RIGHTS-OF-WAY HEARINGS REPORT; MAY 11, 2001

City Hall, Springfield, November 8, 2000
Gardner Auditorium, State House, Boston, November 9, 2000
Hearings Officer: Dorothy Bisbee

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Executive Summary to Hearings Officer Report on Rights of Way Regulations, May 11, 2001

The Massachusetts Department of Food and Agriculture has proposed changes to the Rights-of-Way Regulations at 333 CMR 11.00. The proposed changes will implement the requirements of the Children's and Families' Protection Act of 2000. Additional changes are being made to ensure greater consistency with other State environmental regulations, enhance the protection of environmental resources and further reduce the risks to public health from pesticide applications.

During the public comment period, the Department received over two hundred oral and written comments on the proposed changes. Many of the comments were detailed, and substantive. This Hearings Report reviews these comments, responds to them, and proposes further revisions. Pursuant to Section 5 of the Massachusetts Pesticide Control Act, the Pesticide Board must approve these regulations before they can take effect. Pesticide Board meetings are open to the public, and notices of all meetings relating to the Board's review of these proposed ROW regulations will be posted at the Department's web site, www.massdfa.org.

Summary of Comments

The comments and the Department's proposed responses, in italics, are summarized under the following headings.

The need for new regulations

With no documented instances of harm to environmental resources or the public health from the use of herbicides on rights-of-way, several industry representatives questioned the need to revise the current regulations at all. They went on to attack the proposed changes as unreasonably burdensome on industry, claiming that they will do serious harm to industry's ability to conduct vegetation management services in Massachusetts. In contrast, however, many comments from non-industry groups stated that they wanted to see very strong regulations to limit or prevent the use of herbicides on rights of way. These comments included a form letter submitted under the names of 168 Massachusetts citizens (the "168 Citizens' Letter") which stated, in part, "It is important that these regulations be strengthened so that harm to public health and the environment caused by pesticides can truly be minimized."

While it is true that there have been no documented instances of negative impact on environmental resources or public health due to pesticide use along rights-of-

way, the Department is revising the regulations to reduce any unnecessary risk from pesticide use on rights-of-way. The Massachusetts legislature has also signaled its intent to increase pesticide regulation of rights-of-way as is evidenced in the Children's and Families' Protection Act.

The Department does recognize that the earlier proposed changes would have significantly, and in some cases unnecessarily, increased the burden on the regulated community. In recognizing the concerns expressed by the regulated community, the new draft of the proposed regulations should, overall, impose a lesser burden on the regulated community than the original draft did by lessening some of the setback increases, removing unnecessary procedural burdens, and making the overall format of the revised regulations conform more closely to the existing regulations. Nonetheless, the new proposed regulations will still impose greater restrictions than the current regulations do, both in terms of setback distances and in terms of notice requirements and other procedural requirements that strengthen public review.

General lack of clarity

Many commentators felt that the Department's proposed changes actually made the regulations harder to follow and lacked sufficient clarity to be promulgated as final regulations. The general formatting of the document, in particular the section covering sensitive areas, rendered the document difficult to read. Adjusting to the revised regulations and the new section numbering system would be problematic, some members of the regulated community noted. In addition, the introduction of several new terms such as "feeder streams," "associated surface water bodies" and "certified vernal pools with water" and "without water" proved confusing to readers.

In recognizing these problems, the Department is proposing several adjustments to the format of the proposed regulations that will make them more consistent with the current regulations. Additionally, several terms will be newly defined or more clearly defined including: Associated Surface Water Bodies; Certified Vernal Pool Habitat; Class B Drinking Water Intakes; Limited Spray Area; No-Spray Area; Public Water Supplier; Rare Species Habitat; Riverfront Area; Surface Water Source; Tributary; Wetlands Determination of Applicability; Zone A; Zone I; and Zone II

Procedural and administrative issues

Several procedural and administrative aspects of the proposed regulations were criticized by industry. It was argued that provisions, which require applicants to procure a list of private wells from Boards of Health, and Determinations of Applicability from Conservation Commissions, could be used to delay, or prevent altogether, vegetation management along a right-of-way. Members of the regulated community criticized the wetlands determination requirement.

Many commentators strongly objected to the revised notice provisions on the proposed regulations. The requirement to include the YOP approval letter in notifications was seen as unnecessary and impractical. A new provision requiring that public notices to municipalities be sent by registered mail rather than certified mail was criticized as expensive and unnecessary. And on the grounds that it was essentially duplicating the information provided in the previously submitted YOP, the requirement to provide a notice to towns of each herbicide application was also seen as unnecessarily burdensome.

The Department recognizes, as a result of the comments, that the original draft regulations may have unintentionally increased the potential for unnecessary delay. The Department has suggested safeguards to ensure that applicators who have met all regulatory requirements for pesticide applications and who have conducted due diligence may proceed, consistent with the law. The Department has proposed a number of options for applicants including asking all residents within 500 feet of a right-of-way for the locations of their wells.

With respect to the requirement that Determinations of Applicability be obtained, this is required of applicants that are not public utilities under the Wetlands Protection Act at 310 CMR 10.03(6)(a). Accordingly, this report is recommending a clearer statement in the proposed ROW regulations on this matter. Furthermore, the report suggests that the proposed regulations reference the DEP delineation requirements.

The report recommends removing the requirement to include the YOP approval letter in the notification. However in the matter of registered mail the Department has no discretion, as this is required by statute. To avoid duplicating the information in the YOP, the Department is recommending that a letter can be sent which references the required information.

Maps

Several commentators remarked on the most appropriate types of maps to use with some favoring Title V maps and DEP's soon to be launched water protection resource area web site.

The report, instead, recommends against including a reference to the web site or other specific information because such references could become outdated, requiring further regulatory amendments. The report suggests that the existing definition, given its broad nature, be retained. Definitions of individual sensitive areas should refer to the most currently available maps of the relevant agency.

Sensitive Areas Protection Zones

A large number of comments centered on the proposed sensitive area provisions. These revised regulations divide Sensitive Areas into Limited-Spray and No-Spray Areas. Herbicides are prohibited in No-Spray Areas, with an exception for utilities able to show through scientific studies that the application of herbicides in wetlands will harm the wetlands less than mechanical vegetation management would. In Limited-Spray Areas, only herbicides that are approved for use in Sensitive Areas may be used. A tabular overview comparing setbacks in the existing regulations to those in the newly proposed regulations is shown on page six.

The addition of new sensitive area definitions came under fire from the regulated community. Commentators found the definitions confusing, and the changes unnecessary.

While many industry representatives felt that these new sensitive areas were too restrictive, many public interest groups felt that they were not restrictive enough. Industry groups questioned the scientific basis for changing or increasing the no spray and limited spray zones. Given the lack of documented instances of any resources being impacted as a result of existing rights-of-way maintenance activities, many commentators felt that the increased setbacks from sensitive areas were unnecessary. Private citizens and environmental groups called for caution in light of the potential for harm from herbicide use.

The railroad industry was particularly concerned about the public safety impacts that the new increased protective setbacks would impose. The new no-spray areas would require that the railroad industry maintain an increased area of railroad tracks free of vegetation by manual or mechanical means. Manual or mechanical means are inferior to herbicide use as a means of eliminating potentially damaging vegetation. It was claimed that the proposed new increased protective zones would seriously interfere with the railroad industry's obligation, and federal requirement, to ensure the integrity and safety of their tracks for transport.

The proposal to increase the no-spray zone around surface water resources and tributaries from 100 feet to 400 feet (the "Zone A") and the limited spray zone to 600 feet was heavily criticized by several groups, most notably the railroad industry. Tom Sullivan of National Grid commented that the expansion in the no-spray zone would greatly increase the need for mechanical controls in these areas. The MDC also weighed in on this point saying that they would be willing to allow certain herbicide usage within the no-spray zone under an approved VMP or YOP reviewed on a case-by-case basis. However, interest groups expressed strong support for the increased protection zone, saying "these setbacks are essential to protect public health and prevent public alarm over the condition of the drinking water."

Table One: Sensitive Area Restrictions for Proposed Revisions to
Rights-of – Way Regulations.

Sensitive Area	Current Restrictions		Proposed Restrictions	
	No Spray	**Limited Spray**	**No Spray**	**Limited Spray**
Public Ground Water Sources	400 ft	Primary recharge	Zone I	Zone II/ IWPA
Public Surface Water Sources				
(i) Surface water sources	100 ft	100 to 400 feet	100 feet	100 feet to Zone A boundary[1]
(ii) Tributaries and associated surface water bodies	None	None	50 feet	50 feet to Zone A boundary[2]
(iii) Class B Intakes	None	None	Lateral distance of 100 feet for 400 feet upstream	Lateral distance of 100-200 feet for 400 ft upstream;
Private Wells	50 ft	50 to 100 feet	100 feet	100 to 200 feet
Wetlands, waters over wetlands, riverfront areas and certified vernal pools Ballast Areas	10 ft[3]	10 to 100 feet	25 feet *10 feet*	25 to 100 feet[4] *10 to 100 feet*
Rare Species Habitat	None	None	Submit copy of YOP to Natural Heritage and Endangered Species Program for comment	

[1] Zone A for a surface water source is ~ 400 feet
[2] Zone A for a tributary to a surface water resource or associated surface water body is ~200 feet. Associated surface water bodies are not currently protected.
[3] Vernal pools are not currently protected.
[4] The limited spray zone for rivers is the Riverfront Area, as defined in the Rivers Protection Act, for ballast and non ballast applications. The limited spray zone for mapped vernal pools is the Vernal Pool Habitat.

The level of protection afforded wetlands was also considered to be too low. Several interest group commentators recommended increasing the setbacks for wetlands from 25 feet to 50 feet to be consistent with the minimum distance from water bodies. Considerable opposition was also expressed to the removal of the section that prohibits the application of herbicides on or within ten feet of any standing or flowing water in a wetland. Audubon stated that MEPA review would be required if this section was to be removed.

The proposal to allow for less restrictive protective zones in the vicinity of non-drinking water resources for the railroad industry came under fire from both public interest groups and the industry. Industry groups accused the Department of setting a "double standard" leading to an inequitable situation. "The same materials are being used and the application methods are the same," stated one representative. The Massachusetts Audubon Society criticized the proposed setback exemptions as "weakening provisions" necessitating MEPA review.

The Department, in its earlier proposed regulations, had distinguished among the following resources: Wetlands; Coastal Waters, Estuaries, Lakes and Ponds; Certified Vernal Pools with Water Present; Certified Vernal Pools without Water; and Riverfront Areas. Given that, for the most part, these resources are all covered under the Wetlands Protections Act, these distinctions proved confusing and unnecessarily complex. In the new proposed regulations the Department has decided to abandon these distinctions and instead consider non-drinking water supply surface waters, vernal pools and riverfront areas resources under the heading ***Wetlands, Waters Over Wetlands, Riverfront Areas, and Certified Vernal Pools.***

The Department has decided to continue to recommend setbacks for wetlands and other non-drinking water resources that are greater than those in the current regulations and those agreed to and accepted by DEP in its 1987 Preface to Wetlands Regulations. The Department believes that this protection should be more than adequate, as herbicides approved for use in sensitive areas should not migrate more than ten feet. The Department will also keep its recommendation of a ten-foot setback for railroad ballast, in light of strong public safety arguments provided by the railroad industry. In recognizing the importance attributed to Riverfront Areas under the Rivers Protection Act, the Department recommends non-ballast area limited spray setbacks for the entire Riverfront Areas.

For drinking water resources the Department is proposing to abandon the Zone A no-spray zone and retain the existing 100-foot no-spray zone in the vicinity of surface water resources for all applicators. The limited spray zone will also remain at 400 feet for all applicators. For associated surface water bodies and tributaries to surface water resources, which currently have a ten foot no-spray zone, the Department is proposing a no-spray zone of fifty feet and a limited spray zone of the Zone A. Reasoning that private wells should be afforded no less

protection than public wells, the Department is proposing to increase the no-spray area from 50 feet to 100 feet.

In recognizing the particular difficulties in maintaining railroad ballast area free from vegetation without the use of herbicides, this exemption will be retained. The reduction in the risks of a train derailment in the vicinity of a sensitive resource, particularly if the train is carrying hazardous materials, significantly outweighs the benefits to sensitive resources from increasing the setbacks. The associated public safety benefits are more tangible than the risks at this time.

In revising the regulations the Department has attempted to mirror resource protection zones in existing state environmental regulations such as Zone II's, IWPA's and Zone A buffers where appropriate. While these zones are largely based on scientific analysis and best professional judgment, the Department recognizes that many of these protective zones were never intended for pesticide applications. Pesticides applied to rights-of-way have been evaluated for their environmental fate and transport properties and their toxicity prior to registration at the federal level by USEPA and their suitability for use on rights-of-way at the state level by DFA and DEP. As a result, changes are proposed which will better reflect the need to selectively apply approved pesticides in the vicinity of sensitive resources. The Department's decisions on demarcations between No-Spray and Limited-Spray Areas are an attempt to balance public requests for greater setbacks with requests from the regulated community to make them smaller. ***In all cases****, the setbacks under the revised regulations will be equal to, or greater than, those that exist today.*

Children's and Families' Protection Act

Representative Peterson, the sponsor of the Chapter 85 of the Acts of 2000, which is known as the "Children's and Families' Protection Act," and the 168 Citizen Letter, among others, criticized the proposed regulations for not "adequately reflecting the plain meaning nor the legislative intent of the language in the pesticide act concerning the use of pesticides along roadways."

The Department's revised proposal has incorporated, practically word for word, all of the rights-of-way provisions of the Children's and Families' Protection Act. This includes the 21-day notification requirements; the 48-hour newspaper notification requirement; the requirement that all agencies of the commonwealth develop policies to eliminate or, if necessary, reduce the use of pesticides for any vegetation management purpose along any roadway; and the requirement that any employee of any state agency, or authority, when using, observing or supervising the use of pesticides be provided with personal protection equipment and clothing.

Rights-of-Way Advisory Panel

Commentators asked about the reason for replacing the VMP Panel with a Rights-of-Way Advisory Panel. Recommendations were made as to the members to be added.

The name change reflects the broader scope as described in the proposed regulations of the panel. The hearings report suggests that a representative of MDC's Division of Water Management should be added to the panel.

Conclusion

All pesticide regulations are highly controversial, and the Rights-of-Way Regulations are particularly so. The Department has carefully considered all public comments, reviewed its original proposal, and recommended revisions that, it believes, present a rational approach and a fair compromise between calls for increased regulation and calls for decreased regulation. The Department is also recommending that the ROW Advisory Panel review the revised regulations when they are implemented and, if appropriate, propose additional revisions in 2003.

All comments are discussed in the Report. Appendices to the Report include the Department's current regulatory proposal, a table summarizing the proposed setbacks, and a document comparing the regulations as they currently exist, as proposed in 2000, and as proposed today.

Hearings Officer Report on Rights of Way Regulations, May 11, 2001

SUMMARY

Under its authority at MGL c. 132B, the Department of Food & Agriculture proposed revisions to the regulations entitled "Rights of Way Management" at 333 CMR 11.00 in November 2000. Following a careful review of all public comments, the Department has revised its proposal to represent a compromise between the increased regulation that citizens and public interest groups and some state agencies requested, and the regulated community's argument that there was no need to revise the existing regulations. The attached Executive Summary reviews the main points in these revised regulations, and compares the setbacks that these regulations would increase. Pursuant to MGL c. 132B, s. 5, the Pesticide Board must approve these recommendations before they can become final. Copies of existing and revised 333 CMR 11.00, along with a document comparing the current proposal to the original proposal and the existing regulations, are attached. If approved by the Pesticide Board, the revisions will take effect upon publication in the Massachusetts Register, most likely in the fall of 2001.

PUBLIC REVIEW PROCEDURES

The Department began discussions about revising the ROW regulations with the Vegetation Management Plan Panel and the Pesticide Board in 1996. In conformance with Executive Order 384, the Department submitted its original proposal to the Department of Administration & Finance (A&F) in the November 1999 and issued notices of January 2000 hearings to Local Government Advisory Committee representatives and interested parties. However, the Department cancelled these hearings to complete a more detailed cost-benefit analysis at A&F's request. The Department submitted this analysis to A&F on January 21, 2000. The Massachusetts Legislature then enacted the Children's and Families' Protection Act of 2000. This law amended provisions of the Massachusetts Pesticide Control Act relating to pesticide application in rights of way. Therefore, the Department made further revisions to its proposed regulations, and submitted a revised version to the Executive Office of Environmental Affairs (EOEA) on July 24, 2000. EOEA forwarded the proposal to A&F on August 15, 2000, and A&F approved the Executive Order 384 checklist on September 8, 2000.

Pursuant to MGL c. 30A, the Department issued notice of a public hearing and comment period. The Department filed this notice and copies of the proposed changes with the Secretary of State's Office's Publications and Regulations Division on October 5, 2000, distributed them to the Massachusetts Municipal Association and the Executive Office of Communities and Development on September 25, 2000, and mailed them to interested parties on October 3, 2000. The notice was published in the Boston Globe on October 19, 2000, the Springfield Union-News on October 20, 2000, and the Massachusetts Register

on October 27, 2000. The fact sheet, notice, and current and proposed regulations were also posted at the Department's web site, www.massdfa.org.

On November 8, 2000, the Department held a public hearing in Springfield City Hall at 12:00 noon. Gerard Kennedy of the Department's Pesticide Bureau attended, and Department Deputy General Counsel Dorothy Bisbee presided as Hearing Officer. Approximately 30 members of the public attended the hearing and gave oral and/or written comments. The Department held its second scheduled hearing on November 9, 2000 in the State House's Gardner Auditorium at 1:00 p.m., again with Gerard Kennedy attending and Dorothy Bisbee serving as Hearing Officer. Approximately 30 members of the public attended the hearing and gave written and/or oral comments.

Lists of groups and individuals who presented public comments are included in the Appendices to this Report. Due to an overflow of e-mailed comments that booted some comments back to commentators, the Department extended the public comment period from its original termination date of November 30, 2000, to 5 p.m. on December 8, 2000.

The Hearings Officer has confirmed that the Department has satisfied all procedural requirements of applicable state statutes and regulations, as well as Executive Order 384, in conducting the public comment and review period for these regulations. The Hearings Officer has determined that the Department has made a fair and careful review of all public comments, and that the revised proposal is a rational and appropriate response.

INTRODUCTION

The Department of Food and Agriculture received over two hundred oral and written comments on the proposed revisions to pesticide rights-of-way regulations at 333 CMR 11.00 during the public comment period. Moving from the general to the specific, the following Hearings Report reviews these comments, responds to them, and proposes further revisions that represent a middle ground between the original proposal and the existing regulations. The revised proposal is closer to the current regulations in content and structure, and some setback increases are smaller than those originally proposed. However, the proposal still represents a significant increase in the extent to which herbicide use in rights-of-way will be regulated in Massachusetts. In addition to increased setbacks and new procedural requirements mandated by the Children's and Families' Protection Act, the Department has re-inserted many current requirements into its proposal.

Appendices A and B list the persons and organizations who commented on the proposed regulations during the comment period. Appendix C lists acronyms used in the body of the Report, Appendix D contains the Department's final proposal, Appendix E compares the final proposal to the current regulations and the original proposal, and Appendix F lists documents referenced in the Report. While the Report should address every comment the Department received during the comment period, many comments came from multiple sources. Therefore, some commentators may not be quoted in the Report itself.

Every attempt has been made to reflect the comment record accurately and fairly. Any person who provided comments on the proposed revisions to 333 CMR 11.00 and feels that her or his comments were omitted from this Report or misquoted herein should contact the Hearings Officer at Dorothy.Bisbee@state.ma.us at once so that any appropriate revisions can be made.

Because the subject of pesticide applications in rights-of-way is so controversial in Massachusetts, this Report is being made available to the public over the Internet. The Department will give this Hearings Report to the Pesticide Board to assist the Board in deciding whether to approve the proposal.

GENERAL COMMENTS

1. Given that there appear to have been no documented problems with the current version, commentators challenged the need for revised regulations.
Dennis Coffey of the Massachusetts Railroad Association stated: "there have been no legitimate complaints associated with the current regulations; no complaints about drift, public health or the hazards; no impacts to human health; no impacts to environmental health." Harry Williston of Vegetation Control Services, Inc., Burdon Skaggs, Paige Kane of CSX, P. Scott Conti of Providence & Worchester Railway, and several others made similar comments. Wayne W. Duffett, P.E. of TEC Associates, Consulting Engineers, said: "All of the administrative changes in the Regulations are over issues for which this office, in annually dealing with 175 communities on nine railroads, receives virtually no comments or complaints. How, then, are these changes justified?"
Tom Sullivan of Northern Grid USA stated that Massachusetts' ROW regulations "are the most comprehensive of those in any state in the country and provide a high level of natural resource and human health protection." Sullivan also noted that National Grid has a good working relationship with municipal officials, public water suppliers, surface water suppliers including the MDC, and ROW neighbors, resulting in good communications and a significant level of trust, and that there was no need for change in this area. Finally, Sullivan asked what, if any, scientific data had led to the Department's decision to increase the size of no-spray zones, stating that National Grid USA was "not aware of any Sensitive Areas being negatively impacted using the present no-herbicide zones."

(a) Discussion:
The Department is aware of no documented instances of harm to environmental resources or the public health from the use of herbicides on rights-of-way that have occurred since the regulations took effect in 1987. Similarly, the Department is aware of no significant problems with the administration of the existing regulations. Private citizens and some environmental and municipal groups and agencies have sent the Department a clear message over the past several years that, in their view, the current regulations are inadequate for protecting sensitive resources and public health. In the late 1990s, in response to these comments, the

Department began drafting regulatory revisions that would increase protection of resources and expand the level of municipal review of pesticide use in rights-of-way. The Department's proposed revisions were based on changing public attitudes towards risk, rather than on new scientific data. These changing attitudes were further evidenced in the passage of the Children's and Families' Pesticide Act in 2000. As a result, the Department further revised its proposed revisions to reflect changes that are now mandated by legislation.

(b) Department's Suggested Action

The Department recognizes the concerns that individuals and industry groups have expressed regarding these proposed regulations. The Department has attempted to strike a balance in the proposed regulations between adequate stringency and reasonable allowance of responsible right-of-way maintenance. Specific proposed revisions to the draft regulations are discussed below.

2. A number of commentators stated that, contrary to the statement in the public hearings notice, the regulations are not "streamlined and easier to follow."

Darryl Jassen of Western Massachusetts Electric Company (WMECo) and DeAngelo Brothers both criticized the proposed regulations as being more obtuse and harder to comply with. Paige Kane of CSX criticized the proposal as creating an unworkable and unreliable system leading to public safety hazards, and for amounting to "a permitting system." The Massachusetts Water Resource Authority (MWRA) stated in written comments that the regulations as proposed lacked sufficient clarity to be promulgated as final regulations. DeAngelo Brothers observed that, while most states regulate pesticides through one agency and work with other agencies and municipalities to streamline the regulatory process, "It seems that Massachusetts has gone the other direction." Others with similar comments about the difficulty of following the proposed regulations included Dennis Coffey of the Massachusetts Railroad Association (MRA) and Rufin Van Bossuyt.

Discussion

The Department recognizes that the revision was not easier to follow, particularly for members of the regulated community who have learned to follow the current regulations. Therefore, the Department has revised its proposed regulations for closer consistency with the current regulations. The revisions preserve the numbering and lettering in the current regulations to the extent possible, retain the existing format, and re-insert some substantive provisions in the existing regulations.

As with other command-and-control environmental rules, pesticide regulations must be complex if they are to provide adequate environmental protection while allowing some herbicide use. For example, a blanket prohibition on any spraying within a set number of feet of standing water would be clear and concise, but it would omit intermittent streambeds that may be dry in one season but carry pollutants in another. A blanket restriction on all herbicide use would be even easier to follow and to enforce, but it would disallow uses that, at the present time, have been shown to have significant benefits. Results-oriented regulations might

state that no herbicide application could harm a water body. These regulations would be impossible to comply with or to enforce without detailed, resource-specific regulations detailing what constitutes "harm." Therefore, pesticide regulations and other environmental rules in Massachusetts and at the federal level tend to require specific actions that are designed to achieve or avoid particular results.

The Department has attempted to make the revised regulations as consistent as possible with the other environmental regulations in the Commonwealth. In the proposed regulations, sensitive environmental resources are identified according to DEP designations where applicable. Setbacks for no-spray and limited-spray zones are also harmonized with other environmental regulations where applicable. As noted in the discussion further below, the Department is now proposing additional uniform definitions based on comments received. Some examples of improved consistency with existing environmental laws and regulations are as follows:

- In the existing regulations, drinking water is covered under the broad headings for "Public Ground Water Supplies," "Public Surface Water Supplies" and "Private Drinking Water Supplies." The proposed regulations substitute designations for public water supplies found in DEP's Drinking Water Regulations (310 CMR 22.00) such as Surface Water Sources. They also include a more detailed private well identification process.
- Drinking water setbacks in the proposed regulations mirror DEP's protective areas for wells such as Interim Wellhead Protection Areas (IWPAs) and Zone I's.
- In order to mirror the Rivers Protection Act, the Department has proposed riverfront area no-spray and limited-spray zones.
- The proposed new protective zone for Rare Species is consistent with the habitat designations of the Division of Fisheries and Wildlife.

The Department is the lead agency when it comes to pesticide regulation, and is the primary point of contact for ROW applicators. The Department has worked with all other agencies involved to ensure that its ROW regulations are consistent with other environmental protection laws in the Commonwealth. In some cases, applicants will still need to contact other agencies that have jurisdiction over particular types of sensitive area delineations or play other roles in the process.

While the Department recognizes that the Rights-of-Way regulations are not simple, the streamlining claims apply to the enhanced consistency of the proposed regulations with other state environmental regulations. These proposed designations identify the environmental resources requiring protection with greater scientific, ecological and legal accuracy.

(b) Department's Suggested Action

The Department recommends further modifications to the regulations, as detailed below, to ensure consistency with other state regulations, in particular the Wetlands Protection Act.

3. Many commentators stated that it is not necessary to increase the sensitive area restrictions and questioned the scientific basis for doing so.

CSX Transportation wrote that the proposed regulations would redefine sensitive areas in a discretionary fashion that is not based on science. Gerry Blase of Asplundh Tree Expert Co. and the National Railroad Contractors' Association, in both oral and written comments, asserted that there is no scientific basis for the setbacks from sensitive resources. Specifically, he asked in written comments for the work group that DFA assembled to provide the scientific data that back up the following provisions:

- Increasing buffer zones around sensitive areas.
- The need to "further minimize the risk of unreasonable adverse effects" as outlined in the definition of "Sensitive Area."
- Allowing agricultural activities to go unrestricted in sensitive areas, but requiring rights-of-way applications to stop within 100 feet of the agricultural area despite the fact that farmers may use herbicides in these areas.
- Creating application standards that are more stringent than EPA-approved manufacturers' labels by requiring that the *minimum* labeled use rate be applied in sensitive areas.
- The claim that using the minimum labeled rate of the approved products is "safer" or minimizes unreasonable adverse effects.

DeAngelo Brothers, Inc. and other commentators also objected strongly to the increased setbacks and other restrictions on herbicide applications.

While most opposition to increased restrictions came from members of the regulated community, citizen and homeowner Christopher Burian stated that he was submitting comments "to counter the mass mailing you are receiving from poorly-informed MassPIRG subscribers." Stating that he had "no ties whatsoever to chemical, pest control, or agricultural industries, or to landlords and property managers," and that he genuinely cared for the environment, Burian stated that pesticides can help the environment when used correctly, and that they suppress disease-carrying and crop-destroying parasites. He said that new regulations should be based strictly on scientific principles and with the goal of furthering human health, using appropriate cost-benefit analysis . . . ([including] costs to human health from parasite-borne illness), and asked the Department to enforce regulations "only to insure the safety of people against measurable threats." Amtrak, while a member of the regulated community, said:

> We must point out that the vast majority of our members and the employees that we represent are citizens of Massachusetts. We have no desire to see our families endangered by toxic chemicals or tainted water. We are acutely aware of the type of chemicals that may be used in vegetation control. A private citizen can acquire

from a hardware store and use more of the same chemical (RoundUp) per square foot on their lawn than rail operators are allowed to use along their rights-of-way. Airports and highways are literally unregulated in the matter of vegetation control. The whole situation is patently absurd.

Amtrak's John Mitchell made the following comment, also included in Amtrak's written comments: "We all agree that the use of dangerous herbicides may need better control; however, not at the expense of public safety."

(a) Discussion:

Protective zones (Sensitive Areas) in the proposed regulations largely track protective zones in DEP regulations. DEP-protected areas like Zone II's, IWPAs and wetland buffer zones are based on scientific analysis and best professional judgment regarding a particular type of resource. Still, most of these setbacks are premised on general, rather than specific, scenarios about factors that vary a great deal such as hydrology, topography, soil types, or the confined or unconfined nature of aquifers. They also are designed to protect against a range of risks, many of which may be more significant than the limited application of particular herbicides that are approved for use in sensitive areas. Limiting permissible applications in DEP-protected areas will provide the Department with greater confidence that natural resources will be adequately protected. Prohibiting all spraying in these areas would not, the Department believes, reflect either scientific rationale or a balancing of the requests of different interest groups.

These revised regulations divide Sensitive Areas into Limited-Spray and No-Spray Areas. Herbicides are prohibited in No-Spray Areas, with an exception for eligible applicators able to show through scientific studies that the application of herbicides in wetlands will harm the wetlands less than mechanical vegetation management would. In Limited-Spray Areas, only herbicides that are approved for use in Sensitive Areas may be used.

The Department's decisions on demarcations between No-Spray and Limited-Spray Areas are an attempt to balance public requests for greater setbacks with requests from the regulated community to make them smaller. In all cases, the setbacks under the revised regulations will be equal to, or greater than, those that exist today. However, the Department is decreasing some proposed setbacks from its original proposal based on the fact that the existing setbacks have not been associated with any documented harm to human health or the environment.

Drawing on EPA data, the Department evaluates pesticides for use on rights-of-way based upon factors including their mobility level and their persistence in the environment. The Department is attempting offset these risks to sensitive resources by restricting applications in rights-of-way to the minimum amount of pesticide that can be effectively applied under the label. This provides the highest level of protection for sensitive resources, and reduces and the potential risks to

resources presented by toxicity that could move beyond the target application area or persist in the environment unnecessarily.

Pesticides applied to a right-of-way to maintain vegetative growth could potentially impact a grower's crops, land and livelihood. The restriction on applications within 100 feet of an agricultural area is needed to ensure protection for the food supply from pesticides which may not be labeled for use on food crops, or which may result in an over-application of pesticides to a crop. Furthermore, many farmers use pesticides judiciously or only as part of an Integrated Pest Management program, and some organic farmers do not use pesticides at all.

Herbicides are generally applied in rights-of-way to control weeds that may obstruct or harm utilities or transportation lines, not to combat disease. Therefore, comments received regarding disease-control benefits of pesticides will not apply to these ROW regulations.

(b) Department's Suggested Action

The proposed regulations should be made even more consistent with existing regulations, in particular the Wetlands Protection Act regulations at 310 CMR 10.00 and the Drinking Water Regulations at 310 CMR 22.00, to ensure a consistent approach to environmental protection. The Department will propose setbacks that represent a middle ground between the existing regulations and the revisions as originally proposed.

4. A number of commentators questioned the composition of the working group that was involved in the development of the regulations

The public hearing notice maintains that the department received "input from a working group" in making changes to the regulations. Paige Kane of CSX expressed extreme disappointment at the railroads' lack of participation in the working group, noting that they will bear the greatest cost in terms of tragedies and derailments. Dennis Coffey also stated that the railroads were not allowed a voice in this working group, and P.Scott Conti of Providence and Worchester Railroad Company said that the regulations "were drafted without P&W's input." Wayne W. Duffett, P.E. of TEC Associates was among others making similar comments.

(a) Discussion

The members of the VMP Panel, including its railroad industry representative, were invited to participate in the working group in 1996. All members of the Pesticide Board were also invited. While the activities of the working group were not documented in meeting minutes, dated notes or other precise materials, the Department did receive extensive input from this group and from others through meetings and conversations over the four years prior to the public comment period for the proposed regulations.

(b) Department's Suggested Action
The Department has received extensive railroad industry input during the public comment period, and is taking all of these comments into account in its further analysis of the regulations. The Department is also recommending that the ROW Advisory Panel, which represents a range of interested parties and holds meetings open to the public, review these revised regulations as implemented over the next several years, particularly the sensitive area setbacks, and determine whether the regulations should be further revised.

5. Administrative aspects to the proposed regulations allow towns to use the regulations as a delaying tactic

A number of commentators, among them Eli Mistivich of Amtrak, pointed out that towns could use new provisions requiring lists of private wells and Determinations of Applicability to prevent or delay rights-of-way applications. A new provision requires that updated lists of water sources be obtained from Boards of Health within the 30-day period immediately preceding the application. DeAngelo Brothers, Inc. noted that the lack of a local approval could result in a delay in ROW maintenance that could, in turn, lead to substantial property damage, injury or death. DeAngelo Brothers asked who, in such a case, would be liable.

(a) Discussion:
The Department recognizes, as a result of the comments, that the potential exists for the regulations to be used to delay or avoid vegetation management.

(b) Department's Suggested Action
As detailed more specifically below, the Department has suggested safeguards to ensure that applicators who have met all regulatory requirements for pesticide applications and who have conducted due diligence may proceed, consistent with the law.

6. A new double standard of setbacks is being created for railroads, resulting in an inequitable situation.

Walter Dodge of Northern Tree Service wrote that in 11.04(2)(d), (e), (f) and (h), one set of sensitive areas is outlined for railroads and another set for all other types of rights-of-way. "The same materials are being used and the application methods are the same." Daryl Jassen proposed that a single standard be applied for all sensitive areas.

The Massachusetts Audubon Society, citing the Supplemental Final Environmental Impact Report (SFEIR) for the Fall River/ NewBedford commuter rail project, wrote of its opposition to "any special setback exemptions for railroads prior to public review through the MEPA process of these proposed weakening provisions."

Referring to the fact sheet that accompanied the hearings notice, Ken Kipen of the Hilltown Anti-Herbicide Coalition asked why the specter of train derailments is being

raised to justify applying herbicides to railroad ballast areas fully 60% closer to all water resources than other ROW applicators are allowed to spray.

(a) Discussion
Railroad tracks are susceptible to damage from vegetation that grows up through the ballast (gravel) below them and winds its way through and around the ties. The tracks can often obscure the vegetation, making it easy to miss the potential damage to the track in a visual inspection. Trains are vulnerable to derailments on tracks that have been damaged due to vegetation that has been missed in a visual inspection. Because the Department recognizes the significance to public health of maintaining railroad ballast areas free from vegetation and the particular difficulties in doing so without the application of herbicides, lesser setbacks have been proposed for herbicide applications to railroad ballast areas in the vicinity of certain sensitive areas. The reduction in the risks of a train derailment in the vicinity of a sensitive resource, particularly if the train is carrying hazardous materials, significantly outweighs the benefits to sensitive resources from increasing the setbacks. The associated public safety benefits are significant.

(b) Suggested Action
None.

7. The regulations would seriously interfere with the railroad industry's obligation, and federal requirement, to ensure the integrity and safety of their tracks for transport and for railroad employees.
Federal law requires that the railroads control for vegetation. Vegetation can cause damage to railroad tracks by growing in and around the tracks. The resulting flaws in the tracks can be invisible to the naked eye. This presents a problem for track inspectors because the only way that they can inspect tracks for damage is through a visual inspection. Several industry members commented that, because of this, it is impossible to determine if damage is being caused to the tracks by concealed vegetation that inspectors cannot see. The only sure way to eliminate this potentially damaging vegetation, according to railroad industry representatives, is to apply herbicides.

P. Scott Conti of P&W described in detail how vegetation management along rights-of-way is a critical component of several aspects of railroad safety. Amtrak's Paul Taylor wrote that unchecked vegetation growth significantly weakens the track structure and subgrade, significantly reduces sight lines for employees who perform track maintenance inhibiting their ability to see approaching trains, obstructs the view of warning signals, inhibits sound travel that is particularly critical to railroad employees in times of train speeds reaching 150 MPH, adversely affects the braking and propulsion capacities of trains, creates a film on tracks that impedes wheel-to-rail adhesion and adversely impacts schedules and braking distances, and compromises the reliability of train signal circuits governing train movements and at public grade crossings. James Teague of the Brotherhood of Maintenance of Way Employees and other railroad representatives echoed many of these comments. In the event of an accident as a result of improperly maintained railway lines, Eli Mistivich of Amtrak stated that his inspectors are personally

liable for fines of up to $10,000 per day under federal law. Anthony H. Jewell of Indus-Rail Co. stated that he had been involved in the Massachusetts railroad industry for nearly thirty years and said that during this time:

> I have investigated numerous unfortunate railroad related accidents involving injuries or fatalities and have inspected many thousands of miles of tracks. It has been my experience that none of the railroad incidents that I have investigated or have been familiar with has been related to or attributed in any way shape or form to using too much herbicide … Thirty years ago the rights of way of the railroad main lines in Massachusetts were pretty well cleared away, not infrequently up to 30 feet from the track center line … Today, many of our main lines are becoming over run with vegetation. There is no doubt that some of this change may be directly attributable to the elimination of manual cutting due to safety and cost issues. It is equally clear, however, that the increasingly draconian herbicide regulations of the Commonwealth are playing a key role and are creating safety problems … The increasingly marginal gains in reduction of chemical exposure are in fact creating serious safety hazards for the public at railroad crossings and at a variety of other locations where visibility of signals and equipment can mean life or death.

MRA made the following comment:

> [The two-year limited spray zone revision] would establish and/or lengthen no-spray zones on many miles of track. There are already within the Commonwealth numerous no-spray zones adjacent to public water supplies where heavy vegetation obscures the track from the track inspector's view. In these areas, the potential for an undetected track defect or an accident caused by increased braking distance or lack of sight distance is increased. In no other area could a railroad accident or incident have such an immediate, direct, and catastrophic result. In a remote and inaccessible railroad right-of-way, the response time to a hazardous material spill will be measured in hours.

Paige Kane of CSX stated that the regulations as proposed would substantially interfere with national policy and would effectively prohibit brush spraying on at least 50% of CSX tracks. She submitted a copy of *General Principles of Federal Preemption* and wrote that the proposed regulations "would exceed the legal authority of the state to regulate railroad operations and would create an unmanageable regulatory process."

Alexandra Dawson of WSCAC and MACC wrote that the statement by CSX that half of its rights-of-way would be closed to spraying under the new setbacks "seem highly exaggerated." She went on to write the following (emphasis in original):

> *A DEP study based on GIS identified slightly less than 85 miles of railroad right-of-way, statewide, that would be affected by the increased setback.* The Generic Environmental Impact Report on Airport Vegetation Management has identified a hierarchy of management, under which manual control is first investigated, before

chemicals are considered. This should be the preferred approach for other users as well.

DeAngelo Brothers, Inc. suggested that decreased herbicide applications could result in serious property damage, injury or death along ROWs. DeAngelo Brothers asked who would be liable in such a case, if the applicator had followed the regulations.

Wayne H. Duffett, P.E. of TEC Associates, Consulting Engineers, suggested that increased railroad ROW no-spray zones near surface water supplies would expose these supplies "to far greater and potentially catastrophic dangers from railroad equipment and cargoes. Track defects, concealed by vegetation, have the potential to result in accidents. These accidents could result in the immediate and direct discharge of hazardous material into the water supply and in remote areas where emergency response could take hours."

(a) Discussion

The Department recognizes that the increased general setbacks in the proposed regulations could interfere with the ability of the railroad industry to safely maintain railway lines. To address this, the Department has proposed lesser setbacks for railroads than for other rights-of-way near wetland resource areas. Even if evidence that less than 85 miles of track will be affected means that mechanical controls would have less of an impact on railroads than the industry has argued, it also means that the lesser setbacks will be limited to less than 85 miles. Railroads have investigated manual control and found that its risks outweigh its benefits in most cases, particularly as a single blade of grass can obscure a hairline crack in track. The Department is also decreasing the proposed water supply no-spray setbacks for all applicators to 100 feet. While still more than the current regulations, these setbacks will be less than those originally proposed.

The Department does not agree that Federal law preempts its regulations. Railroads have complied with the State and Federal regulations to date, and the proposed revisions retain a ten-foot setback in many Sensitive Areas for railroad ballast areas. Newly proposed procedural requirements are, as mentioned elsewhere in this Report, mandated by Massachusetts statutes, regardless of whether they are re-printed in these regulations. However, the Department believes that the regulated community relies more closely on regulations than statutes in its compliance efforts, and therefore believes that it is appropriate to repeat these requirements in the regulations.

As noted elsewhere in this Report, the Department is not decreasing any of its setbacks. Water supply setbacks are increased, and the Department appreciates Mr. Duffett's comments about the risk of hazardous material spills in these areas. However, the Department has decided to keep railroad water supply setbacks consistent with other ROW setbacks at this time.

(b) Department's Suggested Action
None.

8. Children and Families Protection Act and Calls to Strengthen the Regulations and Limit Pesticide and Herbicide Application Along Roadways to the Maximum Extent Possible

Rick McNeil of the Easthampton Conservation Commission stated: "I am concerned about pesticide and herbicide use along major roadways. Many streams and bodies of water are already contaminated. We need strong measures to protect our resources. I am glad that the Highway Department did not use herbicides this past year in Western Massachusetts." Other commentators also stated that they wanted to see very strong regulations to limit or prevent the use of herbicides in rights of way. These comments included a form letter submitted under the names of 168 Massachusetts citizens (the "168 Citizens' Letter") which stated, in part, "It is important that these regulations be strengthened so that harm to public health and the environment caused by pesticides can truly be minimized."

The 168 Citizens' Letter and several other commentators remarked on the rights-of-way provisions of Chapter 85 of the Acts of 2000, which is known as the "Children and Families Protection Act," Representative Petersen, the Act's chief sponsor, wrote the following:

> [T]he proposed regulations do not adequately reflect the plain meaning nor the legislative intent of the language in the pesticide act concerning the use of pesticides along roadways. The plain meaning of the legislation clearly favors the elimination of chemical pesticides as a means of managing vegetation along roadways, except in those cases where necessity dictates that pesticides be used. In other words, the legislation contemplates a presumption in favor of non-chemical means of controlling vegetation along roadways.

The Earth Decade Committee urged "tough implementation of the Children and Families Protection Act" and specifically referenced Section 10 of the Act (implemented as revised MGL Chapter 132B, Section 6(c)). This section requires all agencies and authorities of the Commonwealth to "develop policies to eliminate or, if necessary, reduce the use of pesticides for any vegetation management purpose along any roadway." The 168 Citizens' Letter similarly stated that the regulations should reflect the Legislature's clear intent expressed in this provision, adding:

> The policies of state agencies and authorities should be required to meet the difficult burden of proving that it is impossible to eliminate pesticide use along roadways before they can even consider using the chemicals. Agencies that do meet that burden of proof should then be required to demonstrate how they would reduce their use of pesticides. As proposed, the regulations simply do not reflect the letter of the law in this regard and are therefore inadequate.

Ken Kipen of the Hilltown Anti-Herbicide Coalition echoed these assertions and asked why the policies of state agencies and authorities have not been required to meet the difficult burden of proving that it is impossible to eliminate pesticide use along roadways before they can even consider using the chemicals. Rich McNeil of the Easthampton Conservation Commission also requested the inclusion of "burden-of-proof provisions" for pesticide users in the ROW regulations.

(a) Discussion
Section 6B(c) of the Massachusetts Pesticide Control Act, as revised by the Children's and Families' Protection Act, requires Massachusetts agencies and authorities to "develop policies to eliminate or, if necessary, reduce the use of pesticides for any vegetation management purpose along any roadway." Section 11.05(2)(k) of the proposed regulations incorporates this provision by requiring that applicants include descriptions of these policies in their VMP's.

(b) Suggested Action
None

9. The regulations would seriously interfere with the ability of vegetation management services to conduct their business in Massachusetts.
Senator Stephen M. Brewer wrote on behalf of one of his constituents, Walter Dodge of Northern Tree Service, Inc.. Attaching correspondence from Mr. Dodge discussed elsewhere in this Hearing Report Senator Brewer wrote: "[i]t is my understanding that these proposed changes will do serious harm to Northern Tree Service, Inc.'s ability to conduct vegetation management services in Massachusetts. The financial implications to businesses such as Northern Tree Service, Inc. could be severe." DeAngelo Brothers, Inc. wrote that "Massachusetts continues to be one of the most stringent, hard to comply with states in the country," and added:

> … as regulations get tighter and more economically unacceptable, the legitimate contractors will seek better operating conditions elsewhere, opening the door for others who may not be as concerned about regulation compliance and who may not be as qualified to perform the necessary work … Please think about the big picture and how these 'slight' changes to the regulations can and probably will affect the people of Massachusetts.

(a) Discussion
The Department recognizes that the proposed changes will increase the burden on the regulated community. The Department has no control over the changes that are mandated by the Children's and Families' Protection Act. Other changes, particularly those that relate to setbacks, are being proposed as a compromise between some demands for much more stringent protection, and some for much less. Of the more than 200 comments regarding the proposed regulations that the Department received in oral hearing comments and via mail, e-mail and fax, a significant number of comments favored strengthening the provisions.

In response to extensive comment from the regulated community, the new draft of the proposed regulations should, overall, impose a lesser burden on the regulated community than the original draft did. However, it will still impose greater restrictions than the current regulations do.

(b) Suggested Action
None.

10. The regulations fail to recognize the science of Integrated Vegetation Management.

David Goodson of Northeast Utilities System and Tom Sullivan of National Grid USA stated that the regulations fail to recognize that Integrated Vegetation Management, which relies upon a variety of tools including herbicides and mechanical methods and is similar to Integrated Pest Management, is the most effective way to maintain a right-of-way. Mr. Goodson suggested that the current members of the Vegetation Management Panel and the Pesticide Board view ROWs in the field to observe the results of the existing regulations and to decide "what types of changes, if any, may be necessary."

Commentators' principal objections to exclusive reliance on mechanical means were as follows:

1. It is a crude way to maintain a right-of-way because it does not allow for the specificity provided by herbicide applications;
2. Mechanical treatment leads to significant re-growth that does not occur with herbicides, rendering the need for increased maintenance (for example, Tom Sullivan noted that "stable, low-growing plant communities on electric utility rights-of-way will be replaced by fast growing thickets of hardwood trees requiring more frequent, more disruptive maintenance [such as] … the use of chainsaws and more mechanized equipment. These methods do not result in less environmental impact."); and
3. Mechanical treatment poses increased risks to worker safety.

Commentators cited benefits of Integrated Vegetation Management including the following:

1. Promoting the growth of a diverse plant community;
2. Enhancing erosion control in riverfront areas (in particular, Tom Sullivan noted that, within the limited-spray area currently in effect between 10 feet and 100 feet from wetlands, "the stable low growing plant community in this Sensitive Area provides erosion control, bank stability and an aesthetically pleasing riverfront area. The result of mechanical treatment only in the proposed 100 foot no-herbicide set-back will result in hardwood thickets dominated by a few tree species and would require mowing or heavy cutting every few years …";
3. Providing valuable wildlife habitat and lending special value in the vicinity of sensitive environmental resources.

(a) Discussion
The overall purpose of the regulations is to establish a uniform regulatory process that will minimize the use of and potential impacts to human health and the

environment from herbicide use along ROWs. A goal of the proposed regulations is to ensure the use of an Integrated Pest Management approach on all rights-of-way covered by the regulations. This is consistent with the Children's and Families' Protection Act. IPM aims to reduce chemical use while promoting long-term sustainable control of vegetation. Because IVM is a type of IPM, the revised regulations do cover it. The Pesticide Board may consider a field review after its consideration of these comments. The Department's Pesticide Bureau regularly sends staff into the field to observe herbicide management in ROWs.

(b) Suggested Action
None.

11. There should be a provision allowing for electronic presentation of the information required by the regulations.
At least one commentator stated that the vast majority of information provided as part of the existing ROW process is filed away and never read. It should be presented in electronic format or on the World Wide Web. Wayne Duffet commented that, in this age of the Internet, it makes no sense to mail all this notification information.

(a) Discussion
The Children's and Families' Protection Act specifically requires applicants to submit notifications by registered mail, newspaper notice, and other non-Internet methods, and therefore the Department is not recommending a revision of the notification provisions at 333 CMR 11.07 to allow electronic presentation. Furthermore, access to electronic forms of presentation and the World Wide Web is still not universal. Finally, even if VMPs and YOPs were submitted electronically, some or all reviewers would need to download and print them for a careful review. Therefore, the Department recommends continuing to offer the existing submission procedures for VMPs and YOPs at this time. VMP and YOP requirements at proposed 333 CMR 11.05(1)(b) and 11.06(1)(b), respectively, state that VMPs and YOPs "shall be presented on forms and/or format approved by the Department," and 333 CMR 11.06(4)(a) requires applicants to "submit" YOPs to the Department but does not establish a format. These provisions give the Department the continued flexibility to allow report submission in an appropriate format consistent with available technology. The Department is proposing several changes below that will ensure further flexibility on VMP and YOP submission along these lines.

(b) Suggested Action
The Department recommends the following changes to the proposed regulations:

1. Revise 333 CMR 11.05(3)(d) to allow municipalities to view draft VMPs on web sites by revising it to read as follows:

   (d) Whenever a chief elected official, Board of Health or Conservation Commission in a municipality covered by the proposed VMP requests

a copy of the proposed plan, the applicant shall, at least 21 days prior to the end of the public comment period, respond to this request. The response must either include a copy of the proposed VMP, or an Internet address where the VMP may be viewed and a note that a hard copy will be provided promptly upon further request.

2. Revise 333 CMR 11.05(4)(a) to allow electronic presentation of VMPs to the Department at the Department's discretion, as follows:

   (a) 25 copies of the proposed VMP shall be submitted to the Department. The Department shall distribute copies of the proposed VMP to each member of the Rights-of-Way Advisory Panel. The Department may, at its sole discretion, allow electronic presentation of the VMP in lieu of some or all of the 25 copies that would otherwise be submitted pursuant to this subsection.

3. Revise 333 CMR 11.05(4)(f) to allow municipalities to view approved VMPs on web sites by revising it to read as follows:

   (f) The applicant must send a copy of the approved VMP, or an Internet address where the VMP may be viewed and a note that a hard copy will be provided promptly upon further request, to the chief elected official, Board of Health, and Conservation Commission in each municipality covered by the plan.

4. Revise 333 CMR 11.06(3)(b) to allow municipalities to view draft YOPs on web sites by revising it to read as follows:

   (d) Upon submittal of the YOP to the Department, the applicant shall provide by certified mail under separate cover to the Board of Health, Conservation Commission, chief elected municipal official and local Public Water Supplier a copy of the proposed YOP (or an Internet address where the proposed YOP may be viewed and a note that a hard copy will be provided promptly upon request) and the Environmental Monitor notice for the municipality or municipalities in which the herbicide treatment is proposed. The applicant shall maintain copies of the packet sent to municipalities and certified mail receipts. The applicant shall make copies of the packet, certified mail receipts, and any further correspondence regarding hard copies in lieu of Internet viewing, available to the Department upon request.

12. Public participation should be improved.

Several commentators who supported stricter or weaker regulations suggested that the Department should work with commentators, after the comment period has closed, to develop the hearing officer's report and to revise the draft regulations before both documents are presented to the Pesticide Board. Commentator William Guidi wrote that public hearings are becoming less and less accessible, and suggested that it would help if

written comments were read at hearings. Guidi also asked for improved methods to identify proposed changes in regulations, stating "To require the public to dredge through the entire regulation to find changes is to thwart the review process and, in effect, reduce public comment." Mr. Guidi also noted that he was "struck by the almost universal objection by commentators" at public hearings to ROW herbicide applications compared to "the end result of all such processes which has been to condone the same . . . Of what value is public opinion if it is consistently ignored?"

(a) Discussion

Allowing public comment and input after the close of the official comment period would risk allowing unfair influence by some interest groups at others' expense. While the Hearing Officer agrees that additional input will always be helpful, it is also important to move these regulations along. The first revisions were drafted in 1996, and discussions could continue indefinitely. Given this fact, the Department is recommending to the Board that the Department's proposed regulations, if approved and implemented without further comment and hearing, be reviewed by the ROW Advisory Panel for the first few years of implementation and, if necessary, adjusted further in the future.

The Department appreciates the comments on facilitating public participation during the comment period. While the regulatory changes as proposed were too extensive to allow word-processor comparisons, the revised proposal is closer to the original regulations, and the Department has prepared comparisons manually. It is always possible to read comments at public hearings. However, the volume of comment received on these regulations would have made it impossible for most members of the public to sit through a reading of every comment. The Department will consider scheduling some of its future hearings at night or on weekends. While the Department found that the daytime hearings on these regulations were well attended, it recognizes that it may be easier for non-industry commentators to attend hearings outside of normal working hours. The Department also found that verbal comments against stricter regulation of herbicides outweighed those for stricter regulation. Furthermore, while the Department places some weight on the number of comments it receives, it must place a greater weight on the quality of comments if it is to make rational decisions.

(b) Suggested Action

If the proposed revisions are approved without further public hearings, the ROW Advisory Panel should hold regular meetings, open to the public and advertised to its list of interested parties, from now until 2003. The ROW Advisory Panel would make scientifically based recommendations on setback distances and other aspects of the regulations. Upon completion of its review, the Panel could, if it believed it was appropriate, submit additional suggestions for revisions to the Department or the Board. The Board would also be able to ask the Department to draft further revisions based on the Panel's findings.

Post this Hearings Report, along with a comparison of the revised proposed regulations against the current regulations on the Internet. Consider a balance of hearing times for future regulatory revisions, with half being held during working hours and half being held at night or on weekends.

13. The Children's and Families' Protection Act requires excessive regulation for ROWs.

Paige Kane of CSX wrote that the proposed regulations and the Children's and Families' Protection Act expose the railroads to inconsistent vegetation management restrictions, notifications and application requirements. According to CSX, the Children's and Families' Protection Act is designed to protect the general public and children at schools and daycare centers from exposure to pesticides, and specifically appears to focus on the integrated pest management of rodents and insects. CSX went on to write, "it is the position of the railroads that the Children and Families Protection Act should be interpreted as applying only to pesticides (agents that are used to control insects and rodents) and not herbicides (agents that are used to control vegetation)."

Gerry Blase of Asplundh Tree Expert Co. and the National Railroad Contractors' Association wrote (emphasis in original):

> [I]t was apparent by the lack of 'public participation' in the 2 hearings that the DFA is moving in a direction which is **not** in response to a public outcry of an existing poorly written regulation. DFA is once again acting under a 'legislative attempt' to regulate pesticides applications to ONE specific category (rights of way), under the guise of the 'Children and Families Protection Act.' It's a huge stretch to assume that already existing legislation is failing, and that Children and Families are at risk **IF** this legislation is not accepted . . . **DFA needs to consider that a greater RISK to Children and Families from pesticide use and misuse exists AT HOME and NOT on the Railroad and Utility Rights of Ways across the state. If DFA and the Massachusetts Legislature is sincere about protecting Children and Families from pesticides, they should consider regulating and restricting access to insecticides and herbicides products AT HOME *first.* After all, isn't that where the REAL potential for harm exists?**
>
> <u>(a) Discussion</u>
> The Children's and Families' Protection Act applies to all pesticides, including herbicides. The Department has no discretion regarding the ROW provisions within the Children's and Families' Protection Act. The Department will implement and enforce the law according to its authority.
>
> The Children's and Families' Protection Act contains certain provisions which address pesticide use along rights of way and also notification of municipalities. All of these provisions are incorporated, mostly verbatim, into the proposed regulations. Any changes to this legislation desired by the public must be obtained from the Legislature.

DFA agrees that risks in less-regulated areas such as private homes probably far outweigh those in ROWs. However, the Department has received a strong message from the public and, through the Children's and Families' Protection Act, the Massachusetts Legislature, that increased ROW regulation is desired.

As noted above, a significant number of written comments requested increased regulation of herbicide use in rights-of-way, and some commentators stated that it was difficult to reach the hearings at the times and locations provided. It is possible that daytime hearings are easier for the regulated community to attend than other members of the public, since staff of regulated entities can attend during working hours as part of their professional duties. Public commentators working in other fields may need special permission and arrangements to attend hearings. This may be the reason that more written comments from non-industry members were received than those from the regulated community, in contrast to greater representation of the regulated community at the hearings.

(b) Suggested Action
None – the regulations cannot conflict with the Children's and Families' Protection Act.

14. The proposed regulations are not strict enough.
A number of citizen commentators asked that the regulations be even more stringent than the ones that have been proposed. Some comments and suggestions included the following:

- Treated sites must be posted for entire persistence time as people + pets use the areas. (Jennifer Lee, Plainfield, MA)
- Testing must occur after treatment to determine leaching and environmental effects. (Jennifer Lee, Plainfield, MA)
- Liability for harm to human health and the environment caused by herbicides must be determined. (Jennifer Lee, Plainfield, MA)
- "Please, please make [the pesticide regulations] stronger … Our wells are not protected enough by Town leaders, and we look to you to fight for taxpayers. PLEASE DO NOT LET US DOWN!!!" (Karen Garant, Berkley, MA) (emphasis in original)
- "It is interesting … that … the disposal of waste water (Title V) at any site requires an approved engineering study in order to protect the public from unsafe chemicals and organisms entering groundwater/drinking water. In contrast herbicide applicators across the state can dispense their arguably more dangerous pollutants with the mere nod of the board and a regulation that studiously does not look too deeply." (William W. Guidi)

(a) Discussion
Jennifer Lee asked that treated sites be posted for the entire persistence period. The Department does not require posting for ROW sprayings for several reasons. First, many ROWs, such as utility easements and railroads, are private property. Second, the longer a posted sign is up, the less attention it receives. The Pesticide

Board and other pesticide regulatory agencies have traditionally reserved mandatory posting for situations where there is a significant potential for human exposure or where particularly toxic pesticides are used. ROW scenarios do not, the Department believes, fall into such a category. ROW postings should be reserved for times when genuine risks exist. Finally, increased posting requirements would place a considerable burden on the regulated community. The Department is not recommending new posting provisions at this time.

Ms. Lee also asked that testing occur after treatment to determine leaching and environmental effects. The Department does not think that the regulations are the right place to address the issue of testing. It would be impractical to require testing in all instances, given the expense and labor requirements. Furthermore, pursuant to state and federal laws and regulations and inter-agency agreements, herbicides are already tested for factors like mobility, persistence and toxicity. The Department is not recommending test requirements in the regulations.

Ms. Lee suggested that liability for harm to human health and the environment from herbicides should be determined. The Department does not believe that its regulations are the appropriate place to dictate liability, particularly as there is no statutory mandate or authority to do so in the Massachusetts Pesticide Control Act. The Department recognizes, however, that a court may view ROW regulations as the accepted standard for herbicide use. Therefore, the regulations should decrease the risk of liability ROW applicants who follow them, and increase the risk of liability for those who do not. Interestingly, DeAngelo Brothers, Inc., a member of the regulated community, was also concerned about liability. DeAngelo Brothers' concern was with potential liability for accidents resulting from increased weeds and brush that would grow without herbicide use.

Karen Garant asked for stronger pesticide regulations to protect drinking water wells. As discussed below, the Department has created groundwater public drinking water source protection setbacks that are consistent with DEP protective areas for these sources (e.g., Zone I's, Zone II's, and IWPAs). Only certain approved herbicides may be used in limited-spray zones within these areas, and no herbicides at all may be used in no-spray zones. Furthermore, pursuant to proposed Section 11.03(10), the regulations would not allow any person to apply any herbicide identified as a Potential Ground Water Contaminant pursuant to 333 CMR 12.00 to any right-of-way, regardless of whether it was in a Sensitive Area. The Department is suggesting procedures for private well identification that would give the regulated industry several options for identification, while ensuring that identification is made. Applicants may obtain a list of private wells from their local board of health, make inquiries of all residents within 500 feet of the ROW who are not on public water whether they use private wells and if so, where these wells are located, or use another method of identification that has been approved in the YOP. Any citizen with a private well should, if he or she has not done so already, notify their local board of health of the location of the

well, in order to improve the quality of information that localities can provide to applicators.

William Guidi commented on the difference between DEP's Title V septic system requirements, which mandate engineering studies, and the Department's ROW regulations that allow applicators to "dispense their arguably more dangerous pollutants with the mere nod of the board and a regulation that studiously does not look too deeply." Title V must protect against unknown toxins, while the ROW regulations are designed to provide adequate protection for herbicides that have been evaluated for their use prior to approval. The Department is not recommending case-by-case engineering studies for herbicide application in ROWs.

(b) Suggested Action

Some of the strengthening steps provided in these proposed regulations include increased setbacks, revised sensitive area definitions that better conform to DEP protected areas, stricter notification procedures mandated by the Children's and Families' Protection Act, and a clear prohibition on use of potential groundwater contaminants in ROWs.

15. The proposed revisions both strengthen and weaken environmental protection. Unless all weakening provisions are deleted, the Department of Food and Agriculture should submit the proposed weakening provisions to the MEPA process.

On behalf of the Massachusetts Audubon Society, Senior Policy Specialist E. Heidi Roddis submitted comments detailing the position that, while some of the proposed revisions will increase setbacks for certain sensitive areas, others would weaken environmental protections. These comments maintained that all provisions that would weaken existing environmental provisions would require the filing of an Environmental Notification Form (ENF) under the Massachusetts Environmental Policy Act (MEPA).

(a) Discussion

It is true that the MEPA regulations at 301 CMR 11.03(12) would require an ENF if the Department was proposing revised regulations that would "significantly reduce" environmental protection standards. The Department has no intention of weakening environmental protections under the revised regulations, and the proposed regulations significantly increase, rather than decrease, environmental protections overall. During the comment period, many citizens and groups commented favorably on increases in environmental protections that these regulations will provide. Many of these commentators did seek even greater protections, but none asserted that the proposal would result in a decrease in environmental protection overall, nor did any of these commentators favoring increased regulation of herbicides ask for the proposal to be withdrawn. Where environmental protections are increased overall, the Department does not believe that an ENF is required. By letter of April 13, 2001 to Ken Kipen that was copied

to the Department and to Ms. Roddis, MEPA stated that "it would be premature to determine if the [MEPA] provisions of [310 CMR] 11.03(12) apply in this case" until the draft regulations have been revised.

Specific provisions that MassAudubon has identified as having the potential to weaken the regulations are addressed in the body of this Report. These provisions include:

- Changes to provisions regarding exemptions for wetlands setbacks at draft 11.04(2)(f)3 (currently at 11.04(4)(c); now proposed in the new draft at 11.04(4)) would, Audubon stated, allow the applicant, rather than the Department, to conclude whether or not herbicide uses on or within 25 feet of wetlands will have less impact than other management techniques, and would eliminate Advisory Committee review. This differs from the existing regulation at 11.04(4)(c), which limits the exemption allowing applications on or within ten feet of wetlands to public utilities, and requires a Department finding after consultation with the Advisory Committee. The Department is now proposing provisions that more closely track the original regulations, in order to ensure consistency with DEP wetlands regulations and the Cooperative Agreement between DEP and the Department of Food and Agriculture regarding wetlands and herbicide use in ROWs. The Department's revised proposal would place the exemption at Section 11.04(4)(e), would limit the entities eligible for the exemption to public utilities unless other applicants could use the exemptions consistent with Wetlands Protection Act regulations, and would re-instate the requirement of a Department finding following consultation with the Advisory Panel. See discussion of wetlands setbacks under Section 11.04 below.
- Removal of the prohibition on any herbicide applications within 10 feet of standing or flowing water. The Department is proposing the re-insertion of this provision at section 11.03(4)(e)(3). See discussion of wetlands setbacks under Section 11.04 below.
- Removal of the prohibition against drift. The Department has addressed this provision by inserting, at the end of proposed Section 11.03(6), "and no person shall apply herbicides in such a manner that results in drift into any No-Spray Area." See discussion of Section 11.03, below.
- Allowing railroads to apply herbicides within sensitive areas and even in wetlands. The current regulations allow herbicide application "on or within a wetland" when conducted by public utilities, provided a number of conditions are met. Because the Department does not believe that there is any reason to limit this exemption to public utilities, the Department's original proposal would have expanded this exemption to all ROW applicators. However, in order to ensure consistency with existing wetlands laws and regulations, the Department has decided to keep the limitation to public utilities for the time being, noting that other applicants may only do so if consistent with the Wetlands Protection Act and its

regulations. The Department does recommend that the ROW Advisory Panel review this provision over the next two years. The Panel, the Pesticide Board and/or the Pesticide Bureau may consider seeking any changes that would be needed in DEP laws and regulations to permit railroads and other applicants that are not public utilities to obtain the exemption if they can submit studies demonstrating that less impacts will result to the wetlands from chemical control than would result from mechanical methods. The Department's current proposal would allow other applicants to be eligible for the exemption if the Wetlands Protection Act regulations changed.

The Department's decision to allow railroads to apply herbicides up to ten feet of wetlands is based on the compelling public safety arguments the railroads have made. The proposed regulations (see 2001 version of 11.04(4)(c)) do not allow railroads to apply herbicides on or within wetlands, and they keep the temporal and technique limitations in the existing regulations (see existing version of 11.04(4)(b)). The only difference is that wetland setbacks will be *increased* for all non-railroad ballast ROW areas.

(b) Department's Recommended Action

The Department does not believe that an ENF is required, and does not plan to file one for the regulations as proposed. If the Board disagrees with the Department's suggested regulatory revisions in this Report, however, and the Board's differences could result in a substantial weakening of the current regulations, then an ENF may be required.

16. Herbicides carry actual and perceived risks, even if those risks are not quantified.

Dr. Alexandra Dawson advocated strongly for ensuring enhanced protection for drinking water supplies in written and oral comments presented on behalf of WSCAC and MACC. In particular, she called for "the improved 400/200 foot setbacks for surface water supplies and the limitations on re-spraying, which also apply to Zone II recharge areas (including Interim protective areas) around public wells. We believe these setbacks are essential to protect public health and prevent public alarm over the condition of drinking water." Dr. Dawson went on to state the following:

> The careful limitation of chemical use near surface and groundwater supplies is a key component of watershed management. If people lose confidence in their public water supplies because of the possible presence of chemicals, the consequences will be serious.
>
> At the [November Rights-of-Way Regulations hearings], the 'science' for these setbacks was repeatedly questioned by railroad representatives and others. The statement was also made in the Springfield hearing that EPA and DEP had certified that the chemicals on its approved list would have no adverse

> environmental effect. We would point out, and your Department is fully aware, that no such certification exists, or can exist based on present testing.

Regarding the lack of certification of no adverse effect, Dr. Dawson next gave representative examples of fact sheet information in YOPs regarding herbicides proposed for use. For metsulfuron methyl (Escort), Dr. Dawson noted that it has a moderate to high mobility in soil and may persist for up to 56 weeks in cold climates, and there was "evidence of maternal toxicity" in rabbits despite overall favorable toxicity study results. Dr. Dawson noted that the oncogenicity study for Imazapyr (Arsenal) is not complete, and that 2,4-Dichlorophenoxyacetic acid (2,4-D) is classified as a Group D oncogen because existing data cannot assess its carcinogenic properties in humans. "All the other chemicals discussed in the YOPs have similar write-ups," Dr. Dawson added, "based on our limited knowledge of special conditions of application and long-term effects in humans." Dr. Dawson qualified her cautions by stating that she was not saying Escort, Arsenal and 2,4-D did not "have their proper use," nor did she know that they were proposed for use near water bodies. Nevertheless, she stated that dangers clearly cannot be ruled out "and the careful watershed manager would benefit from their exclusion from the immediate area of water supplies."

Many commentators stated that they were concerned about the risks that herbicide uses may carry. For example:

- Horticultural Specialist Deborah Alexander wrote: "Scientific studies may not demonstrate conclusively the harm pesticides cause. However, those of us who work in the landscape KNOW how devastating these chemicals are … Pesticides wipe out far more organisms than we understand." (emphasis in original)
- Citizen Naomi Alson commented on her surprise at the lack of springtime insects she observed when she moved from the Berkshires to Boston. "The spraying of chemicals is overdone," she wrote, "thoughtlessly carried out with little concern for children and others who may be affected adversely by the chemicals."
- Citizen Kathy Cerick wrote: "The public has a right to know when they are at risk for exposure to toxic substances."
- Citizen Carol Reinhardt wrote: "I worry about the prolonged use of pesticides, knowing that the targets may eventually become immune to it. Also I feel with all the advancements that we have that more knowledge about the organisms can be obtained so that they can be gotten rid of in a less harmful way. Right now we have no idea what harm may be being done to our children."
- Citizen Kate Shaw wrote: "The synergistic effects of many pesticides, most of which have not been fully tested and certainly not tested in combination with each other, is too potentially dangerous to ignore. Unlike naturally occurring carcinogens, these we can and are obligated to do something about. Pesticide exposure should be a voluntary risk, not an involuntary risk. Don't tell me we can ban second-hand smoke exposure but not second-hand pesticide exposure!"
- Citizen Michael Ratner wrote, "… history teaches us to be wary of altering an environment in ways that cannot be undone for decades, if not forever. It is far cheaper to avoid than to contain, clean up, or treat the damages from pollution. These regulations should be strengthened."

(a) Discussion

The Department agrees with Dr. Dawson that herbicides are not without risks, and that they require careful management for proper use. The Department believes that the proposed regulations require this careful, appropriate management. Herbicides approved for use in sensitive areas have been reviewed under the Department's Cooperative Agreement with DEP prior to approval. Herbicides are not approved for such use if they will migrate beyond setbacks. Only minimum labeled rates of application are allowed in sensitive areas. Application must be made by or under the on-site supervision of a certified applicator. Numerous other restrictions apply, and Massachusetts is said to have some of the strictest ROW regulations in the country.

Horticultural Specialist Deborah Alexander suggested that people who use pesticides know, if not from a quantitative standpoint, then from a qualitative one, that pesticides' impacts reach beyond their intended targets. The Department relies on the scientific evaluations of pesticides that EPA and others have performed when making its decisions to protect the environment. Like other environmental agencies, the Department does not base its decisions primarily on speculation or on subjective or anecdotal data. On the other hand, the Department *is* proposing regulations that, it believes, provide more protection than existing scientific evidence requires. This decision is based on a judgment that public preferences should have some impact on the Department's regulations, provided this opinion is balanced fairly with competing and legitimate concerns of the regulated community.

Naomi Alson stated that she has noticed that there are fewer insects in Boston than in the Berkshires. This is a valid personal observation, and the Department appreciates the comment. However, it does not establish a causal link to herbicide use. Herbicides are designed to attack plants, and while they may have toxic effects on non-target vegetation and even insects or animals, they have been carefully studied and evaluated for concentrations and manners of use that minimize unwanted effects. Many other agents in the environment that are more prevalent in urban and suburban areas than they are in rural areas could have contributed to the decreased number of insects. Furthermore, Massachusetts' ROW regulations are among the strictest in the nation, and are designed to ensure that herbicide applications are not conducted thoughtlessly. The herbicides approved for use in ROWs are not thought to pose an unreasonable risk to human health and the environment.

Kathy Cerick commented that citizens have a right to know about pesticide applications, and Kate Shaw stated that pesticide exposure should not be an involuntary risk. The Department agrees that public notice provisions are important. The proposed regulations increase public notice requirements, as mandated by the Children's and Families' Protection Act. However, as noted below, the Department is not requiring mandatory posting because it reserves posting requirements for

situations in which particularly toxic chemicals are used or the potential for human exposure is significant.

Carol Reinhardt's concerns about prolonged pesticide use leading to target immunity are valid. Still, as evidenced by the regulated community's clear message in public comment that it needs these pesticides, they are still effective at present. If the Department was aware of a way to control unwanted vegetation in ROWs that better balanced costs and benefits, it would be recommending it. However, none of the comments received included such a recommendation. The Children's and Families' Pesticide Act, like other current statutes and regulations, is designed to decrease the risks to human health.

Kate Shaw raised concerns about synergistic effects of pesticides. This is an important concern. Synergism is an issue with all chemical uses, from perfumes to shampoos to pesticides to detergents. However, there is nothing specific to herbicide use on ROWs that, in the Department's view, raises particular concerns about synergism. On the contrary, it is rare that more than one herbicide is used within a given season on ROWs, compared to agricultural and home lawn situations where a number of different chemicals may be applied in a given season or even during a given application.

Michael Ratner cautioned that it is cheaper to avoid pollution than to clean it up later, and asked for more stringent regulations. The revised regulations are, as discussed in response to requests for MEPA review, more stringent than the current ones.

SPECIFIC COMMENTS, QUESTIONS AND RESPONSES:

11.01 Purpose

Commentators including the Massachusetts Railroad Association, Forester Rufin Van Bossuyt, and Ken Kipen of the Hilltown Anti-Herbicide Coalition noted that this Section has been revised from the existing regulation to include that the purpose of the regulations is to minimize the use of herbicides as opposed to minimizing the potential harmful impacts from herbicides. Mr. Van Bossuyt said: "Herbicides are lawful products registered for use both by the Commonwealth of Massachusetts and the United States E.P.A. The use of herbicides does not need to be minimized but the amount used per acre is reduced by I.P.M. methods."

Ken Kipen of the Hilltown Anti-Herbicide Coalition asked why language from the Children's and Families' Protection Act had not been included in Section 11.01. In particular, he referenced Section 10 of the Act, which requires all agencies of the Commonwealth "to develop policies to eliminate or, if necessary, reduce the use of pesticides for any vegetation management purpose along any roadway."

(a) Discussion:
The regulations are designed to minimize both the risks from herbicide use

and the use of herbicides. The Department has incorporated all of the provisions, and much of the language, of the Children's and Families' Protection Act relating to pesticide use on rights-of-way into the proposed regulations in the relevant areas. The referenced provision from Section 10 of the Act is included in the requirement for state agencies' and authorities' submission of VMPs (originally proposed at 11.06(2)(d); now proposed 11.05(2)(k)). Because this section is only applicable to state agencies and authorities applying herbicides in roadways, the Department has not recommended its inclusion in the general section of the regulations.

(b) Recommended Action
None (but see proposed Section 11.05(2)(k)).

11.02 Definitions

Several commentators remarked upon definitions that had been deleted or added. Some commentators had recommendations for additional terms to be included. Details of these comments, and the Department's final proposals for definitions, are as follows:

Agricultural Area: Ken Kipen of the Hilltown Anti-Herbicide Coalition questioned the exclusion of the phrase "where herbicides might impact adversely on the vegetation" from this definition. He asked: "Why is the Department playing down the risk of using herbicides while at the same time eliminating language about alternatives to spraying?" Horticultural Specialist Deborah Alexander wrote:

> To grow plants you need a delicate balance between soil microbes and nutrients. To grow plants you need a delicate balance between soil microbes and nutrients. According to DISCOVER MAGAZINE, vegetable crops have decreased in the amount of vitamins and nutrients they contain. In many cases, it is the microbes that help the plants take up these nutrients from the soil. Pesticides wipe out far more organisms than we understand. In some cases, making the fields impossible to plant for some years.

(a) Discussion
The Department deleted the phrase "where herbicides might impact adversely on the vegetation" from the current definition because, in addition to being implicit (as herbicides are designed to impact adversely on unwanted vegetation), the phrase could be interpreted to imply that some or most herbicide applications will not have this adverse impact. Measures to protect agricultural areas from herbicide applications to rights-of-way are outlined in the sensitive areas discussion (333 CMR 11.04).

(b) Recommended Action
None.

Associated Water Bodies MWRA recommends that a definition be added for the term "associated water bodies" to distinguish these from other types of water bodies.

(a) Discussion
The Department intends to protect surface water bodies that are connected to surface drinking water sources, and agrees that a clearer definition is needed. The Department recommends that the term be "Associated Surface Water Bodies," as that term is used in the definition of a "Zone A" in DEP's Drinking Water Regulations at 310 CMR 22.00. While current DEP regulations do not define the term, the context indicates that Associated Surface Water Bodies are hydrologically connected with Class A surface water bodies.

(b) Department's Suggested Action
The Department recommends that all references to "associated water bodies" be changed to "Associated Surface Water Bodies," and suggests that the Board seek confirmation from DEP that the following definition is appropriate:

Associated Surface Water Body, any body of water that is hydrologically connected to a Class A surface water source.

Bordering Vegetated Wetland (BVW)
Shepley Evans of MACC commented that the regulations should include a definition of this term as defined at 310 CMR 10.55(2).

(a) Discussion
Wetlands regulations at 310 CMR 10.03(6) allow a presumption that ROW herbicide applications will not alter wetlands, provided the applicant complies with the ROW regulations promulgated in 1987 (and, if not a public utility, obtains wetland delineations). As promulgated in 1987 and as currently written, the ROW regulations' coverage of wetlands has not been limited to Bordering Vegetated Wetlands. The Department does not believe this limitation is appropriate without DEP's concurrence that Notices of Intent will not be required for non-Bordering Vegetated Wetland applications. While the Board may decide to seek such a concurrence, the Department is recommending a more comprehensive definition of wetlands for the time being.

(b) Department's Suggested Action
See discussion of the definition of "Wetlands" below.

Class B Drinking Water Intakes

(a) Discussion
As discussed under the definition of "Maps" below, the Department proposes adding a reference to existing maps for each sensitive area definition. The Department also now proposes a clearer definition for Class B Drinking Water Intakes.

(b) Department's Suggested Action
Replace the proposed definition with the following:

<u>Class B Drinking Water Intakes</u>, intakes to Class B waters suitable as sources of public water supply with appropriate treatment, as defined at 314 CMR 4.05(3)(b) and as identified on the most current available maps prepared by the Department of Environmental Protection.

<u>Community Water Source and Non-Community Water Source</u>
National Grid said that these definitions and the definition of "Public Water System" "update and conform to other state regulations. These regulations appear to be clear and workable." However, because the proposed regulations do not make any distinction between community and non-community sources in terms of protection, DEP recommended that it would be simpler to refer to them with the single term "Public Ground Water Source."

(a) <u>Discussion</u>
The Department agrees with DEP: while the additional definitions may be clear, the ROW regulations make no distinction between them. Therefore a single term, "Public Ground Water Source," referring to sources of water for community and non-community water systems, is preferable.

(b) <u>Department's Suggested Action</u>
The two sections that separately address "Community Water Source" and "Non-Community Water Source" should be replaced with a single defined term as follows:

<u>Public Ground Water Source</u>, a source of water for a Public Water System, as that term is defined at 310 CMR 22.02.

<u>Determination of Applicability:</u> Rufin Van Bossuyt commented that this definition should be revised to clearly state that Determinations of Applicability apply only to railroads. Electric utilities have an exemption for maintenance activities under the Wetlands Protection Act, Van Bossuyt wrote, and the proposed wording could confuse local conservation commissions and the public.

(a) <u>Discussion</u>
Van Bossuyt has identified an important distinction. As detailed below, based on a desire to maintain consistency with existing wetland laws and regulations, the Department is revising its proposal to recommend the delineations as part of VMPs with a note that, with certain exceptions for public utilities, DEP regulations currently require applicants working in wetland buffer zones to include these delineations in their VMPs. As a result, the ROW regulations will not require revision if the wetlands regulations' requirements change.

Massachusetts General Laws Chapter 131, Section 40, Paragraph 1, exempts certain public utility maintenance activities from the requirements of the Massachusetts Wetlands Protection Act. Consistent with this provision, DEP

wetlands regulations at 310 CMR 10.03(6)(a) exempt herbicide applications to public utility ROWs. These regulations stipulate, however that the public applicators must follow the Department of Food and Agriculture's ROW regulations at 333 CMR 11.00, effective in 1987. For ROW applicators that are not public utilities (such as railroads and highways), 310 CMR 10.03(6)(b) establishes a presumption that herbicide applications within buffer zones will not alter wetlands if, in addition to following the ROW regulations as effective in 1987, applicators obtain determinations of wetland boundaries and submit them with their VMPs. The practical effect of these two sections is that DEP regulations will not require an ROW applicant to file a Notice of Intent under the Wetlands Protection Act if that applicant adheres to 333 CMR 11.00 and, if not a public utility, obtains a determination of wetland delineations.

The Department sees no reason to treat public utilities differently than railroads, highways, or other ROW applicants when it comes to herbicide application. No public comments identified any such rationale. The distinction in the wetlands regulations appears to stem from the fact that the Wetlands Protection Act exempts public utilities. While the sole authority for regulating pesticides in the Commonwealth rests with the Massachusetts Pesticide Control Act (see Massachusetts General Laws Chapter 132B, Section 1), the Department does not wish to promulgate regulations that potentially conflict with other laws or regulations. Therefore, the Department proposes that the regulations recommend that applicants obtain delineations, and that the regulations note that current DEP regulations at 310 CMR 10.03(6)(b) require applicants to submit wetlands delineations with their VMPs before making applications in buffer zones (in other words, within 100 feet of wetlands) unless they are eligible for the public utility exemption. This revision is made with the understanding that the Rights-of-Way Advisory Panel may still require a delineation if it is not satisfied that a public utility's VMP is sufficiently protective of sensitive wetland areas. Should DEP regulations cease to require the delineations for non-public utilities in the future, the Panel could still, again, still require them.

The Department also notes that its original proposal could be read to require determinations of applicability as to whether or not herbicide applications would alter wetlands. As revised, it is clear that the determination is limited to a delineation of the <u>boundaries</u> of wetlands and their buffer zones. 310 CMR 10.03(6)(b) does <u>not</u> require a determination regarding the <u>activity</u>, and, as noted in the "Preface to the Wetlands Regulations Relative to Rights of Way Management: 1987 Regulatory Revision," DEP has already made the presumption that "work performed in accordance with a VMP and YOP, as may be required under DFA regulations, will not alter an area subject to protection under [the Wetlands Protection Act]."

It should be noted that the ROW regulations that are currently in place do not require wetlands delineations or reference the DEP requirement. Therefore,

the current proposal, while less stringent than the 2000 proposal, represents a strengthening of the regulations.

(b) Department's Suggested Action
The Department suggests inserting the definition of "Wetlands Determination" below, replacing all references to a Determination of Applicability with references to this procedure, and making changes to VMP and YOP specifications discussed further below.

> **Wetlands Determination, a written determination of the boundaries of Wetlands and boundaries of areas within 100 feet of Wetlands in accordance with 310 CMR 10.05(3)(a)1. and 2. These determinations are recommended for all applicants. DEP regulations at 310 CMR 10.03(6)(b) require applicants not eligible for a public utility exemption to submit these determinations with their VMPs if they will apply herbicides within 100 feet of wetlands and will not submit a Notice of Intent under the Wetlands Protection Act. In order to obtain a Wetlands Determination, the applicant should submit a request to the conservation commission on maps of a scale that will enable the conservation commission or Department of Environmental Protection to find and delineate the boundaries of Wetlands and buffer zones within the vicinity of the right-of-way herbicide management area. To be considered "valid", the Wetlands Determination should be made within six months immediately prior to the submission of the Vegetation Management Plan. The Wetlands Determination shall cover the period of the Vegetation Management Plan only and shall expire at the end of the five year period of that Vegetation Management Plan.**

Feeder Stream should be deleted and replaced with Intermittent Streams or Perennial Streams, according to MACC. MWRA recommended that DFA modify the term to clarify its intent in this area. MWRA also noted that the term "tributary" has been removed from the definitions in the proposed revised regulations, but that the definition for "Zone A" continues to refer to "tributary and associated water bodies" as reference points for establishing a Zone A. Tom Sullivan of National Grid wrote that, while the definition of "feeder stream" was fine, the use of an additional term when "tributary" was used in the Zone A definition might not be necessary. Sullivan also commented on the lack of a definition for "tributary." Audubon noted that the definition of "feeder stream" "appears to exempt streams that happen to be dry at the time they are observed for planning or application purposes." Finally, Shep Evans of MACC suggested that feeder streams are also defined as "Rivers" at 310 CMR 10.00.

(a) Discussion
The Department recognizes that the use of the term "Feeder Stream" is confusing. The Department's intent is to provide adequate protection for all streams, perennial and intermittent, that flow into surface drinking water sources. The word "tributary" addresses this concern. In addition, perennial streams outside of Zone A's fall under the definition of "Rivers" and therefore will also be protected. As with other sensitive area definitions, the Department has added language referencing existing DEP maps so that applicants will be able to identify sensitive

areas for their VMPs. The Department proposes limiting protected tributaries to those found within Zone A's. However, it does not propose incorporating this limitation into the definition of "tributary" because this would create an inconsistency between DFA and DEP definitions.

(b) Department's Recommended Action

The Department proposes instead to use the term "tributary" as defined in DEP's Drinking Water Regulations at 310 CMR 22.00 and to modify the provisions in Section 11.04 accordingly:

> **Tributary, as identified on the most current available maps prepared by the Department of Environmental Protection, any body of running, or intermittently running, water which moves in a definite channel, naturally or artificially created, in the ground due to a hydraulic gradient, and which ultimately flows into a Class A surface water source, as defined in 314 CMR 4.05(3)(a).**

"Limited Application Waiver" and "Public Safety Waiver"

MRA questioned the lack of provisions for waivers for limited applications and public safety reasons. These provisions would provide the Department with the flexibility needed to respond to unforeseen circumstances, MRA said. WMECO requested waivers for noxious weed applications. Local highway official Harry Williston of Vegetation Management Services stated that it is very difficult, under the existing and proposed regulations, for municipalities with limited resources to legally apply pesticides to address, for example, a citizen's poison ivy problem around a roadside mailbox. He went on to write: "the Department should be able to give an exception for allowing a community to treat up to 1 acre of per year, provided that a certified applicator is used and what is to be sprayed is poison ivy or sumac only." Other commentators also asked for waivers or other provisions to allow flexibility when it rained or other unforeseen circumstances arose.

(a) Discussion

The Department deleted Limited Application Waivers and Public Safety Waivers from an earlier draft of the proposed regulations to ensure consistency with the new notification requirements of the Children and Families Protection Act. The Department eliminated Touch-Up Applications for similar reasons. However, after reviewing public comments, the Department recognizes that a need exists for the limited application and public safety waivers and touch-up applications for cases such as municipal treatment of noxious weeds such as poison ivy, sumac and poison oak. The VMP/YOP process is long and cumbersome, and it essentially prohibits most applications that are not anticipated at least a year in advance. The Department does not believe that the VMP/YOP process is justified for one-time applications or unanticipated public safety applications. Therefore, as discussed below, the Department is proposing the inclusion of a provision for Limited Application Waivers that would be consistent with applicable law and policy. Limited Application waivers would be available for both one-time uses and public safety purposes.

It should be noted that the Department does not view this provision as weakening the regulations' ability to protect the environment in any way. The provision would, as proposed, be quite limited and would incorporate all of the new procedural requirements of the Children's and Families' Protection Act, requirements that are significantly stricter than the notification requirements contained in the current regulations. The Department is also proposing re-instating the touch-up application provisions, with additional language to ensure compliance with the Children and Families' Protection Act, for those applicants that do have VMPs and YOPs.

As revised by the Children and Families' Protection Act, General Laws Chapter 132B, Section 6B requires notification to municipal officials at least 21 days in advance of the application and the posting of a notice in the local newspaper forty-eight hours in advance of an herbicide application. Therefore, proposed waiver provisions will include a requirement that applicants comply with proposed Section 11.07(a) and (c).

While the Massachusetts Pesticide Control Act clearly declares that it has sole authority to regulate pesticides in the Commonwealth, the Department has cooperated with the Department of Environmental Protection to address the issue of herbicide application in wetland ROWs. This work has resulted in a Cooperative Agreement, discussed elsewhere in this Report, and DEP has incorporated ROW regulations into its own wetlands regulations. While the Department of Food and Agriculture and the Pesticide Board could argue that these DEP regulations will be preempted by any conflicting pesticide regulations, given the exclusive authority granted by Chapter 132B, Section 1, the Department believes that consistency in published state laws and regulations is important to the entire regulated community, and is not recommending changes that would conflict with wetlands regulations.

As discussed in the context of Wetlands Delineations in the definitions section above, Wetlands Protection Act regulations at 310 CMR 10.03(6)(a) create a presumption that public utilities applying herbicides within wetlands or buffer zones are not altering wetlands provided they comply with the ROW regulations. 310 CMR 10.03(6)(b) creates a similar provision for entities which are not public utilities, when applications are made to buffer zones only, provided that, in addition to complying with the ROW regulations' plan requirements, the applicant obtains a Wetlands Determination and submits it as part of the VMP. The Department is currently proposing a reference to the DEP requirement in the VMP section of its regulations, with a recommendation that applicants include these Determinations in their VMPs. The Department is recommending a similar reference in the waiver provision for the same reason.

(b) Department's Recommended Action

The Department is now recommending that the existing touch-up provisions be retained, with modifications discussed below to incorporate new statutory

procedural requirements. The Department is also proposing the waiver definition set out directly below, with procedural details described in the discussion of proposed Section 11.03(14), further below. The recommended definition is as follows:

<u>Limited Application Waiver</u>, a waiver from the requirements of 333 CMR 11.05 and 11.06, granted at the Department's sole discretion pursuant to 333 CMR 11.03(14), when the reason for the application is emergency public health or safety or when the application is for one time only.

<u>Limited-Spray Area</u>: Commentators did not request a definition of "Limited-Spray Area," but they did remark upon the difficulty of following the regulations as proposed.

(a) <u>Discussion</u>
Based on general comments about the difficulty of following the regulations as revised, the Department is now proposing that the current regulations' format for a Sensitive Area definition be incorporated into definitions of Limited-Spray and No-Spray Areas. While details are still necessary and are included in Section 11.04, particularly to ensure that it is clear that Limited-Spray Areas do not modify No-Spray Areas (e.g., no spraying is permitted within 25 feet of a certified vernal pool, even though the Limited-Spray Area includes the entire Vernal Pool Habitat) these definitions provide an easier overview of the restrictions on herbicide applications on rights-of-way. In general, applications in Limited-Spray Areas will only be permitted when a minimum period of time (12 or 24 months, depending on the area) has elapsed since the last application, and when certain application techniques are used.

a) <u>Department's Recommended Action</u>
Add the following definition:

<u>Limited Spray Area</u>, any area that is both within a Right-of-Way and:
(a) within any Zone II or IWPA;
(b) within any Zone A or within a lateral distance of 200 feet for 500 feet upstream of a Class B Drinking Water Intake;
(c) within 200 feet of any identified Private Well;
(d) within 100 feet of any Wetlands or Water Over Wetlands;
(e) within any Riverfront Area;
(f) within any Certified Vernal Pool Habitat; or
(g) within 1oo feet of any Agricultural or Inhabited Area.

<u>Maps</u> should include National Heritage and Endangered Species maps, according to the MACC. MWRA requested that the definition of maps include a reference to new DEP data and maps that are to be included in DEP's web page. MWRA commented that this reference should also be included in the Zone I definition and in 11.04(2)(i). MWRA recommended that a definition of "Title V Maps" be included. DEP, however, commented that the use of Title V maps for Zone II's and IWPA's would be "problematic as these have not been updated for 5-6 years." DEP went on to state that its

website maps should be ready by January 1, 2000 (2001?), and recommend the following language in the ROW regulations for the locations of water supply protection areas:

> "The most current water supply protection information is maintained at the DEP website at www.state.ma.us/dep/brp/dws/"
> "Additional maps of water supply protection areas are also available at the DEP service centers at each DEP Regional Office and at Boards of Health."

MDC recommended that the definition of maps be modified to include the italicized statement: "USGS maps of a scale 1:25,000 or other maps as determined by the Department *which are based upon the most current MassGIS hydrography coverage and* are of such accuracy and scale." The Water Supply Citizens Advisory Council recommended that the maps should include maps superior to USGS maps. Alexandra Dawson of WSCAC and MACC also recommended the inclusion of Title V maps in the definition for "maps," and noted that DEP would have new Drinking Water maps available on its web site and at DEP service centers by January 1, 2001.

(a) Discussion
The Department agrees that it should be able to ensure that the maps used are of good quality for the purpose they serve. The Department also believes that applicators should be able to obtain reasonable guidance on where to obtain maps. However, the Department recognizes that the availability and quality of maps is changing all the time and opinions about which maps are best and which are reasonably available may differ over time and by agency. Therefore, the Department suggests that definitions of individual sensitive areas refer to the most currently available maps of the relevant agency.

(b) Suggested Action
None.

NHESP

(a) Discussion
While many are familiar with the Natural Heritage and Endangered Species Program, the Department is proposing a new definition for it that would ensure that applicants recognized its place within the Division of Fisheries and Wildlife, and which would allow the use of a shorter acronym throughout the regulations.

(b) Suggested Action
Add the following definition:

NHESP, the Natural Heritage and Endangered Species Program within the Massachusetts Division of Fisheries and Wildlife.

No-Spray Area: Commentators did not request a definition of "No-Spray Area," but they did remark upon the difficulty of following the regulations as proposed.

a) Discussion

Based on general comments about the difficulty of following the regulations as revised, the Department is now proposing that the current regulations' format for a Sensitive Area definition be incorporated into definitions of Limited-Spray and No-Spray Areas. While details are still necessary and are included in Section 11.04, these definitions provide an overview of the restrictions on herbicide applications on rights-of-way. In general, no herbicide applications will be permitted in No-Spray Areas. The only proposed exception is that which will allow herbicide applications between 25 feet of wetlands when, in addition to meeting the other requirements for ROW applications, the applicants have proven that the herbicide applications will result in less impacts to the wetlands than mechanical control would cause. Under no circumstances will the proposed regulations allow herbicide applications on or within ten feet of any standing or flowing water in a wetland, consistent with DEP's 1987 Preface to Wetlands Regulations Relative to Rights of Way Management.

b) Department's Recommended Action

Add the following definition:

No-Spray Area, any area that is both within a Right-of-Way and:
(a) within any Zone I;
(b) within 100 feet of any Surface Water Source;
(c) within 50 feet of any Associated Surface Water Body or within 50 feet of any Tributary within a Zone A;
(d) within a lateral distance of 100 feet for 400 feet upstream of a Class B Drinking Water Intake;
(e) within 100 feet of any identified Private Well;
(f) within 25 feet of any Wetlands or Water Over Wetlands (or, for Ballast areas, within 10 feet of any Wetlands or Water Over Wetlands);
(g) within 100 feet of the mean annual high-water line of any River; or
(h) within 25 feet of any Certified Vernal Pool).

Private Drinking Water Source: Tom Sullivan of National Grid stated that "[t]he proposed definition suggests that local Boards of Health and the Department are the primary sources of this information. Very few private wells are identified from these sources. Most private wells are identified-in-the-field by crews looking for them and contacting residences along the way." Sullivan proposed that applicants be required to outline their private well identification methods in their YOPs and be held accountable for these identifications.

(a) Discussion

The Department believes that a definition is needed, and also agrees that Sullivan's suggestion of placing the burden of identification on applicants, subject to YOP approval, is a good one.

(b) Suggested Action

In addition to incorporating Sullivan's suggestion at proposed Section 11.03(12) below, add the following definition:

<u>Private Well</u>, any drinking water supply identified by the local Board of Health, the well owner or the Department of Food and Agriculture.

<u>Rare Species Habitat</u>:

a) <u>Discussion</u>
While commentators did not directly suggest a definition of "Rare Species Habitat," the Department is recommending one to simplify the Sensitive Area discussions at Section 11.04.
b) <u>Suggested Action</u>
Add the following definition:

<u>Rare Species Habitat</u>, the estimated habitat of Rare Species as shown on Estimated Habitat maps in the most current edition of the Massachusetts Natural Heritage Atlas prepared by NHESP.

<u>Right-of-Way:</u> Shepley Evans of MACC noted that the term "bike path" can cover everything "from mountain bikes to back yard tricycle tracks," and recommended that the definition should exclude bike paths until the term could be better defined.

(a) <u>Discussion</u>
The term "bike path" refers only to areas accessible to and intended for bicycles. It should only apply to trails that are formally maintained with herbicides with a primary purpose of being a means of passage. Back-yard tricycle tracks are not included in this definition. If a mountain bike path were maintained with herbicides, then ROW regulation of that herbicide application would be as appropriate for resource protection of the areas around that path as it would be around any other area maintained for public passage with herbicides. The Department appreciates this comment, but does not believe that the definition will be misconstrued, given the context of the ROW regulations.

(b) <u>Recommended Action</u>
Replace the definition of "right-of-way" with the following:

<u>Right(s)-of-Way (ROW(s))</u>, any roadway, or thoroughfare on which public passage is made and any corridor of land over which facilities such as railroads, powerlines, pipelines, conduits, channels or communication lines or bicycle paths are located.

<u>Rights-of-Way Advisory Panel</u>

a) <u>Discussion</u>
In response to general comments about the difficulty of following the revised regulations, the Department is proposing a revision that will follow the existing regulations more closely. As part of this proposal, the Department suggests that the new section on the ROW Advisory Panel be included at a new Section 11.11, in order to retain the original numbering of the

regulations. The Department suggests revising the definition accordingly with references to 11.05 (VMPs) and 11.11.

b) Recommended Action
Add the words "and 11.11" at the end of the Advisory Panel definition.

Riverfront Area: DEP noted the reference to 310 CMR 10.58 in this definition with approval. It also noted that it had recently amended the definition of "Mean Annual High Water," and that this should serve as the boundary of the riverfront area.

(a) Discussion
The Department's definition incorporates the new DEP high-water line definition. As discussed under "Maps" above, the Department also recommends incorporating a reference to DEP maps. Finally, the Department believes that "River" should be defined with a reference to the DEP definition.

(b) Suggested Action
Insert the following definition:

River, a river as defined at 310 CMR 10.58(2) and as identified on the most current available maps prepared by the Department of Environmental Protection.

Sensitive Areas: A commentator asked whether the sensitive area definition reference should be to 333 CMR 11.04 and not 310 CMR 11.04.

(a) Discussion
This commentator has identified a typographical error. The Department also recommends incorporating a reference to the new No-Spray and Limited-Spray definitions, discussed above.

(b) Department's Recommended Action
Revise the definition to read as follows:

Sensitive Areas, as defined in 333 CMR 11.04, any areas within Rights-of-Way, including No-Spray and Limited-Spray Areas, in which public health, environmental or agricultural concerns warrant special protection to further minimize risks of unreasonable adverse effects.

Surface Water Source
MWRA suggested adding the words "and feeder streams, tributaries, and associated water bodies" to the definition of "Surface Water Source."

(a) Discussion
As discussed elsewhere in this Report, tributaries and associated surface water bodies are covered in the definition of "Zone A." Therefore, they do not need to be included in the definition of "Surface Water Source." "Surface Water Source"

is defined to include streams, as it is in the DEP definitions, and the Department is not proposing the inclusion of a more detailed definition at this time. As discussed under "Maps" above, the Department also recommends incorporating a reference to DEP maps.

(b) Suggested Action
At the end of the definition of "Surface Water Source," insert the following:

…, as identified on the most current available maps prepared by the Department of Environmental Protection.

Touch–up Application: Some commentators requested that touch-up applications be allowed.

(a) Discussion
The Department recognizes the importance of touch-up applications. However, the Department also recognizes that the Children's and Families' Protection Act does not exempt any applications from notification requirements. Provisions for this requirement are included in the revised proposed 11.03(8).

(b) Department's Recommended Action
Touch-up application provisions should be re-inserted at proposed 11.03(8), as discussed below. The following definition should be re-inserted in 11.02:

Touch-up Application, any limited application of herbicides following an initial treatment, which is necessary to achieve the desired vegetation control.

Tributaries and Associated Water Bodies: MDC commented that the terms "tributaries and associated water bodies" should be defined. They also asked "that DFA explain which surface waters would be classified as tributaries and associated water bodies that do not fall under the definition of *surface water source*?"

(a) Discussion
The Department seeks to protect waters that flow into surface drinking water sources (Class A surface water sources). Therefore, as discussed above under the definitions of "associated water bodies" and "feeder streams," the Department proposes adopting DEP Drinking Water Definitions of "associated surface water bodies" and "tributaries" to replace all references to "associated water bodies" and "feeder streams." This will limit the tributaries afforded extra protection to those that flow into drinking water sources. The Department will only require this special protection for Tributaries that occur within Zone A's, since tributaries are sometimes broadly interpreted to include any moving water within the watershed of a water supply. As with other sensitive area definitions, the Department is also proposing a reference to DEP maps.

(b) Department's Suggested Action

The regulations should define tributaries according to the existing DEP definition at 310 CMR 22.00. The no-spray area around tributaries would be limited to those tributaries that occurred within Zone A's. However, this provision would not be included in the definition of "tributary" so that consistency between DEP and DFA definitions will be maintained. The definition for tributary should read as follows:

<u>Tributary</u>, as identified on the most current available maps prepared by the Department of Environmental Protection, any body of running, or intermittently running, water which moves in a definite channel, naturally or artificially created, in the ground due to a hydraulic gradient, and which ultimately flows into a Class A surface water source, as defined in 314 CMR 4.05(3)(a).

<u>Valid Determination of Applicability</u>

<u>(a) Discussion</u>

The Department has incorporated the term "valid determination of applicability" into its definition of "Determination of Applicability."

<u>(b) Department's Suggested Action</u>

Delete the definition of "Valid Determination of Applicability."

<u>Vernal Pool</u>: Shepley Evans of MACC commented that this definition should track DEP definitions by including in the definition of Certified Vernal Pool "as per 310 CMR 10.57(2)(a)5, 6 and 310 CMR 10.57(2)(b)." DEP commented that the proposed regulations contain four vernal pool definitions where a single definition should suffice.

<u>(a) Discussion</u>

The delineation of vernal pools and vernal pool habitat is complex. Water in pools comes and goes, and the extent of protected habitat varies by the species in the pools and other factors. The presence or lack of water should not be a factor in affording protection to a vernal pool, particularly since plans for herbicide application are made well in advance of application to allow for plan review and approval. The Department agrees that the definition of Vernal Pool could better reflect the definition in the Massachusetts Wetlands Protection Act, which incorporates vernal pool habitat as mapped by the Division of Fisheries and Wildlife's NHESP. However, DEP's definition of vernal pool habitat requires a minimum 100-foot protective area, indicates that some certified vernal pools will not have clearly mapped delineations, and provides a complex procedure for identifying vernal pool habitat in these cases or in cases where the mapped delineation may be incorrect. The Department believes that applicators should, to the extent possible, have a simple no-spray radius that will be applicable to vernal pools in the same way that it applies to all wetland resource areas. Therefore, the Department proposes tracking the DEP definition but limiting the required no-spray area to 25 feet, with a limited-spray area of the mapped vernal pool habitat or, of the habitat has not been mapped, within 100 feet of the vernal pool.

(b) Department's Suggested Action
The Department suggests replacing the two separate sections for "vernal pools" with definitions of "Certified Vernal Pool" and "Certified Vernal Pool Habitat."

Certified Vernal Pool, a confined basin depression, certified and mapped by NHESP pursuant to the provisions of 310 CMR 10.57(2)(a)5,6, which, at least in most years, holds water for a minimum of two continuous months during the spring and/or summer, and which is free of adult fish populations.

Certified Vernal Pool Habitat, that vernal pool habitat which has been certified and mapped by NHESP pursuant to the provisions of 310 CMR 10.57(2)(a)5,6 or, in the event that such habitat has not been mapped, the area within a 100-foot distance of any Certified Vernal Pool.

Water Over a Wetland
As noted above, commentators found the new sensitive area definitions confusing.

(a) Discussion
As one means of simplification, the Department is proposing to define any non-drinking water surface water body (oceans/coastal waters, estuaries, lakes and ponds) as "Water Over a Wetland." Rivers (the definition of which includes all perennial streams and creeks) are covered under a separate heading.

(b) Suggested Action
Add the following definition:

Water Over Wetlands, the ocean or any estuary, lake or pond as defined at 310 CMR 10.04.

Water Supplier
MDC recommended that the definitions include "Water Supplier" and that this definition should include the appropriate source water supply managers.

(a) Discussion
The Department agrees that a definition for the term "Public Water Supplier" as added to the Pesticide Control Act by the Children's and Families' Protection Act may be useful, and proposes to adopt the definition of "Supplier of Water" found in DEP's Drinking Water Regulations at 310 CMR 2.02(1).

(b) Suggested Action
Add the following definition:

Public Water Supplier, as defined at 310 CMR 22.02(1), any person who owns or operates a public water supply system.

Zone A

MWRA requested clarification of the term "associated water bodies." Tom Sullivan of National Grid commented that the definitions of Zone A and Class B Drinking Water Intakes "reflect updates necessary to conform to other state regulations [and] … appear to be clear and workable."

(a) Discussion
As discussed above, the Department proposes incorporating references to existing maps for sensitive area definitions. The Department is proposing minor revisions for consistency with these other definitions.

(b) Department's Proposed Action
Revise the first phrase of the first sentence of the definition to read as follows:

Zone A, as identified on the most current available maps prepared by the Department of Environmental Protection, the protective land area …

Zone I and Zone II

(a) Discussion
To further coordinate the regulations with those of DEP, to avoid any possible confusion as to intent, and to assist applicants in identifying these areas, the Department proposes to modify its definitions of Zone I and Zone II by referring to the most recent DEP maps available, and incorporating the references to definitions at 310 CMR 22.02.

(b) Department's Proposed Action
Revise the proposed definitions of Zone I and Zone II to read as follows:

Zone I, as identified on the most current available maps prepared by the Department of Environmental Protection and as defined at 310 CMR 22.02, the protective radius required around a public water supply well or wellfield. For public water system wells with approved yields of 100,000 gallons per day (gpd) or greater, the protective radius is 400 feet. Tubular wellfields require a 250-foot protective radius. Protective radii for all other public water system wells are determined by the following equation: Zone I radius in feet = (150 x log of pumping rate in gpd) - 350.

Zone II, as identified on the most current available maps prepared by the Department of Environmental Protection and as defined at 310 CMR 22.02, the aquifer recharge area for a public water supply well or wellfied.

11.03 General Provisions

Format

Many commentators remarked upon the fact that the revised regulations were not "streamlined and easier to follow." In oral comments, several members of the regulated community noted that they had spent over ten years using the current version of the

regulations, and that adjusting to revised regulations would be very difficult. The Department is therefore recommending that the revised regulations track the current regulations as closely as possible in numbering and format. Accordingly, the Department is recommending that many of the proposed provisions of Section 11.03 be moved back to their original locations in current Section 11.03, and that the original formatting be retained.

(2)(d)

Many commentators stated that it is unreasonable to expect Boards of Health to provide updated lists of water sources and supplies within 30 days because the Boards may not have the information or may refuse to provide it. Daryl Jassen of WMECo, Tom Sullivan of National Grid USA, Harry Williston of Vegetation Control Service, Walter Dodge of Northern Tree Service and Wayne Duffett of TEC suggested that the proposed regulations would effectively give the Boards the power to shut down or delay the management of ROWs. Sullivan noted that boards of health do not have community and non-community water source data, and that most do not respond to requests for private well information, which they may or may not possess. Sullivan recommended that each applicant should be required to outline its own "method for Private Well location in its YOP and be held accountable. The perception that the applicant gets this information from the BOH is wrong." Walter Dodge noted applicants apparently would have no recourse if a board of health did not respond to the request for an update on water sources.

As to the Section 11.03(2)(d) requirement that Boards of Health supply updated lists of community and non-community water sources, Alexandra Dawson of WSCAC and MACC recommended the use of Title V maps developed by DEP to identify public water.

(a) Discussion

The Department agrees that the regulations should not unnecessarily delay rights-of-way maintenance that complies with regulatory procedures. The Department suggests that applicants request current lists of all identified private drinking water supplies within 500 feet of rights-of-way or review alternative sources of information on these public and private water supplies in the event that they do not receive lists from their Boards of Health. The applicant could identify the private well identification methods in its YOP. Alternatively, applicants would be permitted to follow other DFA-approved methods.

As discussed under the definition of "maps" above, the Department is proposing that the issue of maps be addressed by incorporating references to currently available maps. The Department does agree with Dr. Dawson that Title V maps may be the best available identifier at this time. While the Department understands that Title V maps tend to be updated on an irregular basis, it also believes that it is unreasonable to expect applicators to obtain more information on these sources than is readily available from Commonwealth agencies. As revised, the regulations should allow flexibility for map updates.

(b) Department's Suggested Action
The Department recommends that proposed section 11.03(2)(d) be replaced with the following language at 11.03(12):

(12) No person shall use an herbicide for the purpose of clearing or maintaining a right-of-way unless that person has done one or more of the following:

(a) obtained a current list of identified Private Wells within 100 feet of the right-of-way from the Board of Health,

(b) inquired of all residents within 500 feet of the right-of-way who are not on public water supplies whether they use private wells and if so, where these wells are located; or

(c) followed an alternative Private Well identification method outlined in an approved YOP.

(3)(c)
Commentators including Shepley Evans of MACC noted that "high propensity to drift" needs to be better defined "in terms of some measurable and understandable data that lay people and spray contractors alike can agree on."

a) Discussion
The Department intends this section to mean that no pesticide shall be applied under such conditions that it is likely to move off the target site of application. This section is included in the current regulations. The Department is aware of no significant problems with this definition as it has been applied in the current regulations. Propensity to drift will vary both by wind velocity and by type of herbicide used. Therefore, the Department believes that the determination is best left to the applicator, who will be familiar with field conditions and pesticide products. This section is an additional safeguard the specific limitations on the types of pesticides that may be applied in sensitive areas and the setback requirements for these areas. Still, the Department will recommend adding the no-drift limitation for No-Spray Areas.

b) Suggested Action
Restore the drift limitation to its current location at Section 11.03(6), with added limitations for No-Spray Areas, as follows:

(6) No herbicide shall be applied when the wind velocity is such that there is a high propensity to drift off target and/or during measurable precipitation, and no person shall apply herbicides in such a manner that results in drift into any No-Spray Area.

(4)
Commentators objected to the inclusion of the MSDS requirements for Personal Protective Equipment ("PPE"). Harry Williston of Vegetation Control pointed out that

federal law requires pesticide labeling, and the label should be the only requirement for PPE.

(a) Discussion
The Department proposed this section because it is among the requirements of the Children's and Families' Protection Act, Chapter 85 of the Acts of 2000. Because statutes supersede regulations, the requirement to include MSDS's and other supporting information will exist regardless of whether or not DFA lists it specifically in the regulations. However, the Department agrees that the language of the statute, particularly the phrase "and any other supportive technical data provided by the manufacturer" has the potential to be extremely broadly interpreted, and may conflict with the preceding sentence which limits PPE requirements to those imposed by state and federal law. The Department interprets the statute as requiring PPE to match MSDS and other requirements only when these requirements exist in state or federal statutes or regulations. Therefore, the Department believes that the word "shall" in the Children's and Families' Protection Act is misleading, and proposes a revision to this sentence for clarity. The Department also proposes adding a reference to the General Laws for the definition of "authority." Furthermore, the Department has noted that, by deviating from the statutory language and using the passive voice, the draft regulations failed to identify who is responsible for providing PPE. The Department therefore recommends tracking the statutory language in the first sentence. Finally, the Department believes that the word "use" will incorporate the statutory language "spraying, releasing, depositing or applying" and will make the regulations easier to follow.

b) Recommended Action
Move this provision to Section 11.03(13), and revise it to read as follows:

(13) The applicator shall provide any employee of any state agency, or authority as defined in M.G.L. c. 3, § 39, when such employee is, within a right-of-way, using pesticides, supervising the use of pesticides, or present during the use of pesticides, with personal protective equipment and clothing Applicators should note that other federal or state laws or regulations pertaining to pesticide applications may require this personal protective equipment to include protections according to Material Safety Data Sheets (MSDS's), the product label, and any other supporting technical data supplied by the manufacturer.

Additional Suggested Provisions for 11.03: Waivers and Touch-Up Applications
The Massachusetts Railroad Association and others commented on the lack of provisions allowing the Department of Food and Agriculture to grant "limited application waivers" and "public safety waivers" and to permit "touch-up applications." Harry Williston of Vegetation Management Services, who is also a local highway official, pointed out that the existing and proposed regulations make it very difficult for municipalities with limited resources to legally apply pesticides to address, for example, a citizen's poison

ivy problem around a roadside mailbox. He said that in rare cases where citizens asked for municipal spraying that would be infeasible under the present regulations:

> [W]e must tell them that we are unable to help them – BUT they can go to Agway, Wal-Mart, Home Depot, etc. and purchase some Roundup and spray it themselves. THIS IS WRONG – Cities and Towns should have some method of helping these people by using a certified applicator and not going through all the time and expense of a VMP and YOP. The Department should be able to give an exception for allowing a community to treat up to 1 acre of per year, provided that a certified applicator is used and what is to be sprayed is poison ivy or sumac only.

(Emphasis in original.)

(a) Discussion

As discussed under "Limited Application Waivers" in the Definitions section above, the Department agrees that waivers from VMP and YOP requirements are appropriate in limited cases, and also proposes the reinstatement of the provisions for touch-up applications as modified by the Children's and Families' Protection Act notification requirements.

(b) Suggested Actions

The Department proposes the following Section 11.03(8):

(8) No touch-up applications shall be carried out except under the following conditions:

- **(a) Touch-up applications must occur within 12 months of the date of approval of the YOP.**
- **(b) All applicable public notification procedures of M.G.L. c. 132B, § 6B, as outlined in 333 CMR 11.07(1) and (3), are followed.**
- **(c) No more than 10% of the initially identified target vegetation on the applicant's right-of-way in any municipality may be treated and the total amount of herbicide applied in any one year shall not exceed the limits specified by the label or Yearly Operational Plan.**
- (d) **The Department may impose such additional restrictions or conditions on the use of herbicides as it deems necessary to protect public health and the environment.**

The Department proposes the following Section 11.03(14):

(14) Notwithstanding the provisions of 333 CMR 11.03(2) or other provisions of 333 CMR 11.00, the Department may, at its sole discretion, issue Limited Application Waivers to applicants wishing to apply herbicides to clear or maintain rights-of-way without VMPs or YOPs, but only under the following conditions:

- **(a) The applicant must demonstrate either:**

1. **that the application will not occur more than once in a five-year period unless a VMP and a YOP are prepared and all other requirements of 333 CMR 11.00 are met; or**
2. **that the application is necessary to protect public health or safety.**

(b) The applicant must still adhere to all public notification requirements established at 333 CMR 11.07(1) and (3).

(c) The applicant must provide the Department with a letter establishing the concurrence of the chief elected official or board of selectmen of the municipality where the application is to be made.

(d) The applicant may only use herbicides on the Department's "Herbicides Recommended for Use in Sensitive Areas List."

(e) It should be noted that, with certain exceptions for public utilities, wetlands regulations at 310 CMR 10.03(6)(b) currently require Wetlands Determinations prior to any application within 100 feet of a Wetland.

(f) **Limited Application Waivers shall issue solely at the Department's discretion, and the Department may impose such additional restrictions or conditions on the use of herbicides as it deems necessary to protect public health and the environment.**

Additional Suggested Provisions for 11.03: Mailing Lists

Ken Kipen of the Hilltown Anti-Herbicide Coalition questioned the omission of current 333 CMR 11.03(9), which requires the Department to maintain a mailing list of interested parties.

(a) Discussion

The Department omitted this section from its proposal because it believed that maintenance of lists of interested parties was assumed and did not require explicit reference in the regulations. These comments, however, have changed the Department's thinking on this point.

(b) Department's Suggested Action

The Department recommends that the section should be re-instated at 11.03(9) to read:

(9) The Department will maintain mailing lists of individuals and groups desiring to obtain notices on various aspects of the Program.

Additional Suggested Provisions for 11.03: Markers

(a) Discussion

The Department is proposing minor revisions to 11.03(4) for consistency with the current regulations.

(c) Department's Suggested Action
Replace 11.03(4) with the following:

(4) The perimeter of any sensitive areas which are not readily identifiable on the ROW shall be identified with a clearly visible marker system, consistent with the VMP, prior to any herbicide applications.

11.04 Sensitive Area Restrictions

11.04 – Format
Rufin Van Bossuyt commented that the identifiers for each section are confusing. DEP commented that the format rendered it difficult to discern the correct citation and suggested indenting subsections.

(a) Discussion
The Department agrees that the complexity of the information renders presentation difficult, and recommends a return to the original format.

(b) Department's Suggested Action
Return to the original format, as detailed herein and as shown in Appendices D and E.

11.04(1)(a) – Application Rates
DeAngelo Brothers, Inc. objected to restrictions on the amount of herbicide that can be applied. The company stated:

> The herbicide label recommends a range of [application] rates so the target species can be controlled without repeated treatments avoiding over application to non-target areas. These rates have been approved by federal agencies after the material has undergone rigorous testing both in the laboratory and in the field … Minimum rates could potentially lead to repeat applications, depending on the growth stage [the] target vegetation is in.

(a) Discussion
While the Department respects these comments, the provision limiting applications in sensitive areas to the minimum approved rate is taken from the existing regulations. The Department has not received other comments specifically opposing this provision. Furthermore, the Department does not intend to weaken the existing regulations at this time.

(b) Department's Recommended Action
None.

Existing 11.04(1)(c) – Limitations for Drift

Ken Kipen of the Hilltown Anti-Herbicide Coalition asked **"**Why was 11.04(1)(c) which detailed specific buffer-zone limitations for DRIFT within each resource sensitive area, eliminated?" Massachusetts Audubon Society also expressed opposition to the removal of this section, and asserted that MEPA review would be required to delete them.

(a) Discussion

The specific reference to drift in current 11.04(1)(c) was eliminated because proposed 11.03(3)(d) (currently found at 11.03(6) and proposed to be reinstated there) prohibits the application of any herbicide when there is a high propensity for drift, regardless of whether the herbicide application is in a sensitive area. Still, the Department recognizes the concern over the elimination of this term, and proposes to reinstate the limitation on drift, applying it to all No-Spray Areas in 11.03(6), and to re-insert existing Section 11.04(1)(c), incorporating the revised definition of "Private Well."

(b) Department's Suggested Actions

See discussion of 11.03(6), above. In addition, reinsert Section 11.04(1)(c) with minor modifications:

> **(c) No person shall apply herbicides for the purpose of clearing or maintaining a right-of-way in such a manner that results in drift to any area within 10 feet of standing or flowing water in a wetland or area within 400 feet of a public drinking water supply well; or area within 100 feet of any surface water used as a public water supply; or area within 100 feet of a Private Well.**

11.04(1)(c)/11.04(1)(d) – Use of the Word "Department," Herbicide Identification Process, and Modifications or Waivers

DEP commented that the references to the "Department" in proposed 11.04(1)(c) are unclear. DEP added "If the point is to include all appropriate parties in the review process and have that process as timely and efficient as possible, it should be made more clear in the regulation." DEP recommended that a timetable be established for the evaluation of herbicides pursuant to proposed 11.04(1)(c). DEP also noted that proposed 11.04(1)(c) is ambiguous as to whether DFA or DPH should have adequate time to review and comment on the lists, guidelines and procedures. "If the point is to include all appropriate parties in the review process and have that process as timely and efficient as possible," DEP wrote, "it should be made more clear in the regulation."

On behalf of WSCAC and MACC, Alexandra Dawson questioned the modification or waiver that applicants can request from the Department if they propose to use an herbicide in a manner inconsistent with the terms and conditions of use imposed in the guidelines developed through the Memorandum of Understanding. In particular, she said that WSCAC and MACC found the fact that a mere "rationale," rather than a demonstration that the proposed use is "no less protective of public health and the environment" than uses that would be allowed under the Memorandum of Understanding "alarming." Shepley

Evans also stated on MACC's behalf that the waiver provision was unjustified. Finally, National Grid stated that the Memorandum of Understanding process has worked well and would be undermined by the proposed changes.

Discussion

All references to the "Department" in the proposed regulations are to the Department of Food and Agriculture as indicated in Section 11.02. The Department will recommend changing the references at 11.04(1)(c) (now proposed as Section 11.04(1)(d) for consistency with the existing regulations) to "Department of Food and Agriculture" for ease of reading, given the term's proximity to "Department of Environmental Protection" and "Department of Public Health." Because the Memorandum of Understanding discussed in the current regulations already exists as a Cooperative Agreement, the Department recommends a reference to this document or future amendments thereto. Similarly, because herbicides approved for use in sensitive areas have already been identified pursuant to the Cooperative Agreement, the Department is recommending references to this list. Any changes to the list would be made pursuant to the Cooperative Agreement or amendments thereto, but there is no need to retain these details in the ROW regulations, particularly as they will become outdated if the Cooperative Agreement is revised.

Regarding the modification or waiver, the Department is retaining these provisions consistent with the current regulations. This is not a new provision, the Department is not aware of any adverse impacts from the existing provision, and public comments from the regulated community have convinced the Department that some flexibility is needed for applicators where consistent with current environmental laws. Furthermore, a "detailed rationale" is required and the proposed herbicides are subject to the same review pursuant to the Memorandum of Understanding/Cooperative Agreement that other herbicides proposed for use in rights-of-way are subject to.

(b) Department's Suggested Action

Move the provision to Section 11.04(1)(d) and revise to read as follows:

(d) Only herbicides specified by the Department as acceptable for use in sensitive areas pursuant to the Cooperative Agreement executed between the Department of Food and Agriculture and the Department of Environmental Protection on July 1-2, 1987, or future amendments thereto, shall be used in sensitive areas.

Applicants proposing to use an herbicide which has been registered for use on rights-of-way but has not yet been evaluated pursuant to the provisions of the Cooperative Agreement may request that such herbicides be evaluated pursuant to said provisions. For an herbicide that has been evaluated pursuant to the provisions of the Cooperative Agreement, applicants proposing to use such herbicide in a manner inconsistent with the terms and conditions of use imposed in the guidelines may request a modification or waiver of such terms or conditions. A request for such modification or waiver shall provide a

detailed rationale for use, with all relevant data including but not limited to environmental fate, efficacy and human health effects of the proposed herbicide. Such herbicides and/or uses shall be subject to the evaluation standards adopted by the Departments of Food and Agriculture and Environmental Protection in the Cooperative Agreement.

"Commentary" to 11.04(1)

Walter Dodge of Northern Tree Service requested clarification on the Commentary and its intent. Daryl Jassen of WMECo asked whether the Commentary applied to all applicants, or whether the second option in the Commentary applied only to applicants not subject to the Wetlands Protection Act. Tom Sullivan suggested adding the word "such" in the last sentence, prior to the word "applicants" to distinguish applicants who were subject to Wetlands Protection Act jurisdiction from those who were not. Rufin Van Bossuyt wrote that it should be clearly stated here that the Commentary applies to railroads, not electric utilities. Tom Sullivan commented that the Memorandum of Understanding/Cooperative Agreement process cited in the Commentary has worked well, and that "the proposed regulations undermine this process and the whole approach to vegetation management in sensitive areas by greatly enlarging the no-herbicide zones within sensitive areas."

(a) Discussion

Walter Dodge's citation to the Commentary was missing the words "333 CMR 11.00. Alternatively, applicants may choose to proceed" between the words "provisions of" at the second to last sentence" and "310 CMR 10.00" in the last sentence, and this may explain Northern Tree's need for clarification. Regarding questions on coverage, the Commentary refers to non-public utility applicators. Consistent with the Wetlands Protection Act exemption for public utilities, 310 CMR 10.03(6)(a) exempts public utilities from wetlands protection act provisions provided applicators meet the requirements of the ROW regulations. The Department has allowed, and believes it should continue to allow, applicants who are not public utilities and who need to perform work within 100 feet of wetlands, to choose to follow DFA's Rights-of-Way regulations or, if they prefer, DEP's Wetlands Protection regulations including the Notice of Intent. The Department will recommend clarification of this point in the regulations through the addition of the words "subject to the Wetlands Protection Act" after each instance of the word "applicants" in the Commentary, consistent with Tom Sullivan's suggestion of using the word "such" for clarification. In answer to Tom Sullivan's comment, the proposed commentary will not significantly alter the Memorandum of Understanding process.

(c) Department's Suggested Action

The Department recommends revising the Commentary to read as follows:

Commentary

Applicants not eligible for the public utilities exemption from the

Wetlands Protection Act outlined at 310 CMR 10.03(6)(a), who wish to apply pesticides registered for use in Massachusetts to rights-of-way, may choose to apply herbicides determined to be suitable for use in sensitive areas in accordance with the provisions of the Cooperative Agreement mentioned above or, alternatively, such applicants may proceed pursuant to the provisions of 310 CMR 10.00 as authorized by M.G.L. c. 131, § 40.

11.04(1)(e)

Ken Kipen of the Hilltown Anti-Herbicide Coalition asked "Why was 11.04(1)(e) eliminated?"

(a) Discussion

The Department included this provision in expanded form in proposed 11.04(2)(k). Upon review, the Department believes it best to move this provision back to proposed 11.04(1)(e), as it is a general, rather than a specific, provision.

(b) Department's Suggested Action

Restore current Section 11.04(1)(e) as follows:

> **(e) The Department may impose such additional restrictions or conditions on the use of herbicides within or adjacent to sensitive areas as it determines necessary to protect human health or the environment. Such changes may be proposed by a municipal agency or individual during the public comment period.**

11.04(2) Specific Sensitive Areas – General

Walter Dodge of Northern Tree Service objected to the new sensitive area distinctions and setbacks in general, stating the following in written comments:

> Not only does the DFA want to create 6 new sensitive areas they also want to increase the setback distances. This is totally unnecessary. The current setbacks are more than adequate. There has not been even one instance of contamination under current regulation. What then prompts this proposed change? The change is arbitrary, confusing and lacks any basis.

In written comments, DeAngelo Brothers, Inc., which employs applicators throughout the United States and Canada, commented that some of the proposed revisions would pose difficulties for compliance and enforcement. It commented on the expansion in the number of protected areas, changed setbacks, and special provisions for railroad ballast areas, asking questions about how its applicators would be able to identify these sensitive areas and setbacks, and how its applicators would be notified of the changes.

(a) Discussion

It is true that the Department is not aware of any unreasonable adverse effects on human health, safety or the environment from the use of herbicides under the

current regulations. The Department is proposing increased setbacks in response to extensive comments and request from significant numbers of citizens who believe that there is an unnecessary risk, as well as input from other Massachusetts environmental agencies, and from the legislative intent to increase pesticide regulation evidenced in the Children's and Families' Protection Act. The Department is proposing revised definitions of sensitive areas to ensure consistency with water protections afforded under other Massachusetts environmental regulations.

As at present, the responsibility of identifying sensitive areas and setbacks and keeping up with changes to these areas will rest with the applicator. Through the VMP and YOP process as well as field inspections, the Department and other agencies and entities will have an opportunity to review the applicators' sensitive area delineations and field identifications.

(b) Department's Suggested Action
The Department recommends some changes to definitions and setbacks, as discussed below. The Department also proposes making the revised regulations more consistent in style and format with the current ones, in order to assist applicators who have learned to use the current regulations over time. The setbacks the Department is now proposing are in no case less than those that exist at present, and will represent added protection for sensitive areas. However, the revised proposal will be less burdensome on the regulated community than the regulations were as originally proposed.

11.04(2)(a) Community Water Sources and Non-Community Water Sources
Because the regulations do not distinguish between these two sources in terms of protection, DEP recommended that it would be simpler to refer to them with the single definition "public water source." As discussed in the definitions section above, the Department agrees with this suggestion.

This section references Title V maps, and MWRA recommended that Title V maps be defined. DEP commented, however, that the reference to the Title V maps was problematic here because these maps had not been updated in five or six years. DEP recommended the inclusion of the following language: "The most current water supply protection area information is maintained on the DEP web site at (www.state.ma.us/dep/brp/dws/). Additional maps of water supply protection areas are also available at the DEP service centers at each DEP Regional Office and at Boards of Health. (available by January 1, 2000)"

(a) Discussion
See discussions of definitions of "Community and Non-Community Water Sources" and "maps" above. The revised proposal for Public Ground Water Source covers Community and Non-Community Water Sources and references the most currently available DEP maps. The Department is not including a reference to the web site or other specific information because such references

could become outdated, requiring further regulatory amendments. As discussed above, the Department is reverting to language that more closely tracks the language in the existing regulations.

(b) Department's Suggested Action
In addition to the changes to the definition of "maps" proposed above, the following language should replace proposed Section 11.04(2)(a):

(2) Water Supplies

(a) Public Ground Water Sources

1. No herbicides shall be applied within a Zone I.

2. No herbicides shall be applied within a Zone II or IWPA, unless:

a. A minimum of 24 months has elapsed since the last application to the site; and

b. Herbicides are applied selectively by low pressure foliar techniques or by basal or cut-stump applications.

11.04(2)(b) Private Drinking Water Supplies
Ken Kipen of the Hilltown Anti-Herbicide Coalition asked that the burden of identifying private wells be placed on the applicant. As discussed above, some commentators stressed the need for greater herbicide restrictions, particularly near drinking water supplies. Also as discussed above, many commentators did not find that the revised regulations were "streamlined and easier to follow."

(a) Discussion
The Department is proposing that this section be moved back to Section 11.04(2)(c) for consistency with the current regulations, and that language be more consistent. As discussed in the Definitions section above, the Department is proposing the use of the term "Private Well" and presenting the well identification process in proposed Section 11.03(12). Mr. Kipen's comment is addressed in the discussion of Section 11.03(12). In light of comments regarding concerns about unknown risks to drinking water of herbicides, the Department is proposing a greater setback from private wells than originally proposed: a 100-foot no-spray area, and a limited-spray area between 100 and 200 feet.

(b) Recommended Action

The Department's recommended revision is as follows:

(c) Private Wells

1. No herbicide shall be applied within 100 feet of an identified Private Well.

2. No herbicide shall be applied within a distance of between 100 feet and 200 feet of an identified Private Well, unless:

a. A minimum of 24 months has elapsed since the last application to the site; and

b. Herbicides are applied selectively by low pressure foliar techniques or stem application.

11.04(2)(c) Surface Water Sources, Associated Feeder Streams and Class B Drinking Water Intakes

Several commentators expressed confusion over this section. The use of the terms "feeder streams," "tributary," and "surface water source," the application of the Zone A, and the 200 foot distance from a Zone A were of particular concern.

MDC wrote that they interpret the definition of "surface water source" as outlined in the proposed regulations to include the MDC public drinking water supply watersheds. Therefore, MDC wrote, this section applies to all waters (lakes, ponds, reservoirs, rivers, streams, or impoundments designated as public water supplies) found in the watershed. As MDC interprets this section, the 400-foot no-spray zone represents a significant increase in the size of the buffered areas. MDC requested confirmation of this interpretation.
MDC also commented that they would be open to a process that allowed certain herbicide usage within these zones under an approved VMP and YOP, reviewed on a case-by-case basis.

Tom Sullivan of National Grid wrote that the current 100-foot no-spray zone for reservoirs and tributaries is adequate to protect resources, and that "significant re-growth of tall growing trees requiring the use of mechanical mowers and extensive hand cutting with chainsaws" occurs after two maintenance cycles of mechanical vegetation control in these zones. "Expanding this no-herbicide zone to at least 400 feet from the reservoir and 200 feet from tributary or feeder streams will greatly increase the need for mechanical methods," Sullivan wrote, "We contend the environmental impact from this change is not for the better nor is Public Surface Water better protected. Buffer studies in New York support this position. I believe the MDC agrees with this position as well." Sullivan proposed allowing the use of sensitive area materials and methods in the sensitive areas, up to 100 feet of the surface water source or tributary

(a) Discussion

Discussions of definitions of "Feeder Stream," "Tributary," "Surface Water Source" and "Zone A" above are pertinent to these comments. In general, after a review of all public comments, the Department is proposing a compromise between requests for increased restrictions on herbicide use and comments that the requirements are already as strict as they should be. The Department is proposing Limited-Spray areas for all Zone A's, which include the protective

buffers for surface water sources. All lakes, ponds, reservoirs, streams, or impoundments that are designated as "public water supplies" under 314 CMR 4.00 are covered. Zone A's have been defined by DEP for all surface water sources in the state and the information is available through DEP or MASSGIS. The proposed protective zone is intended to be consistent with both DEP drinking water regulations and MDC's own protective zones. It represents a significant increase over existing protective zones.

In addition to surface water sources, the regulations as originally proposed included protective buffers for "feeder streams," or streams which feed into the surface water source (if a Zone A has been defined for the stream) and for Class B Drinking Water Intakes. The Department recognizes the confusion presented by the use of the term "feeder stream." The Department takes note of National Grid's concerns about the four-fold increase in the protective zones for surface water sources and of MDC's willingness to allow the selective use of herbicides within the Zone A protective zone. The Department believes, however, that case-by-case review beyond that allowed by the VMP/YOP process would be overly burdensome. The Department further recognizes that DEP did not specifically develop the Zone A protective zone with pesticide applications in mind.

(b) Department's Suggested Action

The Department proposes the following language at Section 11.04(2)(b) to replace that formerly proposed at 11.04(2)(c):

(b) Public Surface Water Sources, Associated Surface Water Bodies, Tributaries and Class B Drinking Water Intakes

1. **No herbicides shall be applied within 100 feet of any surface water source.**
2. **No herbicides shall be applied within 50 feet of any Associated Surface Water Body, or within 50 feet of any Tributary within a Zone A.**
3. **No herbicides shall be applied within a lateral distance of 100 feet within 400 feet upstream of any Class B Drinking Water Intake.**
4. **No herbicides shall be applied within a distance of 100 feet from any surface water source and the outer boundary of any Zone A, within a lateral distance of between 100 and 200 feet within 400 feet upstream of a Class B Drinking Water Intake, or within a lateral distance of 200 feet between 400 and 500 feet upstream of a Class B Drinking Water Intake, unless:**
   a. A minimum of 24 months has elapsed since the last application to the site; and
   b. Herbicides are applied selectively by low pressure foliar techniques or stem application.

11.04(2)(d)

As originally proposed, 11.04(2)(d) would create no-spray and limited-spray areas for coastal waters, estuaries, lakes and ponds (e.g., surface waters not protected as drinking water sources, rivers or feeder streams). The Wetlands Protection Act includes the *land underneath* all of these waters as wetland resource areas. In order to avoid redundancy, to ensure consistent protective areas, and in light of DEP's comment that lakes and ponds

are protected by the Wetlands Protection Act, the Department is proposing instead to cover these surface water bodies in the same section used for its other wetlands protections, now proposed at Section 11.04(4), and to add a definition of "Water Over a Wetland" as discussed above.

11.04(2)(d)2, (e)2, (f)2, (h)2, and (i)2 – Ten-Foot Minimum Spray Distance

Each of these subsections of the proposed regulations would create a minimum distance of ten feet from various water bodies for railroad ballast areas. At least one commentator asked why DFA was allowing spraying to within ten feet of a water body. Ken Kipen commented that a no-spray zone of ten feet was insufficiently protective for a water resource, especially if there was a downslope. Walter Dodge of Northern Tree Service asked why a separate scheme should apply to railroads when the same materials were used and application methods were similar. Sheri Butterfield of Amtrak's Environmental Department, conversely, stated that the proposed restrictions in railroad ballast areas "may be too narrow in certain track areas that are in closer proximity to water bodies than the no spray areas; effectively eliminating the use of herbicides as a vegetative control measure." Tom Sullivan of National Grid USA questioned the basis for increasing existing 10-foot no-spray zones to 50 feet, and asserted, "Buffer studies carried out in New York state clearly that the present 10 foot buffer protects" coastal waters, estuaries, lakes and ponds.

(a) Discussion

The existing regulations allow herbicide applications up to a distance of ten feet from a surface water body. The proposed regulations would create larger setbacks for most applicators, but would keep the ten-foot minimum for applications in railroad ballast areas. As discussed elsewhere in this Report, the Department is suggesting this allowance for railroads based on railroad input on the importance of maintaining railroads free from vegetation. However, the Department believes that a ten-foot minimum distance is required for consistency with existing DEP regulations and policy, even if this will mean some railroad ballast areas will be limited to manual vegetation control.

(b) Department's Suggested Action

None.

11.04(2)(e): Riverfront Area

In General:

According to Audubon: "The Rivers Protection Act explicitly requires an alternatives analysis for all alterations within Riverfront Areas. The proposed herbicide regulations are deficient in that they do not provide an alternative analysis meeting the statutorily required standard of the Rivers Protection Act."

(a) Discussion

While riverfront regulations at 310 CMR 10.58 require alternatives analyses in many cases, Section 10.58(6)(a) explicitly exempts roads, utility lines, rail lines

and certain other structures from the riverfront area requirements. 310 CMR 10.03(6)(c) exempts herbicide applications in rights-of-way from the Wetlands Protection Act when the applications are within riverfront areas that are not subject to 310 CMR 10.03(6)(a) or (b) (giving exemptions and presumptions of non-alteration for right-of-way herbicide applications when ROW regulations at 333 CMR 11.00 are followed), as long as that the herbicide application complies with the plans required by the ROW regulations (VMPs and YOPs), and provided these riverfront areas qualify under 310 CMR 10.58(6)(a). Therefore, the alternatives analysis is not required.

(b) Department's Suggested Action
None.

11.04(2)(e)1

Tom Sullivan of National Grid commented that the minimum 100-foot setback for non-railroad ballast applications was too great. As discussed above, Sullivan noted that the existing limited-spray area between ten feet and 100 feet of non-drinking water supply rivers promotes a stable low growing plant community that provides erosion control and bank stability, and that no-spray requirements would result in hardwood thickets. Sullivan proposed a limited-spray area to within ten feet of the mean annual high-water line of rivers.

(a) Discussion:
The Department agrees that a limited-spray area for riverfront areas is appropriate and consistent with other wetlands setbacks. The Department has chosen to apply the "Riverfront Area" definition for limited-spray areas, rather than a fixed setback from the mean annual high-water line, for consistency with the lesser setbacks that DEP regulations afford to riverfronts in certain densely populated areas. For non-railroad ballast area no-spray zones, the Department has decided on a fixed 25-foot setback from the mean annual high-water line, a setback consistent with other wetlands setbacks in the proposal. However, the railroads will be allowed to apply herbicides up to 10 feet of the mean annual high-water line of any river if the Pesticide Board adopts the Department's revised proposal.

(b) Department's Suggested Action:
The Department recommends making the minimum distance of non-railroad ballast applications near riverfront areas 25 feet from the mean high water line and making Limited-Spray Area the same as the Riverfront Area. For consistency with the existing regulations, the Department proposes moving the riverfront area provisions into the wetlands provisions at proposed Section 11.04(4) (emphasis added to identify riverfront provisions; 11.04(4)(e) is not included because it does not apply to Riverfront Areas):

(4) Wetlands, Waters Over Wetlands, *Riverfront Areas*, and Certified Vernal Pools

(a) With the exception of railroad Ballast areas, no herbicide shall be applied on or within 25 feet of a Wetland or Water Over a Wetland, *within 25 feet of the mean annual high-water line of any River*, or within 25 feet of any Certified Vernal Pool.

(b) With the exception of railroad Ballast areas, no herbicide shall be applied between 25 feet and 100 feet of a Wetland or water over a Wetland, *within the area between a distance of 25 feet of the mean annual high-water line of any River and the outer boundary of any Riverfront Area*, or within the area between a distance of 25 feet of any Certified Vernal Pool and the outer boundary of any Certified Vernal Pool Habitat, unless:
1. A minimum of 12 months has elapsed since the last application to the site; and
2. Herbicides are applied selectively by low pressure foliar techniques or stem application.

(c) Ballast Areas: For railroad Ballast areas, no herbicide shall be applied on or within 10 feet of a Wetland or water over a Wetland, *within 10 feet of the mean annual high-water line of any River*, or within 10 feet of any Certified Vernal Pool.

(d) Ballast Areas: For railroad Ballast areas, no herbicide shall be applied on or within a distance of between 10 feet and 100 feet of any Wetland or Water Over a Wetland, *within the area between a distance of 10 feet of the mean annual high-water line of any River and the outer boundary of any Riverfront Area*, or within the area between a distance of 10 feet of any Certified Vernal Pool and the outer boundary of any Certified Vernal Pool Habitat unless:
1. A minimum of 12 months has elapsed since the last application to the site; and
2. Herbicides are applied selectively by low pressure foliar techniques or stem application.

(e) …

11.04(2)(f) (now proposed at 11.04(4)): Wetlands – General

Probably the most complex and controversial section of the ROW regulations pertains to wetlands. Comments made about this section and the Department's responses are detailed below under separate headings for the major issues raised including: Bordering Vegetated Wetlands, the Wetlands Study Option, Aquatic Vegetation Control, and Standing or Flowing Water. The Department's overall recommendation regarding wetlands is as follows:

Department's Suggested Action for Wetlands

The Department proposes moving the wetlands provisions to Section 11.04(4), keeping the proposed increase in the setback for non-railroad ballast areas from 10 feet to 25 feet, and reinstating the current blanket prohibition of any herbicide application within 10 feet of standing or flowing water in a wetland. The Department further proposes that the section on wetlands also cover non-drinking water supply surface waters, vernal pools and riverfront areas. Finally, the Department proposes revisions to the study option that would allow for fairer regulation of applicants that were not public utilities if corresponding changes were made to wetlands laws and regulations. Proposed Section 11.04(4)(a) – (d) is given directly above under the discussion of Rivers and Riverfront Areas. As

proposed, revised Section 11.04(4)(e) would read as follows:

(e) Notwithstanding 333 CMR 11.04(4)(a) – (d), public utilities providing electric, gas, water, telephone, telegraph and other telecommunication services (and other applicants, if consistent with all relevant provisions of the Massachusetts Wetlands Protection Act and its regulations in effect at the time of application) may apply herbicides on or within 25 feet of a Wetland in accordance with the following conditions:

1. Submission of a study, the design of which is subject to prior approval by the Departments of Food and Agriculture and Environmental Protection, evaluating impacts of the proposed vegetation management program utilizing herbicides on or within 25 feet of Wetlands, and comparing those impacts to those which would result if only non-chemical control methods were used in these areas. The study must detail vegetation management practices and use patterns specific to those used by the type of entity submitting the study; and

2. A finding by the Department, after consultation with the Rights-of-Way Advisory Panel, that the proposed vegetation management program utilizing herbicides on or within 25 feet of Wetlands will result in less impacts to the Wetlands than mechanical control.

3. Notwithstanding the above, no herbicides shall be applied on or within ten feet of any standing or flowing water in a Wetland.

Detailed discussion of 11.04(2)(f): Bordering Vegetated Wetlands, Setback Distances, Water Bodies and Drinking Water

MACC suggested replacing the term "Wetlands" with "Bordering Vegetated Wetlands" (BVWs) for consistency with the language that conservation commissions and other wetlands professionals use. MACC also recommended increasing the BVW setbacks from 25 feet to 50 feet. Dr. Alexandra Dawson, on behalf of WSCAC and MACC, recommended increasing the setback to 50 feet to be consistent with the minimum distance from water bodies, noting that "BVWs, by definition, are hydrogeologically connected to open or running water and deserve as much protection." Dr. Dawson stated that WSCAC found the low level of protection afforded wetlands to be "puzzling."

(a) Discussion

MACC's comment regarding BVW's is discussed in the Definitions section of this report under "Bordering Vegetated Wetlands," above.

The Department is still proposing a 25-foot setback for wetlands. This represents a 250% increase over the existing ten-foot setback, and the Department believes that it is a reasonable response to strong public requests for even greater setbacks, coupled with a lack of evidence of problems with the ten-foot setbacks.

The Department is proposing the same setback for water bodies that are not drinking water sources, but rather are water over wetlands. While the Department originally proposed 50-foot setbacks for non-drinking water supply surface waters, it has decided to reserve setbacks of 50 feet or more for drinking water resources as identified by DEP. The Department is adopting a consistent setback for wetlands and waters over wetlands to simplify the regulations for the regulated community. The Department believes that a 25-foot setback is more than adequate for both resources. Drinking water resources will have greater setbacks and, as proposed Section 11.04(1)(f) ensures, the most restrictive setbacks will apply to resources that are both wetlands/water over wetlands and drinking water resources. For example, Water Over a Wetland that was also an Associated Surface Water Body would have a 50-foot required setback, and Water Over a Wetland that was also a Surface Water Source would have a 100-foot setback.

The Department recognizes the confusion and inconsistencies within the sections that address Wetlands and Coastal Waters, Estuaries and Ponds. To address this inconsistency, the Department proposes to re-instate the prohibition on the application of pesticides to standing or flowing water and to combine these sections into one sensitive resource area entitled "Wetlands, Waters Over Wetlands, Riverfront Areas, and Certified Vernal Pools" with a no-spray setback of 25 feet for non-railroad areas and ten feet for railroad ballast areas. As with wetlands, the revised non-drinking supply surface water setbacks would represent a 250% increase over the ten-foot no-spray setback. As discussed above, the ocean or any pond, lake or estuary would be defined as Water Over a Wetland.

(b) Recommendation
Retain wetlands definitions discussed above. Define non-drinking water surface water sources as waters over wetlands. Establish a 25-foot no-spray zone for wetlands, water over wetlands, rivers and vernal pools, with a 100-foot limited-spray zone. Define River as well as Riverfront Area. For recommended language, see above.

Detailed discussion of 11.04(2)(f): Wetlands Study Option
DEP commented:

At 11.04(2)(f)3(A) & (B), 333 CMR 11 states that an entity may apply herbicides to a wetland if the entity conducts a study and the study concludes herbicides will result in fewer impacts. Does this refer to individual ad hoc studies, or to a single generic and already completed study? [E.g., the "Study of Fates of Herbicides in Wetlands on Electric Utility Rights of Way in the (sic.) Massachusetts Over the Short Term", as cited in the 12 October 1995 DFA "Decision Concerning the Wetland Impact Study Conducted Pursuant to 333 CMR 11.04(4)(c)(2)"] This section is not clear as written.

Dr. Dawson recommended that a site-specific study be conducted when wetlands are targeted for maintenance, particularly near public or private drinking water sources. She

commented that the existing 1990 Tufts University study on the impact of cutting versus chemical use which public utilities tend to rely upon in their decision-making is inadequate because it "was not intended to compare and weigh the benefits of different management techniques for protecting drinking water."

Dr. Dawson also recommend that the proposed setbacks for surface water and wetlands should apply to railroad work as well as to other rights-of-way maintenance, except where track safety is threatened. Spraying should be limited to the immediate track area, or a minimum of ten feet from the water body or wetland, Dr. Dawson commented.

Audubon expressed particular concern over this section because the *applicant* will now have the power to conclude whether or not the use of herbicides within 25 feet of a wetland will have less impact than the use of mechanical controls. Audubon also expressed opposition to the removal of the role of the Advisory Panel in this decision.

Ken Kippen commented that he found this section confusing because it seemed to state that "the buffer zones may not only be breached, but that the spraying may be carried out ON or IN the wetland itself." He went on to inquire as to the meaning of 11.04(2)(f)(3) in terms of the minimum distance from wetlands that spraying may occur.

MACC recommended that NHESP be engaged in the review of the studies outlined in this section, that their approval be required, and that "studies should also include an evaluation of long term practices to encourage and maintain low growing plant species, similar to the practices of the electrical transmission agency." MACC also recommended that a conclusion be included in this section through the following revised language:

> A conclusion in the approved study indicating that the proposed vegetation management program utilizing herbicides within the wetlands will result in less negative impacts to the functions and values of wetlands and the public interests they serve, as per 310 CMR 10.01(2).

Forester Rufin Van Bossuyt said that the existing wetlands provisions were written before at least two major studies were completed "and the Department made a finding that herbicide applications resulted in less impacts to wetlands than mechanical control. This should be noted in any revision to the regulations."

> (a) Discussion
> Current 11.04(4)(c) allows public utilities, but not other applicants, to use herbicides on or within ten feet of wetlands if they submit a study indicating that the application of pesticides will have less impact on the wetlands than mechanical methods of vegetation control and the Department makes a finding, after consultation with the Advisory Committee, of lesser impact from herbicide use than mechanical control. Electric utilities have presented such a study that covers much of their work in rights of way. The report is entitled "Study of Environmental Fates of Herbicides in Wetlands on Electric Utility Rights of Way

in Massachusetts Over the Short Term: Final Report, December 31, 1993, Revised December 14, 1994."

In its original proposed revisions, the Department expanded the wetlands study option to all entities acting under VMPs and YOPs wishing to apply herbicides within 25 feet of wetlands. The Department made the recommendation because it was aware of no scientific, economic or other reason that the study option should be limited to utilities. The increase in no-spray areas for applicants not eligible for the exemption to 25 feet from ten feet was highly significant, and the Department did not want to burden some applicants unfairly if they could produce other studies indicating that their work would cause less harm to wetlands than the mechanical vegetation control they would otherwise be forced to use.

Upon further review, the Department has decided not to propose provisions that potentially conflict with other environmental regulations. Exemptions for public utilities stem from a provision in the Wetlands Protection Act exempting activities conducted "in the course of maintaining, repairing or replacing, but not substantially changing or enlarging, an existing and lawfully located structure or facility used in the service of the public and used to provide electric, gas, water, telephone, telegraph and other telecommunication services." Massachusetts General Laws Chapter 131, Section 40, Paragraph 1. Furthermore, Wetlands Protection Act regulations at 310 CMR 10.03(6)(a) and (b) allow a presumption that herbicide applications performed in accordance with the ROW regulations "effective July 10, 1987" will not alter wetlands. Under existing regulations, DEP could find that an applicant that was not eligible for DEP's public utility exemption and that applied herbicides within wetlands was in violation of 310 CMR 10.03(6)(b). While the Department believes that the Massachusetts Pesticide Control Act preempts the wetlands regulation, the Department does not favor promulgating regulations that could result in apparent non-compliance with DEP regulations. Therefore, the Department is now recommending that the study option be made available to public utilities and, *if consistent with all relevant provisions of the Massachusetts Wetlands Protection Act and its regulations in effect at the time of application*, applicants that are not public utilities. The Department believes that this should provide applicators with sufficient notice that DEP's requirements may apply, while allowing interested persons to work to revise DEP's laws to allow exemptions to other ROW applicants in the future. If these changes to DEP's laws and regulations were made, the ROW regulations would not require further revision to allow the exemption to apply to all applicators, as the Department believes it should.

Changes to provisions regarding exemptions for wetlands setbacks at draft 11.04(2)(f)3 (currently at 11.04(4)(c); now proposed in the new draft at 11.04(4)) would, Audubon stated, allow the applicant, rather than the Department, to conclude whether or not herbicide uses on or within 25 feet of wetlands will have less impact than other management techniques, and would eliminate Advisory Committee review. This differs from the existing regulation at 11.04(4)(c), which

limits the exemption allowing applications on or within ten feet of wetlands to public utilities, and requires a Department finding after consultation with the Advisory Committee. In response to public comments, and also in light of the fact that current Wetlands regulations at 310 CMR 10.03(6)(a) and (b) refer to the Department's 1987 ROW regulations, the Department is recommending a return to the requirement of a Department finding on the study, after consultation with the ROW Advisory Committee.

With regards to DEP's question about whether the study may be generic or must be specific, the former is true. Electric utilities seeking the exemption generally point to the "Study of Environmental Fates of Herbicides in Wetlands on Electric Utility Rights-of-Way in Massachusetts Over the Short Term: Final Report" dated December 31, 1993 and revised December 14, 1994. This study looked at two active ingredients with particular persistence and mobility characteristics, and allowed the Department to extrapolate that particular types of herbicides would be preferable to mechanical management. The study was most relevant to herbicide applications around structures supporting above ground utility wires. If other applicants choose to invoke the study option in the future, they will need to find or prepare studies specific to the work they wish to perform. The Department also recommended the following clarifying language in the 2000 draft regulations: "The study must detail vegetation management practices and use patterns specific to those used by the type of entity submitting the study." No commentators objected to this statement, and the Department is still proposing it. If the completed study does not convince the Department, after consultation with the ROW Advisory Panel, that the proposed herbicide applications will cause less impact to the wetlands than mechanical application would, then they may deny the application. Hence, there are two stages in the review process when Department may require more specific studies, and one stage for where DEP may require them.

(b) Recommendation
See proposed Section 11.04(4), above.

11.04(2)(f): Wetlands – Aquatic Vegetation Control
DEP stated in written comments:

> As defined in 310 CMR 10.00, lakes and ponds are also wetlands. Therefore, treatments on rights of way occurring within these areas must comply with BRP WM04 - License to Apply Chemicals for Control of Nuisance Aquatic Vegetation pursuant to the authority granted to the DEP by M.G.L. Chapter 111, Section 5E. In addition to requirements (A) & (B) listed in 333 CMR 11.00, other obligations must also be met.

DEP then listed a number of requirements that it believed were applicable in most cases when applications occurred within lakes and ponds, including procedures for applying

nuisance aquatic vegetation control chemicals and filing notices of intent. Furthermore, DEP stated that applicators must submit written reports following all aquatic applications.

(a) Discussion
As noted above, the Massachusetts Pesticide Control Act is the sole authority for pesticide regulation in the Commonwealth, and therefore it may be argued that the DEP licenses conflict with this law. At any rate, the proposed regulations, as revised, would include the prohibition against any herbicide applications within ten feet of any standing or flowing water within a ROW. This should eliminate any aquatic applications.

(b) Department's Recommended Action
None.

11.04(2)(f): Wetlands – Standing or Flowing Water

Ken Kippen of the Hilltown Anti-Herbicide Coalition, Dr. Dawson of WSCAC and MACC, and Audubon expressed opposition to the removal of the section that prohibits the application of herbicides on or within ten feet of any standing or flowing water in a wetland. Audubon stated that MEPA review would be required if this section was to be removed. Ken Kippen also questioned the removal of the following section from the current regulations:

- **11.04(4)(c)(2),** which requires a finding by the Department that the proposed VMP will result in less impacts to a wetland than mechanical control.

(a) Discussion
As discussed elsewhere in this Report, the Department is proposing restoration of the current prohibition against applications on or within ten feet of standing or flowing water in wetlands. This decision is based on the discussion of the ROW herbicide application exemptions from the Wetlands Protection Act in the 1987 Preface to the Wetland Regulations. While the Department recognizes some environmentalists are concerned about allowing applications in or on any wetlands at all, the provisions allowing it for public utilities in some cases are not new.

(b) Department's Suggested Action
Re-instate the provision in proposed Section 11.04(4), presented in the general wetlands discussion above.

11.04(2)(g): Wetlands – Inhabited and Agricultural Areas

While reviewing public comments, the Department noted that its proposed regulations included a No-Spray Area for Inhabited and Agricultural Areas, where in fact spraying is not prohibited outright. Instead, spraying within 100 feet of these areas must conform to certain requirements. Therefore, the Department rearranged proposed Section

11.04(2)(g) (now proposed at Section 11.04(5)) as follows (changes indicated by strikeout and underlined italics):

~~(g)~~ (5) <u>Inhabited and Agricultural Areas</u>

~~(a) No high pressure foliar herbicide applications shall be carried out within 1oo feet of any inhabited area or any agricultural area.~~

~~(b)~~

No foliar herbicide shall be applied within 100 feet of any Inhabited Area or any Agricultural Area unless:

1. A minimum of 12 months has elapsed since the last application to the site; and

2. Herbicides are applied selectively by low pressure, *<u>using</u>* foliar techniques or stem application.

<u>11.04(2)(h) and (i) Vernal Pools</u>

Audubon, MACC and DEP found the distinction between certified vernal pools with water and certified vernal pools without water confusing. Ken Kipen of the Massachusetts Anti-Herbicide Coalition suggested that nothing less than 100 feet is sufficient to protect the migration of mature frogs and salamanders from vernal pools. MACC noted that a pool could be dry at the time of delineation and wet at the time of application, or vice-versa. MACC recommended the elimination of the distinction and the establishment of a 50-foot setback. DEP stated that the four separate protection areas for vernal pools should be "consolidated into one protective area based on the mapping provided in the certification process. This would make compliance and enforcement more achievable."

Tom Sullivan of National Grid wrote that the proposed 100- and 50-foot no-herbicide zones for certified vernal pools were too large, and questioned the scientific basis for this decision. He added that National Grid has "maintained and enhanced vegetation using IVM methods to 10 feet from waters edge or to the edge of vernal pools with no water present for decades without compromising these resources." Sullivan suggested that the limited-spray zone should extend to within ten feet of vernal pools with water present, and to the edge of vernal pools with no water present.

Amtrak's Sherri Butterfield recommended in writing that the new regulations should specifically exempt active drainage ditches relating to transportation facilities from any restricted vegetation control activities around vernal pools.

<u>(a) Discussion</u>

As discussed in the Definitions and Wetlands sections above, the Department agrees that the section is confusing and overly complex. The applicants should have access to a reliable resource, at the outset of their planning, which clearly identifies vernal pools. The Department is also recommending that vernal pools be protected together with wetland resources at proposed Section 11.04(4).

The Department appreciates the logic to the suggestion that drainage ditches should not be included in the definition of vernal pools. In the Department's experience, conservation commissions have asserted that drainage ditches were

vernal pools. The Department does not believe that man-made drainage ditches designed to maintain ROW structures should be classified as vernal pools, tributaries, or any other protected resource. However, as revised, the proposed regulations will only relate to vernal pools that have been certified and mapped. Therefore, in the interests of ensuring consistency with other environmental regulations, the Department is not, at this time, making an exemption from the vernal pool requirement for active drainage ditches. However, only mapped and Certified Vernal Pools will be covered. The Department is now recommending a 25-foot no-spray setback for vernal pools. The Department believes that this should be adequate, given that only limited spraying will be permitted within mapped Certified Vernal Pool Habitat.

(b) Department's Suggested Action
Incorporate Certified Vernal Pool setbacks into proposed Section 11.04(4), discussed directly above.

11.04(2)(j) Rare Species

Audubon wrote that a provision should be added which would prohibit applications if the Natural Heritage and Endangered Species Program (NHESP) issued a formal finding that the application would have an adverse effect on rare species. MACC strongly recommended that VMPs and YOPs be submitted to NHESP "as they are proposed, including with them copies of the relevant maps of Estimated Habitat of State Listed Species, so that the NH&ESP specialists may efficiently focus on the habitat areas impacted." National Grid stated, "This new requirement will add administrative burden to the process for the applicant. A bigger issue is: has anyone consulted with Natural Heritage? Do they want National Grid's YOP and 100-150 USGS maps to review every year?"

(a) Discussion
Under the proposed regulations, NHESP has 45 days from the date of receipt of the notification to issue a formal finding and shall make recommendations to the ROW Advisory Panel. The Department may then take whatever action is considered necessary and appropriate. The Department believes that it should make the final decision, and has provided a new proposed section 11.04(3)(c) to ensure that the Department has this right. Regarding Mr. Sullivan's comment, the Department believes that NHESP should have the opportunity to comment when its resources allow, particularly in light of other public comments requesting this review. As proposed, the regulations will not prohibit an application if NHESP does not review the proposal, but they will require a wait. Given the need to protect Massachusetts' rare species, the Department believes that this compromise is reasonable. The Department is proposing that the rare species provisions be moved to proposed Section 11.04(3) to facilitate numbering that is more consistent with the existing regulations.

(b) Department's Suggested Action
Move the section to 11.04(3) to read as follows:

(3) <u>Rare Species Habitat</u>

(a) Any person proposing to apply an herbicide within any Rare Species Habitat shall submit to NHESP a copy of the YOP, along with a notification of the proposed action and a detailed description of the activity concurrently with the submission of the YOP to the Department.

(b) NHESP shall have 45 days from the date of receipt of the notification to comment and make recommendations to the ROW Advisory Panel.

(c) No person shall apply an herbicide within any Rare Species Habitat unless the application is approved by the Department's Rights-of-Way coordinator within 60 days of the date of NHESP's receipt of the notification.

<u>11.04(2)(k) Additional Restrictions or Conditions – General</u>

Walter Dodge of Northern Tree Service objected to this section on the same grounds that he objected to the other sensitive area restrictions, noting that there was no demonstrated risk, and that this particular section "would allow the DFA to stop right of way work altogether . . . Any restrictions imposed under this change would not have to be based on sound vegetation management practices. Rather they could very easily be based on someone's opinion and not factual information." "Agencies and individuals already have rights to ask DFA for additional restrictions without stating it explicitly," Tom Sullivan of National Grid wrote, echoing Dodge's comments and stating that any delays in this process, combined with public notice and newspaper advertisements, "will be a tremendous burden." Sullivan stated that the provision should be deleted altogether. Daryl Jassen noted that this section appears to indicate that DFA can stop or delay all ROW operations, including *non-pesticidal* maintenance. This, he maintained in his comments, is contrary to the stated intention of the regulations. Walter Dodge of Northern Tree raised similar objections.

<u>(a) Discussion</u>:
As discussed in response to Ken Kipen's comment on the deletion of current Section 11.04(1)(e), above, the Department is recommending a return to the language included in the current regulations at this section. A return to this language should address Mr. Janssen's and Mr. Dodge's comments, as it refers specifically to the Department's right to impose additional requirements for "the use of herbicides …"

<u>(b) Department's Suggested Action</u>:
As discussed above, restore Section 11.04(1)(e).

<u>11.05 Rights-of-Way Advisory Panel</u>

Commentators asked about the reason for replacing the VMP Panel with a Rights-of-Way Advisory Panel, and about the location of the requirements of the existing regulation. Commentators recommended that the panel include representatives of the following: an

electric utility company (Daryl Jassen of WMECo and Walter Dodge of Northern Tree Service), the NHESP (MACC), NHESP or a representative of the Division of Fisheries and Wildlife or a qualified biologist selected by those agencies (Audubon), the railroad industry (Amtrak's Sheri Butterfield), a public water supplier (DEP, MWRA, MDC and WSCAC), and a smaller public water system that has its own surface water supply (DEP). DEP strongly recommended that a representative from MDC/MWRA be included on the panel, stating "These agencies jointly supply more than half of the drinking water used in Massachusetts, and their perspective would be helpful." MDC echoed this comment, requesting that the panel be expanded to include a representaive of MWRA or MDC's Division of Watershed Management "to represent public water supply concerns given the fact that we supply over half the citizens of the Commonwealth with drinking water." MACC recommended that the panel should receive copies of public hearing comments to consider in their reviews. DEP suggested inserting the following italicized phrase into Section 11.05: "Any member absent *without due cause* from two or more consecutive meetings." Dr. Dawson of WSCAC and MACC recommended that the "panel should be set up to request information from the utilities about the results of, or problems relating to, chemicals used during the period covered by the latest Vegetation Management Plans." Walter Dodge suggested that some criteria of expertise should be established for the Commissioner's appointees to this Panel.

(a) Discussion

The name change reflects the broader scope as described in the proposed regulations of the panel. The panel advises the Department on a broad range of issues, not just VMPs, relating to these regulations and to fulfill specific functions as detailed within these regulations.

The current regulations (333 CMR 11.05(4)) give NHESP a seat on the VMP Advisory Panel. Due to resource constraints, however, the staff of NHESP informed the Department several years ago that they were unable to attend meetings, and instructed the Department to no longer send them the VMPs and notifications. NHESP did not request reinstatement on ROW advisory panels in public comments on these regulations. The Department, however, consults with NHESP on issues relating to endangered species. Utilities and railroads have representatives on the panel. The Department agrees that an MDC or MWRA member should represent public water suppliers. Because MDC is a sister agency to the Department, and because of its Memorandum of Understanding with the Department discussed elsewhere in this Report, the Department believes MDC is the most appropriate representative. In response to Dr. Dawson's comment that the advisory panel should be authorized to request information from utilities about results of or problems associated with pesticide use over the latest VMP period, this information is available to the panel through public hearing comments that the Department provides to the advisory panel. Finally, in response to Mr. Dodge's suggestion on criteria for Board membership, the Department believes that current provisions allowing the Commissioner to appoint members are adequate.

(b) Department's Suggested Actions

The Department suggests that the Commissioner of Food and Agriculture should appoint an MDC representative, and the regulations should be revised to reflect this fact. In response to DEP's comment, the phrase "without due cause, as determined by the Commissioner," should be added as indicated: "Any member absent *without due cause, as determined by the Commissioner*, from two or more consecutive meetings." Finally, the Department is recommending that this section be moved to Section 11.11 in order to retain the numbering of the current regulations.

11.06 Vegetation Management Plan

General Recommendation

The Department recommends that this section be moved back to Section 11.05 for consistency with the current regulations, and that subsections be rearranged to reflect the current organization. The only substantive changes from the proposed revisions that the Department is recommending are the addition of language indicating that the IPM plan must be detailed, and that a cost-benefit demonstration be included in roadway plans. As discussed in the Definitions section under "Wetlands Determinations" above, the Department is also proposing a reference to the DEP regulations' requirement of wetland delineations to be added at the end of proposed Section 11.05(2)(e):

> **. . . Applicants should note that Department of Environmental Protection regulations at 310 CMR 10.03(6)(b) currently require Wetlands Determinations for applicants that are not eligible for a public utility exemption. The Department recommends that all applicants include valid Determinations of Applicability in their VMPs.**

11.06(2)

MWRA commented that maps depicting the limit of sensitive areas and no-spray zones should be submitted for review. DEP recommended that a map be included in the VMP at 11.06(2). That VMP map could be used to show anticipated changes in management over the five-year period. DEP also suggested that the following elements be included in these maps in addition to the map requirements requested in the YOP: all sensitive areas as defined at 313 CMR 11.04, particularly including any public or private resource areas such as water supplies and zones of protection, beaches, recreational areas, farms, etc., all wetlands defined at 310 CMR 10.00, the relative abundance and species composition of treatment area vegetation, and the separate areas to be treated with different chemicals.

In addition to the map requirements requested in the YOP, DEP suggested that the following be shown in the VMP:

- all sensitive areas as defined in 313 CMR 11.04, particularly including: any public and/or private resource areas (water supplies & their protection zones, beaches, recreation areas, parks, agriculture, etc.)
- any wetlands as defined in 310 CMR 10.00; as well as

- relative abundance and species composition of vegetation in treatment area, and
- separate areas to be treated with different chemicals.

(a) Discussion
Maps are submitted as part of the YOP process. Maps can change from year to year, and to reflect this possibility, they are in the YOP that changes from year to year, rather than in the VMP that is approved for five years. This addresses the fact that changes are difficult to anticipate, in terms of new construction, new private wells, sale of property, etc. The YOP remains the optimal place for maps to be submitted, as that document has the greatest potential to reflect the changes from year to year.

Sensitive areas for railroads are delineated on the maps. The areas for utility work are marked off prior to the application with marking field tape. The other areas are those that are readily identifiable in the field (mentioned in the definitions). These areas are already listed on the majority of the maps; however, the railroads that use track charts would not have these areas on their maps.

It would be difficult to mark separate areas on a utility right of way. The pole markings are occasionally hard to decipher, and wires are numbered (transmission versus distribution) and marked on the maps in the YOP. The railroads have mileposts, but as stated below, there would not be any point to separating areas. The Department is not requiring a listing of the particular chemicals used in each area because all chemicals listed for sensitive area use in the YOP must be approved for sensitive area use. The railroads use one tank mix, usually comprised of two different pesticides, an adjuvant, and some low drift. The utilities use a one-pesticide tank mix, with an adjuvant and surfactant. All are pesticides taken from the sensitive areas materials list.

(b) Suggested Action
None.

11.06(2)(c)
MACC commented that the following language should be added after "A description of the IPM Program": "past, present and future, including an analysis of effectiveness and a recitation of short, medium and long term objectives sought." Audubon commented that the regulations should strengthen the Department's commitment to an IPM approach.

(a) Discussion
The Department agrees with the importance of stressing IPM. However, the type of detail that will be relevant for a particular IPM Program will vary. The Department suggests adding, in place of MACC's suggested language, the word "detailed," and reinserting, with minor modifications, language at the end of the provision contained in the existing regulations: "to minimize the amount and frequency of herbicide application." For roadways, this language will be

supplemented by proposed Section 11.06(2)(d) (now proposed at 11.05(2)(k)) which requires a description of the applicants policy to eliminate or, if necessary, reduce the use of herbicides.

(b) Suggested Action
Replace "A description of the IPM Program" at proposed 11.06(2)(c) with the following at 11.05(2)(h):

(h) A detailed description of the IPM Program, showing how it will minimize the amount and frequency of herbicide application and demonstrate long-term sustainable control of vegetation.

11.06(2)(f):
Representative Douglas Petersen, chief sponsor of the Children and Families Protection Act ("CFPA"), attended the public hearing in Boston and presented oral and written comments concerning the proposed regulations and the CFPA. Representative Petersen noted that the right-of-way provisions at CFPA Section 10 responded to "concerns raised by citizens about pesticide applications along rights-of-way, particularly along roadways." Representative Petersen further noted that the CFPA "contemplates a presumption in favor of non-chemical means of controlling vegetation along roadways." In light of this presumption, Representative Petersen suggested that proposed Section 333 CMR 11.06(2)(f) include a *methodology for evaluating* the reasons why alternative vegetation control methods were considered and rejected. He suggested that the regulations include a cost/benefit analysis requirement, and stated that applicants "should be required to demonstrate that the cost of using non-chemical means of controlling vegetation along roadways significantly outweighs the benefits before pesticides are chosen as the preferred method of managing roadway vegetation." Similarly, Audubon commented that this section "does not clearly establish standards for selecting herbicides vs. other vegetation management techniques, based on objective review of the best available information on environmental and public health risks," and asked that the provision be strengthened accordingly.

(a) Discussion: The CFPA established a presumption against pesticide use along roadways for state agencies and authorities: Section 10 requires these applicators to "eliminate, or if necessary reduce, the use of herbicides along roadways." This requirement is addressed in proposed Section 11.06(2)(d), which requires a description of the applicant's policy to eliminate or, if necessary, reduce the use of herbicides on roadways. The Department agrees that this language can be strengthened to ensure consistency with the CFPA, and suggests adding a requirement for a demonstration that costs of non-herbicide control would outweigh benefits. Other CFPA language does not require the elimination of herbicide use, however, and the Department is not recommending imposing additional justification at this time for non-roadway herbicide application.

(b) Suggested Action: Replace proposed Section 11.06(2)(d) with the following at 11.05(2)(k):

(k) For state agencies and authorities as defined in M.G.L. c. 3, § 39, a description of the applicant's policy to eliminate or, if necessary, reduce the use of pesticides for any vegetation management purpose along roadways, and a demonstration that, for the proposed application, the costs of non-chemical vegetation control significantly outweigh the benefits.

11.06(3) Public Notice Review and Comment

MWRA requested that DFA amend this section to reflect the notice provisions of its 1996-97 Memorandum of Understanding ("MOU") with MDC. In particular, MWRA requested that VMP maps identify sensitive areas, and that proposed and approved VMP's be sent to all public water suppliers whose watersheds or Zone I's would be affected. DEP supported notification of MDC whenever VMPs and YOPs are submitted and acted on that are within the areas of MDC's protected watersheds, and suggested that 11.06(3), (4), 11.07(4), 11.08, and 11.09 be amended accordingly.

(a) Discussion

The MOU applies only to activities within the Quabbin, Ware and Wachusett watersheds. The Department will follow the procedures outlined for these watersheds in the MOU. The Department does not believe that the MOU provisions need to be incorporated into the regulatory language. However, the Department is recommending that an MDC representative be included on the ROW Advisory Panel.

(b) Suggested Action

None.

11.06(3)(c) (first comment, with 11.06(3)(e)

Proposed 11.06(3)(c) would require applicants to send notices of hearings to affected municipalities, noting where copies of the VMP may be reviewed, at least 21 days before the public hearings. Proposed 11.06(3)(e) would require applicants to send actual copies of the VMP to the chief elected official, board of health and conservation commission in affected communities, at those officials' request, at least 21 days before the end of the public comment period. MACC recommended that sections 11.06(3)(c) and (e) be merged into a single requirement at 11.06(3)(c) that applicants send copies of the VMP to all of these officials, regardless of whether a request was made, at least 21 days prior to public hearings.

Discussion

VMP's are not short documents, and Department believes that it is reasonable to require officials wishing to review the documents to request them.

Suggested Action

None.

11.06(3)(c) & (e) (second comment)
MWRA recommended that the proposed VMP, the approved VMP, and the proposed and approved YOPs, be sent to any water supplier with their source, watershed or portion thereof, or Zone I within the area affected by the VMP. MDC requested to be added to the mailing list for VMPs and YOPs, and stated that this could best be accomplished by including a "Water Supplier" in the mailing list for VMP's and YOP's.

(a) Discussion
The Department is now proposing that a representative of MDC be included on the Rights-of-Way Advisory Panel, consistent with requests from MDC, MWRA and DEP. This will mean, in effect that MDC has a chance to review every VMP. In addition, approved VMP's are available to all from municipalities. They are sent separately to each municipality. The municipality is instructed to retain the Plan in the municipal files for the five-year period. If a Plan is lost or misplaced, the applicant sends a replacement document.

(b) Suggested Action
None to this section; add a MDC representative to Rights-of-Way advisory Panel and see YOP discussion, below.

11.07 Yearly Operational Plan (YOP)

General Recommendation
The Department recommends that this section be moved back to Section 11.06 for consistency with the current regulations, and that subsections be rearranged to reflect the current organization. The only substantive changes from the proposed revisions that the Department is recommending are adjustments to the wetlands delineation requirements, changing the provision to a reference to the DEP regulations and moving it to the VMP section at proposed Section 11.05.

11.07(2) Requirements:

(h) Commentators criticized a new provision that requires that copies of a valid Determination of Applicability for each municipality covered by the YOP be included in the YOP, especially given that the towns already have this information. In some cases, ROW applicants have encountered delays in receiving Determinations of Applicability from Conservation Commissions - to the extent that ROW treatments were delayed or postponed until the next year.

MACC commented that the definition of the term "Determination of Applicability" should be revised for consistency with the wetlands regulations as follows:

> A written finding or determination by a conservation commission or the Department of Environmental Protection (DEP) of the boundaries of the Buffer Zone and Areas Subject to Protection under the Wetland Protection Act (MGL c. 131 s. 40) in accordance with the regulations 310 CMR 10.05(3)(b)(1) and (2).

DEP commented:

> It may be helpful to include reference to DEP's process in this matter. The process for Requests for Determination of Applicability, including submittal requirements, timelines and options for applicants if DOAs are not issued in a timely manner is as below:
>
> > '310 CMR 10.05(3)(b) provides that conservation commissions issue a DOA within 21 days after the receipt of the request for a DOA. This section of the Wetlands Regulation also identifies notice and public hearing requirements. 310 CMR 10.05(c) provides that DOAs may be appealed to the DEP and provides that appeals may be made to DEP for failure of the conservation commission to issue a DOA within 21 days from the DOA application date. Such appeals must be made within 10 days of the DOA issuance or the end of the 21-day review period.'
>
> Tom Sullivan said that clarification was needed to show that this provision only applies to applicants subject to the Wetlands Protection Act.
>
> <u>(a) Discussion</u>
> As discussed under Definitions above, the Department is recommending alterations to the delineation concurrence requirement to ensure consistency with Wetlands Protection Act regulations while allowing maximum flexibility for applicants under current and future DFA and DEP regulations. Because Wetlands Determinations will be referenced under proposed Section 11.05, the Department recommends deleting this section and proposed Section 11.07(4)(e). This proposed section stated that valid Determinations of Applicability (now proposed as "Wetlands Determinations") were required, and that they would only be valid if submitted at least 30 days prior to herbicide application.
>
> <u>(b) Department's Suggested Action</u>
> The Department recommends deleting proposed 11.07(4)(e) and (h) and referencing the wetlands determination requirement in Section 11.05.

<u>11.07(3) Public Notice Review and Comment:</u>
DEP asked whether at 11.07(3) and 11.08 there would be an on-site posting requirement to alert the public of the treatment and any land/water use restrictions.

Tom Sullivan of National Grid approved of the requirement that the YOP be mailed to the local public water supplier, adding that National Grid USA had done this in many instances. MWRA commented that regional water suppliers were not mentioned, and asked that, "in addition to local pubic water suppliers, any public water supplier that may have its source, watershed or portion thereof or Zone I's within the local water supplier's municipal boundaries should also receive a copy of the YOP for review and comment." MWRA noted that this was a requirement of the Memorandum of Understanding between

the Department of Food and Agriculture and the MDC Division of Watershed Management. MDC echoed MWRA's comments on these issues.

(a) Discussion
The applicant is required to mark the perimeter of any sensitive area with a clearly visible marker system prior to any herbicide application. As discussed above, the Department is not proposing any additional on-site posting mechanism to alert the public. Regarding MDC and MWRA's request for copies of YOP's, the proposed regulations outline a comprehensive public notification process and require applicants to provide notification and copies of proposed YOPs to the Board of Health, Conservation Commission, chief elected municipal officials and local Public Water Supplier. A notification also must be published in the local newspaper of record. Approved YOPs are not distributed to any agencies under the proposed regulations. However, these documents are matters of public record. The Department believes that the requirement that draft YOPs go to local water suppliers is sufficient when applications are not proposed in MDC watersheds. Consistent with the 1996-97 Memorandum of Understanding between the Department and MDC's Division of Watershed on Identification of Water Features Within the Quabbin, Ware and Wachusett Watersheds (the "MOU"), DFA must ask applicants proposing pesticide applications within these watersheds to forward YOP information to MDC when it forwards this information to municipalities. MDC presently receives these YOPS via Certified Mail, Return Receipt Requested, and has done so for the last two years. Also consistent with the MOU, the Department is required to alert MDC of communications it receives from applicants prior to YOP filings indicating that applications are pending. These provisions should, the Department believes, provide adequate notice of YOPs to MDC. The Department does not believe that applicants should be required to send YOPs that do not affect MDC watersheds to MDC.

(b) Suggested Action
None

11.07(4) Disposition of YOP

(c) Ken Kippen asked why the provision requiring the decision to approve or deny the YOP to be provided in writing had been eliminated from the proposed regulation.

(a) Discussion
The writer has identified an omission. It has not been eliminated – the Department is required to provide notice in writing.

(b) Department's Suggested Action
The Department recommends that section 11.07(4)(c) be moved to Section 11.06(4)(c) and that it be amended to read:

Where practical, the Department shall approve or deny the YOP within 90 days of receipt. The Department will provide notice of the decision to the applicant, municipal agencies and commentators in writing.

11.08 Public Notification

Overview

Many commentators objected to the revised notice provisions in this section. Some commentators wanted increased notification requirements, while regulated community members objected to the already increased requirements. DeAngelo Brothers, Inc. commented:

> Any time there is an increase in the number of individuals to be notified, the greater the chance of not contacting *all* of the right people and relaying all the correct information. This could lead to rejection of the overall spray approval, causing a skip even though other officials gave approval.

P. Scott Conti of Providence and Worchester Railroad Company stated that the proposed public notification provisions "are not just unwieldy, they are unworkable." Mr. Conti attached extensive comments in support of this statement. As detailed below, the Department agrees with many comments it received on this section. It has suggested re-tailoring 11.08 to follow the requirements of Section 6B of the Massachusetts Pesticide Control Act, as revised by the Children's and Families' Protection Act, to the letter, with three exceptions:

1) The proposed regulations would require 21-day notice to local boards of health and local public water suppliers; and
2) The proposed regulations would suggest that applicants could combine YOP and 21-day notice requirements when all requirements were met, and that they could incorporate documents they had already sent to various recipients by reference, in order to avoid unnecessary duplication, when meeting these requirements separately.
3) A reference to "certified private applicators" would be deleted because Department regulations do not allow certified private applicators to make applications in ROWs.

The Department's suggested revision of Section 11.08 (now proposed at Section 11.07 for consistency with the existing regulations) is included in Appendix D.

11.08(a) – YOP Approval Letter

A new provision requires that the YOP approval letter be included in the public notice for the date of the pesticide applications. Tom Sullivan stated that he could recall no requests for a copy of a YOP approval letter in his 11 years of notifying municipal officials, and questioned the need to include one. Wayne Duffet added that approval letters for YOPs are often issued the day before.

(a) Discussion

The Department agrees that the requirement to include the YOP approval letter is unnecessary.

(b) Department's Suggested Action
The requirement that a YOP approval letter be included in the mailing should be removed.

11.08(a) - Dates
It was noted that the word "date" should be changed to "dates." This is because, wrote Walter Dodge of Northern Tree Service, it is common for delays in the application date as a result of weather, manpower, equipment or other concerns such as allowing local officials to conduct site inspections on their schedules. Daryl Jassen of WMECo wrote, "due to high acreage and limited crew size, our ROW herbicide work in one town normally cannot be completed in one day. Our work takes place within a date range." He recommended changing "dates on which" to "date range during which." Tom Sullivan noted that Chapter 132B, Section 6B refers to "dates," as does proposed 333 CMR 11.08(c), and that these terms should all be consistent and allow for a range of dates.

(c) Discussion

The Department recognizes applicants' concern about application timing. More importantly, the Department agrees that revised Chapter 132B, Section 6B specifies that each applicant must include in their 21-day notice "the approximate dates on which such spraying shall occur."

(d) Department's Suggested Action
The Department recommends changing the word "date" to "dates" in 11.08(a).

11.08(a) – Notice to Water Suppliers
Alexandra Dawson of WSCAC and MACC maintained that public water suppliers, including MWRA and MDC, should receive 21-day notices of pesticide applications. She went on to suggest that newspaper notices be included on department and municipal web sites whenever possible. MDC asked to be added to the mailing list for VMPs and YOPs. MWRA requested that, "in addition to local public water suppliers, any public water supplier that may have its source, watershed or portion thereof or Zone I's within the local water supplier's municipal boundaries also receive a copy of the YOP for review and comment."

(a) Discussion
MDC is currently notified of any activities pertaining to Rights-of-Way in their watersheds pursuant to its 1996-97 Memorandum of Understanding with DFA. The proposed revisions would add an MDC representative to the ROW Advisory Panel, thereby ensuring that MDC will be able to double-check all proposed activities to ensure that they follow the Memorandum of Understanding if they affect MDC watersheds.

(b) Department's Suggested Action
None.

11.08(a) – Material Safety Data Sheets (MSDS's)
The proposed required inclusion of the MSDS's of the pesticides to be used in the 21-day notice was criticized because, as Paige Kane of CSX pointed out, an MSDS can be up to 75 pages long. DEP commented:

> In section 11.08: Public Notification, there is a requirement to provide an herbicide Fact Sheet on the active ingredient as well as a copy of the MSDS for the herbicide used. In cases where the applicator is mixing the neat herbicide with a carrier that has established adverse effects on human health and the environment (e.g., toluene), DEP suggests a requirement in 333 CMR 11.00 to provide a fact sheet for those 'inert' ingredients. These carriers and diluents are inert as far as affecting the longevity of certain flora but they are often not inert when one characterizes effects on other environmental receptors.

(a) Discussion
The Department agrees that the MSDS requirement may be unnecessarily burdensome.

(b) Department's Suggested Action
Delete MSDS requirement from the 21-day notice requirement at 11.08(a).

11.08(a) – Registered Mail
A new provision requires registered mail, instead of certified mail, to be used to send the public notice to municipalities. Paige Kane of CSX commented that this provision will cost her company an extra $15,000 per year. Harry Willistow stated that this should be changed to certified mail. According to MRA this "second mailing, now by registered mail, has to contain additionally another copy of the Herbicide Fact Sheets, all the all the other information that's in the YOP, plus the MSDS sheets for the herbicides." Tom Sullivan of National Grid expressed the belief that "the Department has the latitude to interpret legislative intent on this issue and use 'certified mail' in these regulations. As proposed, the YOP would be sent by 'certified mail' and the public notice sent by 'registered mail.' Since both notices can be sent together, this is clearly a ridiculous situation."

(a) Discussion
Revised Chapter 132, Section 6B does not require registered mail for notices sent to the Department, and the Department agrees that this requirement is unnecessarily burdensome. The Department will delete its own registered mail requirement from the regulations accordingly. However, revised Section 6B specifically requires registered mail for the 21-day notice to municipal officials. The Department has no discretion in this matter.

(b) Department's Suggested Action
Delete the registered mail requirement for the Department's 21-day notice requirement; retain the registered mail requirement for local officials.

11.08(a) – Duplicative Information
On the grounds that it was essentially asking for the same information already provided in the YOP (11.07(3)(b)), Cynthia Scoriano criticized the requirement that applicants provide a notice of each herbicide application by registered mail to town officials.

(a) Discussion
Revised Chapter 132, Section 6B requires the distribution of this information to local officials as part of the 21-day notice. The Department has no discretion in this matter. Furthermore, the information required for 11.08(a) notices will relate to specific applications, and a simple reference to the entire YOP would not satisfy the statutory requirement at revised Chapter 132B, Section 6B. However, it would appear reasonable and consistent with statute for applicants to incorporate specific YOP sections by reference into their 21-day notices where appropriate, provided they had already provided the referenced information to the officials and were willing to provide a fresh copy if necessary.

(b) Department's Suggested Action
Add a note to 11.08(a) suggesting that applicators could incorporate particular sections of materials already provided to local officials by reference, provided fresh copies were available upon request. Revise 11.08(b) to ensure that it is a clear and valid substitute for 11.08(a) when the timing is right, the application dates are chosen in advance, and the Department's approval of the YOP does not require modifications.

11.08(b) – Concurrent Notice Periods
Tom Sullivan of National Grid USA noted that the YOP approval letter requirement would make concurrent notice periods impossible, since the approval letter must be included in the 21-day public notice. He calculated the actual notice period to be 70 days or more, given that at least 4-10 days would be required to wait for Department approvals after the 45-day public comment period and prior to the 21-day public notice period. Furthermore, Sullivan noted that approvals have, in the past, been granted on a town-by-town basis, and that in essence, under the new system, an applicant's entire program could be delayed indefinitely by one town.

(a) Discussion
As discussed above, the Department agrees that the YOP approval letter should not be required in the 21-day notice at 11.08(a). This should eliminate the bar to concurrent notice periods.

(b) Department's Suggested Action
None to 11.08(b) (delete YOP approval letter requirement at 11.08(a), above).

11.08(c) – Newspaper Notices - Timing

Gerry Blase of Asplundh Tree Expert Co. and the National Railroad Contractors' Association pointed out that few newspapers at the local level would publish advance notice of each herbicide application within the time frame that applicators would require for the regulatory requirement of 48 hours' advance notice of each application. Newspapers generally require a long publishing lead time for notices like this.

(a) Discussion

The newspaper publication requirements in the proposed regulations mirror the requirements at revised Chapter 132B, Section 6B. The Department has no discretion in this matter.

(b) Department's Suggested Action

None.

11.08(c) – Newspaper Notices - Publication

Dr. Dawson of WSCAC and MACC stated that the notice should also appear on department and municipal web sites where possible.

(a) Discussion

The Department believes that web site publication should not be required by regulation, given the already extensive regulatory requirements and the limited technical resources of many localities. However, the Department agrees with Dr. Dawson that public access to information is helpful to the public and to government, and that voluntary web site publication should be encouraged by public and private entities.

(d) Department's Suggested Action

None.

11.09-10/11.08-11

Ken Kippen asked why the phrase in the existing regulations allowing the Department to halt the application of herbicides was eliminated. MWRA, the Hilltown Anti-Herbicide Coalition and other commentators asked why the section entitled "Penalties" was eliminated in the proposed regulations. DEP asked what enforcement provisions would support compliance with the rights-of-way regulations other than proposed Section 11.09, "Rights of Appeal."

(a) Discussion

Proposed Section 11.09 authorizes the Department to halt the application of herbicides by modifying a VMP or YOP. However, the current regulations clearly authorize the Department to order an immediate halt to herbicide application, while the proposed revision may be read to release applicants from such an order pending the conclusion of an appeal. Furthermore, alteration of a VMP or YOP may take time. The Department agrees that immediate suspension of application should be allowed where required to prevent unreasonable adverse

effects on the environment or on human health. The Department also believes that a clear reference to the appeals process and the public notice process for YOP revisions is appropriate. Therefore, upon further consideration, the Department proposes keeping the language of existing Section 11.08.

In response to DEP's important question, the Department's authority to impose penalties for violations of 333 CMR 11.00 is found in Chapter 132B, Section 14. This will be true whether or not the regulations contain a cross-reference, and the Department eliminated this section in its proposed regulations in the interests of streamlining the regulations. However, the fact that DEP and other commentators asked about it indicates to the Department that inclusion of the cross-reference in the regulations will be helpful. Therefore, the Department proposes keeping current Section 11.10 in the revised regulations.

(b) Department's Suggested Action

Re-instate existing Section 11.08 as currently written, with minor modifications to 11.08(1)(b) (modifications from the current regulations, which were included in the draft revisions, are indicated by underline and strikeout):

> **(b) that the applicant has made a false or misleading statement or has not provided information requested by the Department or Rights-of-Way Advisory Panel ~~in the VMP or YOP~~; or**

Move Proposed Section 11.10 (Rights of Appeal) to Section 11.09 and make minor technical revisions. Reinstate Section 11.10 (Penalties) as currently written. Finally, as noted above, move the Rights-of-Way Advisory Panel section to 11.11.

APPENDIX A
(LIST OF INDIVIDUAL COMMENTATORS)
(not including the 168 Citizen Letter)

- Deborah Alexander, Horticultural Specialist, Needham, MA
- Naomi Alson, South Lee, MA
- Gerry Blase, Representing Asplundh Tree Expert Co. - Railroad Division, and National Railroad Contractors' Association
- Donovan R. Bowley, Ph.D., DEP/BRP/DWM/Drinking Water Program
- Senator Stephen M. Brewer
- Christopher Burian, citizen and homeowner, Waltham, MA
- Sheri Butterfield, Field Environmental Specialist, Amtrak Commuter Rail
- P. Scott Conti, Vice President of Engineering, Providence and Worchester Railroad Company
- Dr. Alexandra D. Dawson, Co-Executive Director, Water Supply Citizens Advisory Committee and Director of Legal Affairs, Massachusetts Association of Conservation Commissions
- Walter Dodge, Northern Tree Service
- Wayne W. Duffett, P.E., TEC Associates, Consulting Engineers
- Shepley W. Evans, Vice President, Massachusetts Association of Conservation Commissions
- Karen Garnet, citizen, Berkley, MA
- Ed Germann, citizen
- David A. Goodson, System Forester, Northeast Utilities System
- William W. Guidi
- Daryl Jassen, Western Massachusetts Electric Company
- Anthony H. Jewell, Indus-rail co.
- Paige E. Kane, Regional Vice President, CSX Transportation
- Ken Kipen, Hilltown Anti-Herbicide Coalition of Ashfield
- Jennifer Lee, citizen, Plainfield, MA
- Rich McNiel, Easthampton Conservation Commission
- Representative Douglas W. Petersen
- Michael Ratner, Winchester, MA
- Carol Reinhardt, Needham, MA
- E. Heidi Roddis, Senior Policy Specialist, Massachusetts Audubon Society
- Gretchen W. Roorbach, Water Resources Planner, Massachusetts Water Resources Authority
- Michael J. Rush, Associate General Counsel, Association of American Railroads
- Cynthia S. Scarano, Guilford Rail System
- Kate Shaw, Falmouth, MA
- Burdon Skaggs
- Thomas E. Sullivan, System Forester, National Grid
- Paul Taylor, Amtrak Commuter Rail Safety Committee
- James A. Teague, Brotherhood of Maintenance of Way Employees
- Rufin Van Bossuyt, Forester, Upton, Massachusetts
- Richard R. Vanderslice, Vice President, Sudbury Earth Decade Committee
- Peg Whittemore, Vice President, Sudbury Earth Decade Committee
- Harry Williston, Professional Pesticide Applicator and Electric Highway Commissioner, Town of Wendell, for Vegetation Control Service, Inc.

APPENDIX B

(LIST OF COMMENTING COMPANIES, ORGANIZATIONS AND OTHER GROUPS)

- 168-Citizen Letter
- Amtrak
- Asplundh Tree Expert Co.
- Association of American Railroads
- Brotherhood of Maintenance of Way Employees
- CSX Transportation
- DeAngelo Brothers, Inc.
- Department of Environmental Protection
- Earth Decade Committee
- Easthampton Conservation Commission
- Guilford Rail System
- Hilltown Anti-Herbicide Coalition of Ashfield
- Indus-Rail Co., Railroad Consultation Services
- Massachusetts Association of Conservation Commissions
- Massachusetts Audubon Society
- Massachusetts Railroad Association
- Massachusetts Water Resources Authority
- Metropolitan District Commission, Division of Watershed Management
- National Grid
- National Railroad Contractors' Association
- Northeast Utilities System
- Northern Tree Service
- Providence and Worchester Railroad Company
- Sudbury Earth Decade Committee
- TEC Associates, Consulting Engineers
- Vegetation Control Service, Inc.
- Water Supply Citizens Advisory Committee to the MWRA
- Western Massachusetts Electric Company (WMECo)

APPENDIX C (LIST OF ACRONYMS)

BRP – DEP's Bureau of Resource Protection
CMR – Code of Massachusetts Regulations
DEP – Massachusetts Department of Environmental Protection
DFA – Massachusetts Department of Food and Agriculture
DPH – Massachusetts Department of Public Health
DWM – DEP's Division of Water Management
EPA – United States Environmental Protection Agency
FIFRA – Federal Insecticide, Fungicide and Rodenticide Act
Gpd – gallons per day
MACC – Massachusetts Association of Conservation Commissions
MDC – Metropolitan District Commission
MWRA – Massachusetts Water Resources Authority
Psi – pounds per square inch
ROW – right-of-way
VMP – Vegetation Management Plan
YOP – Yearly Operational Plan
WMECo – Western Massachusetts Electric Company
WSCAC – Water Supply Citizens Advisory Committee to the Massachusetts Water Resource Authority

APPENDIX D (PROPOSED REVISION) – See attached.

APPENDIX E (COMPARISON OF CURRENT AND PROPOSED REGULATIONS) – See attached.

APPENDIX F (REFERENCED DOCUMENTS)

- 1996-97 Memorandum of Understanding Between DFA and MDC on Identification of Water Features Within the Quabbin, Ware and Wachusett Watersheds
- 1987 Cooperative Agreement Between DFA and DEP
- 1987 Preface to Wetlands Protection Act Regulations
- 310 CMR 10.00 Excerpts
- 310 CMR 22.02 Excerpts
- Norton H. Nickerson, PhD, "Study of Environmental Fates of Herbicides in Wetlands on Electric Utility Rights of Way in Massachusetts Over the Short Term: Final Report, December 31, 1993, Revised December 14, 1994."
- Massachusetts General Laws Chapter 132 (Pesticide Control Act, as amended by the Children's and Families' Protection Act)