

Antidegradation Issues and Policy in West Virginia

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Abstract The confusion over degradation continues for another year. I will attempt to explain where antidegradation originated. How will it actually impact the quality of West Virginia's streams and rivers? After all the additional testing and regulations, will the net effect be better water quality in the state? How will this regulation impact the state's economy, particularly the mining industry? Last, but not least, what part will this regulation play in the ongoing litigation battle between the environmental community and the state and federal regulatory agencies? This paper will attempt to provide an update as of February 2002 on this confusing process.

Key Words: Antidegradation, Ambient Quality, Assimilative Capacity, Parameters of Concern, Water Quality Standards, Tier1, Tier 2, Tier 2.5, Waters of Special Concern, Tier 3, Significant Degradation, Socioeconomic Evaluation, Best Management Practices, Point Source, Non-point Source

Introduction

"Antidegradation." A term very few West Virginians or any person on the street would be able to explain in the regulatory context. During the spring and summer of 2001 the state of West Virginia made changes to the state's water quality standards to revise the antidegradation policy and to adopt an Antidegradation Implementation Plan. The state has had an "antideg" policy for many years, but it was basically on paper and not enforced because there was no approved implementation procedure. In 2001 under pressure from both USEPA and various environmental groups, an implementation plan was adopted. The West Virginia Legislature allowed the WV Division of Environmental Protection to develop the details through "guidance documents," which basically sidestep the public review, comment, and legislative approval of the details of the new implementation plan. This procedure is where many of the problems begin.

Note:

- 1) Paper presented at the 2002 West Virginia Surface Mine Drainage Task Force Symposium, Morgantown, WV, April 16-17, 2002.
- 2) Randall R. Maggard, Manager of Environmental Compliance, Pen Coal Corporation, Dunlow, WV and Vice-President, Twelvepole Watershed Association, Wayne, WV.
- 3) Publication in this proceedings does not prevent authors from publishing their manuscripts, whole or in part, in other publication outlets.

Statement of Purpose

The purpose of this paper is to share the experiences the author has had with the whole antidegradation debate over the last several years. The author would like to specifically address the following points of significance:

- How do you properly define degradation and how was it originally derived from the Clean Water Act of 1972?
- Will the implementation of this new policy actually result in an improvement in West Virginia streams?
- What effect will this new policy have on the economy and regulated community in West Virginia?
- What effect will this policy have on future environmental litigation on the state and federal level?

Antidegradation - Definitions

Based on the dictionary definition, “anti” is a learned borrowing from Greek meaning “against,” “opposite of” used freely in combination with elements of any origin. Further research into degradation refers to “the act of being degraded;” the definition of degraded is “reduced in rank, position, reputation, etc.” or “reduced in quality or value.” Where in the Clean Water Act (CWA) is there a requirement for an antidegradation policy or such a policy expressed? There is no explicit requirement for such a policy in the Act. However, the policy is consistent with the spirit, intent, and goals of the Act, especially the clause “...restore and maintain the chemical, physical, and biological integrity of the Nation’s waters”(Section 101(a)) and arguably is covered by the provision of 303(a) which made water quality standard requirements under prior law the “starting point” for CWA water quality requirements.

The environmental regulatory agencies usually divided streams and rivers into two categories: either “high quality,” which meant that the water exceeded state water quality standards, or “impaired,” which meant that the water exceeded one or more water quality standards which limited its uses. Take iron, for example. If the water quality standard for iron is 1.5 mg/l and the water sampled from a stream was less than 1.5 mg/l, say 0.8 mg/l, then that stream is deemed “high quality.”

The new antidegradation policy established four tiers, or categories of streams. Those are as follows:

Tier 1- Streams that are failing to meet or just meeting water quality standards for “minimum uses” (protection of aquatic life and human recreations).

Tier 2- Streams have concentrations of pollutants that are less than the water quality standard. As with Tier 1, minimum uses must be protected, and degradation (or increases in concentration) are allowed up to or down to depending upon the constituent, to water quality standards. However in Tier 2, any degradation or changes that qualify as significant must undergo an alternative analysis and “SOCIOECONOMIC REVIEW” before this degradation or change will be approved.

Significant degradation is that which will reduce a stream’s assimilative capacity by a

mere ten percent or more. It also applies to activities that will reduce the assimilative capacity by twenty percent or higher when considered with other permitted activities.

Assimilative capacity is basically the water quality standard for a given parameter minus the ambient quality of that parameter.

The ambient quality for a given parameter is currently to be determined by a minimum of twelve samples collected over six months with some various restrictions on sampling times based on certain rainfall events. The ambient concentration is determined by simply taking an arithmetic mean, or average, of the parameter of concern. The basic problem with this regulatory-wise is that at least half of the time the stream exceeds the value determined to be the ambient quality prior to any discharge taking place.

This problem alone could provide environmental lawyers more than adequate information to delay or prevent the issuance of mining permits due to the fact that the permittee will be required to treat the water to meet effluent guidelines and the WVDEP is not supposed to issue mining permits which may require long-term treatments.

Tier 2.5- These are "Waters of Special Concern." NO significant degradation or change is allowed in Tier 2.5 streams. There is, effectively, a new water quality standard established for each parameter at this significance lever, and degradation or change to the water quality standard is not allowed.

Tier 3.0- These are "Outstanding National Resource Waters" and no discharges that could degrade or change the existence of water quality of these streams is allowed, except for limited and temporary degradation.

Tier 2.5 and Tier 3.0 streams must be nominated and approved by rulemaking to be placed in these categories. The WVDEP and the WVDNR have already created a presumptive list of Tier 2.5 streams which will be going through public comment during February and March of 2002. It is very important to express your concerns in writing to the WVDEP during this process. The public comment will probably be closed by the time this presentation is being made, so good luck.

Getting back to definitions, how do we now define quality? If a stream has an ambient quality (remember the definition above) for an iron concentration of 0.5 mg/l and as a result of a proposed discharge it is anticipated through various mathematical formulas and computer modeling that the concentration will change to 0.8 mg/l, is this stream no longer "high quality?" If the state water quality standard was established to protect existing uses, then shouldn't any iron value less than the water quality standard of 1.5 mg/l be protecting those uses? Going back to the basic tenet of the Clean Water Act for which practically all water-related regulations are based, the uses of the water are the prime concern, and the quality is used as a tool to determine the use.

For example, grades are a tool to measure the quality of a student. If rules are put in place to establish that a "high quality" student must be an "A" student and an "A" is defined as a score between 90 and 100 on a scale of 100, then does a student that scores an "94" differ from one that scores a "96?" I think that both would be considered "high quality."

Then why is it that regulatory agencies are debating over minute changes in concentrations of pollutants and not focusing on the streams' uses? This extreme over-emphasis on minute concentrations of various elements in the water column in a stream is a vast oversimplification of the health and quality of a stream. The aquatic health of a stream may actually be improved by the increase of certain parameters such as alkalinity, which is currently performed at limestone dosing stations like those on the Blackwater River. The antidegradation policies could lead to unnecessary treatment in some cases and prevent treatment in other cases.

Implementation

As an active participant and officer in a local watershed organization, I can see first-hand the concerns of both the citizens and the industries located in our watershed. In most cases a minute change in a chemical constitute of the water in the stream is not the concern of the people living in the watershed. They are primarily concerned with the use of that stream both by aquatic life and by local citizens or tourists for recreation, such as fishing, swimming, and boating.

The overwhelming concern of the local citizens and industry alike is the problem of solid waste disposal and habitat degradation. Both of these problems appear to be totally ignored by the regulatory agencies and by the new antidegradation implementation policies. Our watershed group has sponsored numerous stream clean-ups which have resulted in hundred of tons of debris, both toxic and nontoxic, which have been removed and disposed of properly. Based on chemical water analysis this stream is classified as a "high quality stream," yet it is not a place I or others would desire to fish, swim, or boat. Should an aluminum can be ignored just because it won't fit inside a water sample bottle?

In my personal opinion, the vast majority of the state's streams should be put on the impaired list for solid waste contamination and habitat degradation. Then maybe we could expend the appropriate resources on education and clean-up. I understand the importance of the minute chemical constituent of the water column in a stream or river, but there seems to be an over-emphasis on regulatory bureaucracy in the implementation of our present antidegradation policy. Let's try to get to first base before we try to get to home plate.

The new antidegradation policy exempts all non-point sources to Best Management Practices (BMP's). I suppose trash, litter, and other habitat degradation would be under this classification. Several articles have been published recently noting the poor performance of several of the most commonly-used BMP's such as silt fence and straw bales.

Economics and Permitting

The impact the Antidegradation Implementation Plan will have on West Virginia's industries and economy is starting to be felt, but from my personal experiences it is just the "tip of the iceberg." As already seen in the WVDEP, vast amounts of resources, both in manpower and money, are starting to be gobbled up by this "bureaucratic monster" that was given life last spring. Statements have been made by the regulators themselves about the large sums of money that are needed to hire additional staff to deal with this growing "monster." Where will the resources come from? As usual there will probably be substantial fee increases and tax increases on the people and businesses which are directly impacted.

The most critical impact will be the uncertainty in permit approvals and also the delays that are already being felt, particularly in the mining industry. What will happen to West Virginia's economy? If businesses can find a way or have a choice they will probably locate to a nearby state. As an employee of a company that has operations in other states, our West Virginia operations appear to be under a full-scale assault of increased costs and untold delays by the regulatory agencies.

Environmental Litigation

The litigation has already started. In January of this year, Joe Lovett and several other attorneys representing several so-called “environmental organizations,” and other “concerned citizens” filed a “Complaint for Declaration and Injunctive Relief” in Huntington, West Virginia against Christine Whitman and the USEPA. The complaint cites that “West Virginia’s Antidegradation Implementation Procedures-60 C.S.R.5- are inconsistent with the CWA and its implementing regulations. The plaintiffs also cite nineteen different items which they state are inconsistent with CWA. The Relief they are requesting includes USEPA setting aside their approval of West Virginia’s Antidegradation Implementation Regulations and also includes awarding the plaintiffs their costs and expenses, including “reasonable” attorney and expert witness fees.

Discussion

One may ask, “Why do we need an antideg policy?” It is just to satisfy a federal requirement. Will it prevent the further degradation of high-quality waters? Even better yet, are waters currently being degraded by permitted facilities or are the state’s waters cleaner than they have been for the last century? These are the questions that need to be answered. If we look back at this state during the early 1900's, we would find vast unregulated logging operations followed by unregulated coal mining. What about Nitro and the Chemical Valley during World War II? Do you think the Kanawha River is cleaner now than it was then? What about sewage treatment? During the 1960's and 1970's practically all municipal sewage flowed directly into rivers with little or no treatment. Why can't we recognize our accomplishments and implement actions only where improvements are needed? The concerns of many citizens are the trash in the streams and the habitat degradation occurring as a result of unregulated and non-permitted activities— not stricter guidelines for currently permitted operations.

Conclusion

What is needed to improve West Virginia streams and rivers is education and incentives, not more cumbersome regulations which deplete the state’s revenues by paying lawyers as a result of more lawsuits. We already have the framework in place to do the job, we just need to focus our resources properly. More cooperation is needed between state and federal agencies. Why can't more money be made available for stream clean-ups, education, and enforcement and incentives focused on those other “non-point sources?” The state already has adequate regulations in place, they just need to be enforced.

West Virginia’s mining industry already spends millions and millions of dollars on environmental monitoring of the state’s water resources, but most of it just ends up in file cabinets or on computer disks somewhere. We need to have serious discussion about what is needed and cut through all the bureaucracy and red tape to get it done.

Least degrading alternatives and socioeconomic analysis look good for lawyers but in reality do absolutely nothing for the average watershed occupant. Putting terms like this in regulations simply invites litigation and some judge’s ruling. Why can't we find a better way?

References

- Bradley, M.A., Antidegradation Presentation, May 8, 2001, Charleston, West Virginia, 23 pp.
- Friedman, F., 1997, Practical Guide to Environmental Management, Environmental Law Institute, Washington, D.C. 464 pp.
- Kentucky Division of Water, September 1997, Guidelines for Stream and Wetland Protection in Kentucky, Natural Resources and Environmental Protection Cabinet, Frankfort, Kentucky, 52 pp.
- Manahan, S. 1993, Fundamentals of Environmental Chemistry, Lewis Publishers, Boca Raton, Florida, 844 pp.
- Questions and Answers on Degradation, Environmental Quality Board Handout, Charleston, West Virginia, undated.
- Schueler, T., H. Holland, 2000, The Practice of Watershed Protection, Center for Watershed Protection, Endicot City, Maryland, 742 pp.
- Stein, J., L. Urdang, The Random House Dictionary of the English Language, 1981, Random House, New York, New York, 2059 pp.
- Twelvepole Watershed Association, January 14, 2002, Meeting Minutes, Wayne, West Virginia, 4 pp.
- Van Der Leeden, F., F. Troise, D. Todd, 1990, The Water Encyclopedia, Lewis Publishers, Boca Raton, Florida, 808 pp.
- West Virginia Department of Environmental Protection Public Relations Memo, What is Antidegradation, Division of Water Resources, Charleston, West Virginia, undated.
- WVDNR and WVDEP Waters of Special Concern, WVDEP Division of Water Resources, WV Division of Natural Resources, Wildlife Resources Section GIS, Charleston, West Virginia, undated.