

PINELANDS COMMISSION

Pinelands Comprehensive Management Plan

Forestry

Adopted Amendments: N.J.A.C. 7:50-2.11, 6.41, 6.43, 6.45 and 6.46

Adopted New Rule: N.J.A.C. 7:50-6.43

Proposed: June 15, 2009 at 41 N.J.R. 2402(a)

Adopted: November 13, 2009 by the New Jersey Pinelands Commission,
John C. Stokes, Executive Director

Filed: January 7, 2010 **with substantive changes** not requiring additional public notice and comment (see N.J.A.C. 1:30-6.3).

Authorized by: New Jersey Pinelands Commission

Authority: N.J.S.A. 13:18A-6j.

Effective Date: February 1, 2010

Expiration Date: Exempt.

The New Jersey Pinelands Commission (Commission) is adopting amendments to Subchapters 2, Interpretations and Definitions, and 6, Management Programs and Minimum Standards, of the Pinelands Comprehensive Management Plan (CMP). The amendments and new rule were proposed on June

15, 2009 at 41 N.J.R. 2402(a). The adopted amendments and new rule relate to forestry management practices in the Pinelands.

In association with publication of the proposed amendments and new rule in the June 15, 2009 issue of the New Jersey Register, the Pinelands Commission transmitted the proposal to each Pinelands municipality and county, as well as to other interested parties, for review and comment. Additionally, the Pinelands Commission:

- Sent notice of the public hearing to all persons and organizations which subscribe to the Commission's public hearing registry;
- Placed advertisements of the public hearing in the four official newspapers of the Commission, as well as on the Commission's own web page;
- Submitted the proposed amendments and new rule to the Pinelands Municipal Council pursuant to N.J.S.A. 13:18A-7f;
- Distributed the proposed amendments and new rule to the news media maintaining a press office in the State House Complex;
- Published a copy of the proposed amendments and new rule on its web page at www.nj.gov/pinelands; and
- Distributed press releases concerning the proposed amendments and new rule to the news media

Summary of Hearing Officer Recommendations and Agency Response:

A formal public hearing was held before the Commission staff on July 22, 2009. Approximately 25 people attended the hearing; oral testimony on the rule

proposal was provided by 19 individuals. The hearing officer's recommendations are in accordance with the public comment and agency responses below.

Oral comments were recorded on magnetic tape which is on file at the Commission's office at 15 Springfield Road, New Lisbon, New Jersey. The record of this rulemaking is available for inspection in accordance with applicable law by contacting:

Betsy Piner

Pinelands Commission

P.O. Box 359

New Lisbon, NJ 08064

Summary of Public Comments and Agency Responses:

The Commission accepted oral comments on the June 15, 2009 proposal at the above-discussed July 22, 2009 public hearing and written comments by regular mail, facsimile or e-mail through August 14, 2009.

The following individuals and organizations submitted comments:

1. David W. Schneider, Herpetological Associates, Inc., Pinelands Forestry Advisory Committee member
2. Tom Beaver on behalf of Richard Nieuwenhuis, President, New Jersey Farm Bureau
3. Elizabeth Ciuzio, Stewardship Project Director, New Jersey Audubon Society
4. Leslie Jones Sauer
5. Doug Tavella, Chair, New Jersey Division, Society of American Foresters

6. Steve Frazee
7. Amy Cradic, Assistant Commissioner, Natural & Historic Resources, New Jersey Department of Environmental Protection
8. Carleton Montgomery, Executive Director, Pinelands Preservation Alliance
9. Wade Sjogren, President, WHIBCO, Inc., Walter Sjogren Irrevocable Trust, Seabranh Properties, LLC
10. Emile V. DeVito, Ph.D., Manager of Science, New Jersey Conservation Foundation
11. J.E. Mounier
12. Richard Nieuwenhuis, President, New Jersey Farm Bureau
13. Billy Dukes, Chair, National Bobwhite Technical Committee
14. Michael Catania, Chairman, Pinelands Forestry Advisory Committee
15. Michael Kerbowski, Hutton Hill Rifle and Revolver Club, Winslow Twp.
16. Craig Kane, consulting forester
17. Joseph Matter, Chairman, New Jersey Quail Project
18. Bill Cooper, President, Ocean County Chapter, New Jersey State Federation of Sportsmen's Club
19. Al Dolce, Central Jersey Rifle & Pistol Club & New Jersey Quail Project
20. Bill Schemel, President, Camden County Chapter, New Jersey State Federation of Sportsmen's Club
21. Warren Wells, Pine Barrens Chapter of the Ruffed Grouse Society
22. Mark Dreyfus, President, New Jersey Ruffed Grouse Society
23. Tom Hirschblond

24. David Descalzi, Cape May Box Co.
25. Bob Williams, Land Dimensions Engineering, Pinelands Forestry Advisory Committee member

The Commission's response to the comments is set forth below. The numbers in parentheses after each comment correspond to the list of commenters above.

General comments

1. COMMENT: One commenter (the chair of the Commission's Forestry Advisory Committee) provided an overview of the process the Forestry Advisory Committee pursued in developing its recommendations, which served as the basis for the amendments now being adopted. This commenter concluded that the amendments promote forestry that serves both economic and environmental interests, consistent with the objectives of the Pinelands Protection Act. The Forestry Advisory Committee's commitment to assisting the Commission with implementation of the amendments was also noted. (14)

RESPONSE: The Commission appreciates the efforts of the Forestry Advisory Committee in developing its recommendations, as well as the offer to assist the Commission as it proceeds with implementation of the amendments.

2. COMMENT: Nine commenters expressed support for the amendments, indicating that effective, pro-active forest management will help to enhance forest health and expand habitat for game birds such as bob white quail and ruffed grouse. (13, 15, 17, 18, 19, 20, 21, 22, 23)

RESPONSE: The Commission appreciates these expressions of support for the amendments and agrees that active resource management through effective forestry can have positive impacts on the natural resources that characterize the Pinelands and can serve to enhance plant and animal habitat.

3. COMMENT: One commenter indicated support for the amendments as they will allow for commercial forestry to coexist within the ecological framework of the Pinelands. Two other commenters also expressed support for the amendments, indicating that they will provide foresters with the necessary tools to achieve the goals set forth in the CMP (mimic native forest types and historic influences; encourage multi-use forestry). These commenters emphasized that the health and integrity of Pinelands forests depend on more disturbance, not preservation. A fourth commenter observed that commercial forestry in the Pinelands has declined over the past several decades. This commenter expressed support for the amendment and hope that the new forestry provisions will encourage more forestry activity that will benefit the local forestry industry. (5, 11, 12, 24)

RESPONSE: The Commission agrees with the observations made by these commenters. The amendments now being adopted clarify the application process by providing specific direction to potential applicants relative to what forestry techniques are appropriate in which forest type. The Commission hopes that this improved clarity will encourage public and private property owners to engage in increased forestry activity in the Pinelands.

4. COMMENT: One commenter, who served as a member of the Forestry Advisory Committee, expressed support for the amendments and suggested that they are noteworthy because they are based on Pinelands forest types and forest management techniques. (25)

RESPONSE: The Pinelands Commission appreciates these comments of support.

5. COMMENT: One commenter opined that, based on the definition of “agricultural or horticultural purpose” in the Pinelands Protection Act at N.J.S.A. 13:18A-3, the Pinelands Commission lacks the legal authority to promulgate the proposed forestry regulations. This assertion was based upon provisions of the Pinelands Protection Act, N.J.S.A. 13:18A-3(g), which defines major development to include grading, clearing or disturbance to any area in excess of 5,000 square feet for other than agricultural or horticultural activities. The commenter concludes that based on these provisions, forestry is not subject to the Commission’s regulatory authority. (9)

RESPONSE: The Commission disagrees. The definition section of the Pinelands Protection Act does not specify or limit the Commission’s legal authority to act. Rather, this section merely defines terms that appear in other provisions of the Act. The Commission derives its legal authority from the totality of the Pinelands Protection Act. N.J.S.A. 13:18A-1 et seq. and its implementing regulations, the Pinelands CMP, N.J.A.C. 7:50. With regard to the Commission’s authority to adopt the proposed forestry rules, N.J.S.A. 13:18A-6(j) authorizes the Commission to prepare, adopt, amend or repeal such rules and regulations as are

necessary in order to implement the provisions of the Act. N.J.S.A. 13:18A-8 authorizes the Commission to prepare and adopt a comprehensive management plan for the Pinelands Area. The development of the Pinelands CMP was to be based upon a determination of the amount and type of human development and activity that the Pinelands Area could sustain while still maintaining the overall ecologic values thereof. Nowhere does the Pinelands Protection Act prohibit the Commission from regulating forestry, including application requirements.

Additionally, the totality of the definition of “agricultural or horticultural purpose or agricultural or horticultural use” in the Act makes clear that such definition is intended to cover the production of crops and animals (i.e., traditional agricultural practices), not the cultivation and harvesting of trees for wood products (i.e., silviculture). As a result, “forestry” is separately defined and regulated in the CMP.

N.J.A.C. 7:50-2.11: definition of “Forestry”

6. COMMENT: Two commenters suggested that the definition of forestry at N.J.A.C. 7:50-2.11, which now recognizes “forest health” as an acceptable forestry endpoint, should encompass activities that maintain, improve, restore or enhance habitat benefitting Pinelands species and ecological conditions and/or communities for natural resource management. According to these commenters, these suggested modifications would ensure that the Commission considers as forestry those activities that are designed to manage habitat and benefit native Pinelands plant and animal species. One of the commenters suggested that a definition of “forest health” be added to the CMP to achieve this

purpose, thereby expressly recognizing management or restoration of habitat for native species and ecological communities as a forestry practice eligible for enrollment in the State's Forest Stewardship Program. (3, 7).

RESPONSE: The term "forest health" was purposely added to the definition of forestry, at N.J.A.C. 7:50-2.11, to encompass those management activities that were intended to accomplish primarily ecological as opposed to primarily economic objectives. When the Commission's Forestry Advisory Committee was reconvened in 2004, its principal objective was to identify management practices that promote forestry that maintains and perpetuates ecological values in addition to economic and cultural values. The Forestry Advisory Committee's Report, issued in March 2006, specifically acknowledged that forest management simultaneously provides wood products and economic benefits while achieving public policy objectives to enhance the ecological integrity of Pinelands resources and ensure protection of water quality as well as wildlife habitat. These objectives are reflected in the various forestry standards now being adopted and were reinforced in the text of the rule proposal that was published in the June 15, 2009 issue of the New Jersey Register. Consequently, ecologically based forestry activities that are designed to promote forest health fit within the amended definition of forestry at N.J.A.C. 7:50-2.11. The Commission does not believe that further modifications to the definition of forestry or a new definition of forest health are necessary.

N.J.A.C. 7:50-6.41: Purpose

7. COMMENT: One commenter suggested that the stated purpose of the Commission’s forestry rules, as set forth at N.J.A.C. 7:50-6.41, should be further clarified through the addition of a definition for “conservation”. The commenter suggests this would better meet the Department of Environmental Protection’s forest stewardship objectives to manage or restore habitat for native species and ecological communities. (3)

RESPONSE: N.J.A.C. 7:50-6.41, as amended, states that the standards and requirements set forth in subchapter 6, Part IV, of the CMP “encourage forestry for both economic and conservation purposes on public and private lands”. The role of forestry in perpetuating the overall ecological value of the Pinelands is further noted in this section. The Department of Environmental Protection’s forest stewardship objectives fit well within these parameters. The Commission believes this existing language is sufficiently clear and that a definition for “conservation” is not necessary.

N.J.A.C. 7:50-6.44: Forestry application requirements

8. COMMENT: Two commenters encouraged the establishment of an agreement between the Pinelands Commission and the New Jersey Department of Environmental Protection. They suggested that this agreement would help to simplify, coordinate and streamline the process both agencies follow to review applications for forestry in the Pinelands under the New Jersey Forest Stewardship Program. (15, 17)

RESPONSE: The Pinelands Commission has already outlined an intergovernmental agreement with the New Jersey Department of Environmental Protection to implement simplified permitting processes for public and private forest resource management and related activities in the Pinelands Area. Both agencies are presently developing the specific provisions of such an agreement.

9. COMMENT: Two commenters objected to the amendments, suggesting that they would unduly burden landowners by make the permitting process more cumbersome, requiring submission of more detailed information to supplement a forestry application and imposing greater costs. (9, 16).

RESPONSE: The Commission does not agree that the amendments impose an undue burden, financial or otherwise, on landowners. For forestry activities proposed on parcels of land that are enrolled under the New Jersey Forest Stewardship Program, N.J.A.C. 7:50-6.449(a) provides that an application to the Commission is not required. The amendments do require an application to the Commission for other forestry activities. Where such applications are required, N.J.A.C. 7:50-6.44(b) does require the submission of additional information than may have been needed to meet previous CMP application standards. It is expected that this additional information will answer questions that might otherwise have hampered the review process, thereby permitting a quicker application review response time. Consequently, the Commission does not agree that the amendments make the application process more cumbersome or more costly.

N.J.A.C. 7:50-6.46: Forestry standards

10. COMMENT: One commenter suggested that reference to the Society of American Foresters Forestry Handbook, previously set forth at N.J.A.C. 7:50-6.45(a)1, should be retained as a reference in the revised forestry standards. (7)

RESPONSE: The Society of American Foresters Forestry Handbook, in part, provides descriptions of an array of silvicultural techniques. N.J.A.C. 7:50-6.45(a)1 previously cited the Handbook in order to incorporate these descriptions by reference. The intent of the amendments now being adopted is to provide more direct and specific guidance to potential applicants regarding those practices that could be employed to manage Pinelands forests by incorporating descriptions of such practices within the body of the CMP itself. These descriptions indicate where and how a particular practice must be conducted and what controls must be applied to avoid potentially negative impacts. In addition to describing the conditions under which the use of a given practice would be appropriate, the amended forestry rules provide a description of acceptable silvicultural techniques. Returning to a reference to an outside source for descriptions of forestry practices would be counter-productive. The necessary descriptions and standards are now explicitly set forth in the CMP.

11. COMMENT: One commenter offered comments neither in opposition nor in support of the amendments. Rather, the commenter indicated that the presence or absence of threatened or endangered wildlife species may

prevent him from undertaking the forestry activities he has proposed on his parcel. (6)

RESPONSE: The possible impact of forestry on threatened and endangered species and their habitats is an important issue, particularly in the Pinelands, and is recognized as such at N.J.A.C. 7:50-6.46(a)4. However, the Commission cannot address threatened and endangered species issues related to a particular parcel or forestry application through this rulemaking process.

12. COMMENT: Three commenters specifically emphasized their agreement with the inclusion of provisions at N.J.A.C. 7:50-6.46(a)9ii(5) that enable herbicide application in Pine-Shrub Oak native forest types. These commenters expressed their opinion that herbicide application is a necessary site preparation technique which will appropriately suppress shrub-oak growth on a temporary basis in order to facilitate pine regeneration. (5, 11, 12)

RESPONSE: The opinion expressed by these commenters reflects the intent of the amendment.

13. COMMENT: Six commenters expressed opposition to the provisions of 7.50-6.46(a)9ii(5). These commenters expressed concern that Pine-Shrub Oak forests are globally rare and that broadcast application of herbicides may severely damage or eliminate the shrub-oak understory and lead to a conversion of this forest type to another type. These commenters indicated that herbicide application methods that do not result in loss of shrub-oak, such as spot-application, may be acceptable. (1, 3, 4, 7, 8, 10).

RESPONSE: N.J.A.C. 7:50-6.46(a)9ii(5) permits the application of herbicides in Pine-Shrub Oak native forest types only in a targeted manner so that there will be no significant reduction in tree or shrub-oak re-sprouting outside these areas. These provisions are expressly intended to assure that herbicides, when used, are applied in a controlled manner, focused only in those areas and on those plants where their use would be most effective to reduce competition, in order to facilitate successful pine regeneration, but not eliminate the shrub-oak strata. As proposed, this section categorically does not permit broadcast application of herbicides in Pine-Shrub Oak native forest types whether from the ground or by air.

It is also important to note that, in addition to the limitations set forth in 7:50-6.46(a)9ii(5), an applicant considering the use of herbicides would also be obligated to meet the standards of 7:50-6.46(a)9ii(2) and (3). These provisions require that before herbicides may be used an applicant must demonstrate that the control of competitive plant species is clearly necessary and that other non-chemical means are not practical to control competitive species.

When viewed in combination, these explicit limitations are intended to ensure that herbicides are used as a method of last resort and only when they clearly constitute the most effective technique to control competing vegetation. Furthermore, these provisions permit the application of herbicides in Pine-Shrub Oak native forest types only as a site preparation technique. When herbicides are applied during this period, early in a stand's rotation, to facilitate re-establishment of pine seedlings, they would not prevent the return of shrub-oak understory and,

therefore, would not result in the conversion of a Pine-Shrub Oak forest to another forest type. As expressly provided in N.J.A.C. 7:50-6.46(a)1, conversions of Pine-Shrub Oak forests to pine forests through the use of herbicides is not permitted.

However, based on the comments received, the Commission believes the provisions of 7:50-6.46(a)9ii(5) would benefit from some minor revisions to assure that their intent is not misconstrued. Consequently, the Commission is revising this section upon adoption to clarify that herbicide treatments are permitted in Pine-Shrub Oak forests only as a means of temporarily suppressing the shrub oak understory in order to facilitate pine regeneration.

14. COMMENT: Three commenters expressed their agreement with the inclusion of provisions at 7.50-6.46(a)9iv(2) that enable disking in Pine-Shrub Oak forest types. These commenters expressed their opinion that disking is an important site preparation technique which would temporarily suppress shrub-oak growth to facilitate pine regeneration and enable surface soil disturbances that would enhance forest health. (5, 11, 12)

RESPONSE: The Commission agrees with the comments made by these parties.

15. COMMENT: Six commenters expressed opposition to the provisions of 7.50-6.46(a)9iv(2) that permit disking as a site preparation technique in Pine-Shrub-Oak forest types. These commenters expressed concern that, in the absence of depth limitations, the use of large, heavy, sharpened steel forest disks will result in deep soil penetration and disturbance. This will destroy

the soil and root structure and thereby promote forest conversion and the elimination of a globally rare forest type. (1, 3, 4, 7, 8, 10)

RESPONSE: Although the Commission understood that “heavy” disking in Pine-Shrub Oak forest types is not practical, specific limitations in the rule would make this abundantly clear. Therefore, a separate notice of proposal has been authorized and appears in this issue of the New Jersey Register at ___ N.J.R. _____. These proposed amendments to N.J.A.C. 7:50-6.46(a)9iv would make clear that disking is to be permitted in Pine-Shrub Oak forest types only as a site preparation method to temporarily suppress shrub-oak understory in order to facilitate pine regeneration. Such disking would only be permitted to occur one time during the first year of the establishment of a stand to assure the successful growth of pine seedlings. Disking could be repeated one time during the second year of the growth of the stand, but only in areas where pine seedlings have not successfully become established. Finally, the proposed amendments would limit disking to single-pass disking, which penetrates the soil no deeper than six inches.

16. COMMENT: One commenter stated that N.J.A.C. 7:50-6.46(a)10i(5), (a)10ii(4) and (a)10iii(4), which address the number of dead snags which must be retained on a parcel following a clearcut or coppice harvest, need to be clarified. The 18 per acre standard was expressed as a minimum in the summary of the rule proposal; however, the standard itself is expressed as a maximum. This commenter also suggested that these sections should address the practice of leaving dead trees on-site for wildlife habitat but should not specify a maximum number. (7)

RESPONSE: Omitting specific constraints at 7:50-6.46(a)10i(5), 7:50-6.46(a)10ii(4), and 7:50-6.46(a)10iii(4) would require an applicant, as well as the person who will be responsible to review the forestry application, to exercise considerable subjectivity in arriving at an acceptable limit for dead snags. Since one of the objectives of the amendments is to provide unambiguous guidance to potential applicants regarding the minimum acceptable standards that apply to forestry activities, eliminating such specificity would be counter productive.

The Commission does agree, however, that the three sections in question would benefit from clarification. The intent of these sections was to require that, where dead snags of at least 10 inches DBH and six feet in height are present on a parcel, a minimum of 18 per acre must be retained on that parcel following harvesting. Dead snags of the qualifying size in excess of 18 per acre are not required to be retained. The 18 per acre standard is a minimum which must be met. 7:50-6.46(a)10i(5), 7:50-6.46(a)10ii(4), and 7:50-6.46(a)10iii(4) are being revised to clarify the Commission's intent.

17. COMMENT: Two commenters objected to the limitations on harvesting established in the amendments, indicating that these limitations will deter the legitimate business development of forest resources. One of the commenters further noted that his family's business owns and operates nearly 6,000 acres of woodland farms. The commenter suggests that the harvesting limits set forth at N.J.A.C. 7:50-6.46(a)10 will have a more significant and adverse affect on such large landowners in the Pinelands. (9, 16)

RESPONSE: The Commission does not agree that the harvesting limits established at N.J.A.C. 7:50-6.46(a)10 will deter forestry activities in the Pinelands. As noted in the rule proposal, the vast majority of private landowners and applicants in the Pinelands will not be affected by these limitations because they allow for a substantial amount of land to be harvested during any forestry permit period. Specifically, a total of 1,300 acres could be harvested (300 acres through clearcutting, 500 acres through coppicing and 500 acres through seed tree cutting). For very large parcels, such as that owned by the commenter's family, even more land could be subject to harvesting because the amendments base cutting limitations on a percentage of parcel size. Under the amendments, 25 percent or 1,500 acres of the 6,000 acres owned by the commenter's family could be harvested during a ten-year period. This is considerably more acreage than has been proposed for harvesting in the Pinelands by a private landowner in the past five years. Even the forestry applications submitted by the commenter in recent years have not approached this total. The Commission remains interested in promoting good forest stewardship practices but believes the limitations being adopted at N.J.A.C. 7:50-6.46(a)10 are necessary.

18. COMMENT: One commenter urged the Commission to incorporate the Plant Stewardship Index and the Floristic Quality Assessment methodology into the forestry rules to evaluate their effectiveness over time and the extent to which natural values are being sustained. (4)

RESPONSE: Periodic assessment of the effectiveness of the amended forestry rules is a worthwhile objective. It was with this intent that the Pinelands

Forestry Advisory Committee recommended that the Pinelands Commission periodically review, on a 5-year interval, and refine as needed the forestry provisions of the Comprehensive Management Plan. However, the Committee proposed no particular assessment methodology and until there is opportunity to evaluate various evaluation approaches, the Commission does not believe it would be appropriate to incorporate one in the CMP itself.

7:50-6.47: State forestry activities

19. COMMENT: One commenter suggested that an exemption should be added for State forestry activities that are intended to improve forest conditions or forest health for native Pinelands plants and animals. (7)

RESPONSE: Forestry activities conducted on State lands constitute public development which is subject to the application and approval procedures set forth at N.J.A.C. 7:50-4.51 through 4.58. The Commission does not believe it would be appropriate to include in the CMP an exemption from these procedural requirements for certain categories of forestry activities, based solely on the stated intent of such activities. The CMP does provide the opportunity for intergovernmental agreements to be developed which authorize State agencies to carry out specified development activities without securing individual development approval from the Commission, provided the development activities are consistent with the provisions of N.J.A.C. 7:50-5 and 6. This provision, set forth at N.J.A.C. 7:50-4.52(c)1, is a better vehicle to accomplish the objective of the commenter. As reported earlier, the Commission and the Department of Environmental Protection are pursuing such an agreement.

It should be noted that N.J.A.C. 7:50-6.47(b) does authorize the Commission to approve modifications to the forestry standards of N.J.A.C. 7:50-6.46 when they are embodied in a management plan for State conservation lands. Such modifications must be needed to enable research efforts designed to regenerate Atlantic White Cedar, create habitat patches for threatened and endangered plant and animal species or evaluate the ecological impacts of silvicultural techniques.

Federal Standards Statement

Section 502 of the National Parks and Recreation Act of 1978 (16 U.S.C. §471i) called upon the State of New Jersey to develop a comprehensive management plan for the Pinelands National Reserve. The original plan adopted in 1980 was subject to the approval of the United States Secretary of the Interior, as are all amendments to the plan.

The Federal Pinelands legislation sets forth rigorous goals that the plan must meet, including the protection, preservation and enhancement of the land and water resources of the Pinelands. The proposed amendments are designed to meet those goals by encouraging the use of effective management techniques that are intended to sustain and improve the health of Pinelands forests.

There are no other Federal requirements that apply to the subject matter of these amendments.

Full text of the adoption follows (additions to proposal indicated in boldface with asterisks ***thus***; deletions from proposal indicated in brackets with asterisks **“*[thus]*”**):

7:50-6.46 Forestry standards

(a) Notwithstanding the other standards of this subchapter, forestry operations shall be approved only if the applicant can demonstrate that the standards set forth in this part are met.

1.-8 (No change from proposal.)

9. The following standards shall apply to silvicultural practices for site preparation, either before or after harvesting:

i. (No change from proposal.)

ii. Herbicide treatments shall be permitted, provided that:

(1)-(4) (No change from proposal.)

(5) In Pine-Shrub Oak Native Forest Types, herbicide treatments shall ***only*** be permitted ***as a method to temporarily suppress shrub-oak understory in order to facilitate pine regeneration*** **“*[only in areas where pine regeneration is the management objective identified in the forestry application submitted pursuant to N.J.A.C. 7:50-6.44]***. All such herbicide treatments shall be applied in a targeted manner so that there will be no significant

reduction in tree or shrub-oak resprouting outside ***those***
***[these]* areas *subject to the herbicide treatment*.**

iii.-vii. (No change from proposal.)

10. The following standards shall apply to silvicultural practices for harvesting:

i. Clearcutting shall be permitted, provided that:

(1)-(4) (No change from proposal.)

(5) ***Where present on a parcel, a minimum of 18 dead* *[Dead]* *snags per acre*** of at least 10 inches diameter breast height (DBH) and six feet in height*[, up to a maximum of 18 per acre,]* shall be left on the parcel for a minimum of five years; and

(6) (No change from proposal.)

ii. Coppicing shall be permitted in all Pinelands Native Forest Types, provided that:

(1)-(3) (No change from proposal.)

(4) ***Where present on a parcel, a minimum of 18 dead* *[Dead]* *snags per acre*** of at least 10 inches DBH and six feet in height*[, up to a maximum of 18 per acre,]* shall be left on the parcel for a minimum of five years; and

(5) (No change from proposal).

iii. Seed tree cutting shall be permitted in all Pinelands Native Forest Types, provided that:

(1)-(3) (No change from proposal.)

(4) ***Where present on a parcel, a minimum of 18 dead* *[Dead]* *snags per acre*** of at least 10 inches DBH and six feet in height*[, up to a maximum of 18 per acre,]* shall be left on the parcel for a minimum of five years; and

(5)-(7) (No change from proposal.)

iv. (No change from proposal.)

11-14. (No change from proposal.)

(b) (No change from proposal.)