded that the mechanism related to tumor formation in the liver may not be the same as that related to the formation of nasal turbinate tumors.

The results of the Syngenta studies showed that the survival rates of animals treated with metolachlor increased compared to the control group. The increase in survival rate may be related to the reduction in body weight of treated animals, according to Dr. Breckenridge. Dr. Breckenridge observed that an increase in the life span of the test subjects enhances the period for tumor expression. Dr. Breckenridge hypothesized that liver tumor formation was the result of increased life span.



Additional studies by Syngenta show that very high doses of metolachlor result in a series of enzymatic changes in the liver, which lead to hepatocyte proliferation followed by preneoplastic foci that results in liver tumors. Because this chain of events occurs at very high doses, Dr. Breckenridge stated there are questions about whether such enzymatic changes occur at lower doses and, if so, at what doses. Depending on the results of these subsequent studies, Dr. Breckenridge said that it would be possible to determine the threshold concentration of metolachlor that causes a tumorigenic response, and based on that concentration set an appropriate safety standard for exposure.

Dr. Breckenridge asked Department staff to reconsider the proposed standard for metolachlor by relying on a threshold-based standard rather than relying on a linear extrapolation from a low dose response.

**Rebecca Shirer**, Conservation Scientist, The Nature Conservancy - New York Chapter. Ms. Shirer said that the mission of The Nature Conservancy is to preserve plants and animals by protecting the land and water that they rely on to survive. By establishing partnerships with public and private landowners, Ms. Shirer explained that the Conservancy has protected more than 500,000 acres of land and associated water resources in New York State.

Referring to the 2004 New York State Water Quality Report, Ms. Shirer stated that hydrologic modifications have been the major cause of impairment for 932 river miles, and a moderate cause of impairment for 1,296 river miles. According to Ms. Shirer, flow and its natural variations impact freshwater ecosystems and the proposed narrative ambient flow standard is an important first step toward protecting these natural resources.

Ms. Shirer said that the eventual implementation of a numeric flow standard to quantitatively define permissible changes in flow would be the best way to protect the best-uses of the state's rivers and streams. Numeric criteria would assure uniform implementation and predictability in the regulatory decision making process.

According to Ms. Shirer, there is sufficient legal authority for Department staff to promulgate the proposed narrative ambient flow standard. Additional support may be found in the federal Clean Water Act, the Department's State Pollutant Discharge Elimination System (SPDES) permit delegation, Section 401 Water Quality Certification, and ECL article 15. In addition, Ms.

Shirer encouraged Department staff to prepare guidance to ensure implementation of the proposed standard with the assistance of a statewide technical committee.

Ms. Shirer said that existing water supply permits would not be reopened to determine whether these permits comply with the proposed flow standard. In addition, it appears that ground water withdrawals would not be regulated. Nevertheless, Ms. Shirer encouraged Department staff to develop a plan that would consider these existing withdrawals and the potential cumulative impacts that may result from future withdrawals. According to Ms. Shirer, a range of technologies exist to define current base flow conditions, and the related natural or seasonal variations. Finally, Ms. Shirer noted that the US Geological Survey could be an experienced resource that Department staff should rely upon to implement the proposed standard.

#### **Written Comments**

As provided by the public notice, all written comments were directed to Mr. Stoner's attention. Therefore, any written comments received are not summarized in this Hearing Report. Those interested in reviewing the written comments filed with respect to the proposed amendments to 6 NYCRR parts 700 through 704 should contact Mr. Stoner at the address provided above.