



February 14, 2014

Michael McClean
Director of Rights of Way Programs
Massachusetts State Pesticide Bureau
251 Causeway Street, Suite 500
Boston, MA 02114-2151

Re: NStar Yearly Operational Plan for Cape Cod

Dear Mr. McClean:

On behalf of the Association to Preserve Cape Cod (APCC), I submit the following comments and reservations concerning the NStar Yearly Operational Plan (YOP) currently under review by your office.

APCC is a non-profit environmental and educational organization founded in 1968 to promote policies and programs that foster preservation of Cape Cod's natural resources. APCC is a Cape-wide organization with over 5,000 members from all 15 towns on Cape Cod. Our goals include protection of groundwater, surface water and wetlands; preservation of open space; promotion of responsible planned growth; and achievement of an environmental ethic. APCC provides science-based technical assistance, outreach, education and advocacy for and on behalf of our members and all citizens of the region. Please visit our website, www.apcc.org, for additional information.

It is APCC's position that all Cape Cod residents and businesses should strive to significantly reduce their use of herbicide and other pesticides, which have the potential to adversely impact human health and the Cape's sensitive environment. APCC acknowledges that the percentage of herbicides used by NStar is relatively small compared to the overall use of herbicides on Cape Cod, although NStar is one of the largest—if not the largest—single user of herbicides on the Cape. APCC also recognizes that NStar's use of herbicides is not the greatest threat to the Cape's environment or that NStar is even the most serious offender of groundwater degradation on Cape Cod. However, there is no dispute regarding the following points:

1. Cape Cod has a great environmental challenge in the form of groundwater degradation.
2. The degradation challenge is not limited to nutrients; it also includes a wide range of chemical products including herbicides, pesticides, fertilizers, pharmaceuticals and cleaning products.
3. Cape Cod sits above a sole source aquifer that receives recharge from precipitation percolating through the ground or running off into surface water bodies and wetlands. Many of these water bodies and wetlands are directly connected to groundwater.
4. Every resident and every visitor obtains potable water from this aquifer.

5. Chemical contamination (including herbicides) of the groundwater is just beginning to be measured and understood.
6. There are other chemical contaminants associated with the use of herbicides, such as surfactants, which in some cases are not fully disclosed because of certain proprietary protections. These associated chemicals are designed to increase the adherence, effectiveness and/or toxicity of herbicides. The use of such herbicides is of concern because of the risks to water quality and to exposed fish, wildlife and plants.
7. NStar is proposing to reinstitute use of herbicides on its miles of rights of way that sit directly above the sole source aquifer, and in some locations are in close proximity to groundwater, wetlands and water bodies.
8. Multiple herbicides that are designed for treatment of different plants are mixed together in a backpack spray dispenser. The compound effect is unknown.

Public utilities such as NStar play a unique role and have unique responsibilities to act in the public benefit. They are frequently described as “affected with a deep public interest” and operated for the “convenience of the public.” Public utilities, due to their monopoly status, exist in a highly regulated environment. This level of regulation exists because if allowed to function in an unregulated environment, the public benefit might fall victim to stockholder and investor interest (“the evil effects of monopoly” in the words of the Supreme Judicial Court). Society expects more from electric utilities not only because of their monopoly status, but also because of our reliance upon the electricity supplied for public health and safety.

APCC believes that NStar’s vegetation management plan and proposed yearly operational plan, as currently written, are not in the public interest, and may have a negative impact on public health on Cape Cod. Minimizing the opportunity for any chemical to enter the sole source aquifer and ultimately be ingested by people, especially children, is critical to protecting public health. Unless NStar can guarantee that no chemical product will reach the groundwater or food chain, the Massachusetts Division of Agricultural Resources (DAR) should not allow use of herbicides by NStar. The burden is on NStar to establish with absolute certainty that no trace of the product, including surfactants, can reach the groundwater, water supply or food supply. The more product used and more places used make this challenge more daunting. A successful vegetation management plan requires ongoing monitoring and reporting, which should be made public.

APCC applauded NStar’s moratorium on the use of herbicides across the Cape. We had hoped NStar would use the time to develop better procedures, better protocols and better monitoring. Instead, NStar seems to have simply taken a time out with the hope that public interest would wane. Now, NStar is in a poor position to state that electrical distribution is in jeopardy and that herbicide application is necessary, because it did not act deliberately and proactively during the moratorium to develop alternative and more acceptable procedures, protocols and monitoring. APCC is skeptical of the claim that there could be an emergency or threat requiring herbicides as the first line of action. NStar has at its disposal a broad range of actions. Vegetation management is never just a choice between chemicals and clear cutting.

In 1990, APCC published the first *Cape Cod Critical Habitat Atlas*. The purpose of the atlas was to provide a sense of the location of the myriad of natural habitats that make Cape Cod the unique ecosystem that millions of people from across the globe have come to visit and appreciate. In 2011, APCC began an update of the atlas. During the early days of that update it became obvious that:

1. Many critical habitats were missed in 1990.
2. Habitats are negatively impacted in relatively short periods of time.
3. Neither the state's Natural Heritage and Endangered Species Program (Natural Heritage) nor APCC has a complete and up-to-date inventory of critical habitats.
4. Relying exclusively on published maps of critical habitats will lead to missing many important and critical habitats.

While NStar has acknowledged the presence and importance of critical habitats and endangered species, it plans to rely solely upon third party sources of information, e.g. Natural Heritage. As noted, APCC has found that this information is incomplete and should not be relied upon as the single source of information for the purposes of applying herbicides to areas that may contain critical habitats. NStar should be required to map and monitor rights of way for habitat and the presence of state-listed and federally-listed species, and share this information with Natural Heritage.

While some mixing of product may be recommended under very narrow circumstances, it is our understanding that remote herbicide application often involves mixing products designed for different plant communities so that the applicator does not need to differentiate between plant types. The problem with this practice is that a portion of the combined product may not be effective against the target plant species, and will instead enter the environment where it may cause harm to non-target plant and animal species and ecosystems. DAR should prohibit this practice and require applicators to either use split tanks or other methods to target specific plant species in order to avoid this wasteful and potentially impactful practice.

While the YOP acknowledges distance from zones of contribution of public drinking water supplies, wetlands, vernal pools, etc., NStar does not identify the distance from groundwater. The distance from groundwater is a critical factor in determining how much product is attenuated before reaching the groundwater. Safety data sheets for the various products have cautions to prevent any discharges into groundwater. Garlon 4 Ultra has this specific caution, "The use of this product in areas where soils are permeable, particularly where the water table is shallow may result in groundwater contamination." Cape Cod has some of the most permeable soils in the state. Moreover, the table included with the YOP entitled "Control Strategies for Sensitive Areas" is poorly crafted and ambiguous. This section of the YOP requires a rewrite including a better description of the environmental risks and harm as well as the procedures utilized.

Based on information provided in the YOP, NStar does not have a complete understanding of the product ingredients it is applying, and consequently, cannot know what the potential environmental impacts may be from those applications. Seventy-three percent of Arsenal Powerline is "other ingredients;" Dupont Escort XP is 40 percent "other products;" Garlon 4 Ultra is 39.55 percent "other

products;" Krenite S is 58.5 percent "other products;" and Rodeo is 46.2 percent "other products." These "other products" are generally given so-called proprietary protection from disclosure. Presumably they are added to increase the toxicity or effectiveness of the herbicide. There is increasing evidence that surfactants and other ingredients may pose health risks to non-target species on their own or in synergy with the active ingredient. NStar should be prohibited from using chemicals for which it does not have full and complete ingredients, and for which the potential impacts are unknown. It is impossible for NStar or anyone to accurately test for groundwater contamination if it does not know which contaminants to test for.

Wind, rain and even cloud cover have impacts on the utility and effectiveness of the various products NStar plans on utilizing. "Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or use of the product in a manner inconsistent with its labeling" is part of the warning on Arsenal Powerline. The YOP is void of weather constraints or protocol. This must be corrected. Additionally, because of the need to minimize potential introduction of product into the groundwater, weather protocol should include a forecast of no precipitation within 72 hours of any application.

Right of way maintenance requires a balanced approach that includes smart horticulture, constant monitoring and vigilance, erring on the side of caution in all areas but especially sensitive areas, low impact equipment, no indiscriminate mowing and the use of chemicals as an absolute last resort (not routine application every x number of years). It appears that NStar does none of this now, and unless required to act responsibly, will not take a leadership role. Because of NStar's public utility status and its reach to every home on Cape Cod, NStar must be part of the solution to our water and groundwater challenges, not part of the problem. The water quality challenges on Cape Cod are unique to this region (sole source aquifer for drinking water, connection of water to the fishing industry) and methods acceptable in other parts of the state will not work here. The Brewster Conservation Trust recently demonstrated that right of way maintenance can be completed with minimal impact to the environment while still protecting the power supply—no chemicals and no heavy equipment. NStar must be required to cultivate these working relationships with interested parties. It is perplexing that NStar has thus far been so reluctant to innovate, communicate and cooperate.

Thank you for allowing APCC the opportunity to comment on this important decision by DAR.

Sincerely,



Edward J. DeWitt
Executive Director