



COMMONWEALTH OF PENNSYLVANIA  
OFFICE OF ATTORNEY GENERAL

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[REDACTED]

East Brandywine Township  
Board of Supervisors  
1214 Horseshoe Pike  
Downingtown, PA 19335

Re: *ACRE Review Request* – [REDACTED] – *East Brandywine Township-Chester County*

Dear [REDACTED] and Board of Supervisors,

[REDACTED] the owner of [REDACTED] helped a landowner, [REDACTED] sell timber from her property. Upon completion of the job, East Brandywine Township (“Township”) informed [REDACTED] that it would enforce a portion of its timber ordinance requiring all tops and slash<sup>1</sup> to be removed from the timber harvesting site. [REDACTED] spoke with the Township Manager expressing his concerns as to why this portion of the ordinance violated state law, was cost prohibitive, and contrary to good silvicultural practices;<sup>2</sup> he also filed an Agricultural Communities and Rural Environment (“ACRE”)<sup>3</sup>, complaint with the Office of the Attorney General (“OAG”) challenging the legality of the Township’s timber ordinance.

I requested the Township to provide any information that it believed would assist the OAG in its review; a second letter, sent three weeks later, instructed the Township to respond within 30 days. To date, the Township has not responded to the OAG’s requests for information.

Having examined the Township’s timber ordinance, as well as the information provided by [REDACTED] the OAG concludes the entire timber ordinance, not just the specific provision dealing with tops/slash, violates ACRE.

<sup>1</sup> “‘Top’ means the upper portion of a felled tree that is unmerchantable because of small size, taper, or defect.”

“‘Slash’ means woody debris left in the woods after logging, including logs, chucks, bark, branches, uprooted stumps, and broken or uprooted trees or shrubs.” Penn State School of Forest Resources, *Pennsylvania Model Forestry Regulations*, p. 3 (Attached hereto as “Exhibit A”).

<sup>2</sup> “Silviculture is defined as the art and science of controlling the establishment, growth, composition, health, and quality of forests and woodlands to meet the diverse needs and values of landowners and society on a sustainable basis.” USDA Forest Service, White Paper, F14-SO-WP-SILV-34, p.2.

<sup>3</sup> 3 Pa.C.S. §311 *et. seq.*

Silviculture is a “Normal Agricultural Operation” (“NAO”) and “[f]orestry and forestry products” are agricultural commodities as defined by the Right to Farm Act (“RTFA”). 3 P.S. § 952.<sup>4</sup> Timber harvesting is the only agricultural practice that is a *use as of right* in all zoning districts. State law explicitly addresses the considerable limitations on municipal authority to regulate timber harvesting as follows:

[z]oning ordinances may not unreasonably restrict forestry activities. To encourage maintenance and management of forested or wooded open space and promote the conduct of forestry as a sound and economically viable use of forested land throughout this Commonwealth, forestry activities, including but not limited to, timber harvesting, shall be a permitted use of right in all zoning districts in every municipality.

Municipalities Planning Code (“MPC”), 53 P.S. §10603(f).

This provision clearly demonstrates the intent of the General Assembly to encourage and promote timber harvesting throughout the Commonwealth. *See* Penn State University (“PSU”) College of Agricultural Sciences, *Dealing with Local Timber Harvesting Ordinances* (attached hereto as Exhibit B). I also include a Penn State publication regarding timber harvesting practices, which explains why local regulation of forestry activities should be kept to a minimum, if used at all - most concerns supporting local regulation are addressed by State law requirements, removing the need for local regulation of forestry activities. *See* PSU College of Agricultural Sciences, *Timber Harvesting in Pennsylvania, Information for Citizens and Local Government Officials* (attached hereto as Exhibit C).

Moreover, the General Assembly’s objective to broadly encourage and promote all types of agriculture, including forestry, is made perfectly clear in the RTFA<sup>5</sup> and other provisions of the MPC.<sup>6</sup> Indeed, the General Assembly’s Historical and Statutory Notes to ACRE declare the Commonwealth has a “vested and sincere interest in ensuring the long-term sustainability of agriculture and normal agricultural operations” and “[i]n furtherance of this goal...has enacted statutes to protect and preserve agricultural operations for the production of food and other agricultural products.” 3 Pa.C.S., § 311, *Historical and Statutory Notes*. Both the black letter and the spirit of established state law require municipalities to encourage and support, not hamper, timber harvesting.

At the outset, we want to make it clear that we do not have an issue with the general principle that the Township requires a permit for timber harvesting operations. However, the Ordinance permit requirements for timber harvesting operations are overly restrictive and

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<sup>4</sup> An NAO is “[t]he activities, practices, equipment and procedures that farmers adopt, use or engage in the production...harvesting and preparation for market or use of...silvicultural...crops and commodities and is...not less than ten contiguous acres in area; or...less than ten contiguous acres in area but has an anticipated yearly gross income of at least \$10,000.” 3 P.S. § 952.

<sup>5</sup> “It is the declared policy of the Commonwealth to conserve and protect and encourage the development and improvement of its agricultural land for the production of food and other agricultural products...It is the purpose of this act to reduce the loss to the Commonwealth of its agricultural resources by limiting the circumstances under which agricultural operations may be the subject matter of nuisance suits and ordinances.” 3 P.S. § 951, **Legislative policy**.

<sup>6</sup> “It is the intent, purpose and scope of this act...to promote the preservation of this Commonwealth’s...prime agricultural land...to encourage the preservation of prime agricultural land...” 53 P.S. § 10105, **Purpose of act**. “Zoning ordinances shall encourage the continuity, development and viability of agricultural operations.” 53 P.S. § 10603(h). **Ordinance provisions**.

unreasonable, thus beyond the Township's authority under state law. The "[c]omprehensive state regulations already cover many aspects of a timber harvesting operation [, thus in most cases,] a permit should only serve to verify that state laws are being followed." PSU College of Agricultural Sciences, *Dealing with Local Timber Harvesting Ordinances*, p. 14 (Exhibit B).

### TOPS/SLASH

██████████ and ██████████ complain primarily of the tops/slash removal requirements. The Township's ordinance, *Woodland protections and logging standards*, §399-102.1.E(6), reads:

[u]pon completion of the cutting and removal of trees from the site, all remaining tops and slash shall be removed from the site. The forestry/logging plan shall detail the means by which this will be accomplished. It shall be the equal responsibility of the logging operator and the property owner to accomplish the removal remaining tops and slash. In the event such removal is not satisfactorily accomplished, the township may, as it deems necessary and appropriate, undertake and complete such removal and collect the cost of same from the property owner by civil action, including actions as authorized under the Municipal Liens Law.

The ACRE statute authorizes the OAG to use the PSU School of Agriculture as experts in agricultural operations issues. 3 Pa.C.S. § 314(d). In this case, the OAG consulted with a PSU School of Agriculture professor emeritus of forestry. This expert opines that tops/slash is an important component to timber harvest site productivity that should be left on site for several reasons. First, tops/slash contributes important elements back into the site. A log is mostly carbon and other macronutrients<sup>7</sup> which is taken from the site as the product. The tops/slash, smaller branches, twigs, and leaves contain various micronutrients including boron. If these are removed, the micronutrients do not come back into the nutrient cycle quickly or effectively.

Secondly, tops/slash contributes immensely to organic material cycling which serves to release the micronutrients. The tops/slash also helps build the 0-horizon, *i.e.* the upper layers of the soil profile. This 0-horizon is important for the protection of the underlying soil (the mineral components) from erosion. Once the canopy is opened by the harvest, there is nothing to impede the impact of rain on exposed soil. While the removal of the tops/slash may not always expose mineral soil, it does expose the existing organic layer to more light and heat, which in turn accelerates decomposition. Tops/Slash, as it is left after a timber harvest, actually creates some shade, distributed across the site, which in turn reduces the rain impact and assists in generating the 0-horizon. This 0-horizon then acts as a "sponge," absorbing water and allowing it to infiltrate more slowly into the underlying soil structure. Moreover, the organic 0-horizon supports a community of fungi, macro invertebrates, amphibians (*e.g.* salamanders), and reduces surface water flow.

Tops/Slash has been shown to help facilitate forest regeneration. For example, one of the major challenges to regeneration are white-tailed deer. Deer are opportunistic feeders; the residual tops/slash are very important for deterring browsing on actual trees, as generally preferred by deer.

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<sup>7</sup> "Macronutrients can be broken into two...groups: primary and secondary nutrients. The primary nutrients are nitrogen (N), phosphorus (P), and potassium (K)...The secondary nutrients are calcium (Ca), magnesium (Mg), and sulfur (S)." <https://www.ncagr>

Accordingly, a site with ample tops/slash is more likely to regenerate from the protection the residual detritus provides. The advantage afforded by the tops/slash is relatively short-lived, five (5) to ten (10) years; a time period that may be especially critical to site revegetation.

Much of the microorganism community (*e.g.*, insects, fungi, reptile, amphibian, small mammal-like shrews and mice) depend on the habitat created by the tops/slash following harvesting. In fact, the larger residual slash breaks down (rots) over time; this time period is a critical part of the microorganism community's life cycle.

The academic forestry community has studied the amount of slash that would best support wildlife in a Pennsylvania woodlot. The PSU expert opines that at a minimum a woodlot should have three (3) to five (5) cords of wood debris on the forest floor per acre. That translates into 270 to 450 cubic feet of coarse woody debris. A timber harvest might well leave more than that amount of slash; however, a greater amount of tops/slash may be preferable as much of it is relatively short lived.

Another concern with the mandated removal of tops/slash is the impact on the site increases the amount of disturbance from the machinery used to gather and move the tops/slash. Doing this likely contributes to additional tree stem damage, soil compaction, organic matter disturbance, and the loss of habitat as described above.

While the cost of removing tops/slash is site and circumstance specific, in all cases, it presents the logistical challenge of how to gather it up, move it efficiently to a concentration point, and then chip it for removal from the site. Under any scenario, complete removal is expensive and could require specialized machinery. While many people may find tops/slash to be aesthetically displeasing, understanding its role in forest regeneration may help alleviate some of this distaste. Know, too, that the displeasing appearance of the site is relatively short-lived as it decays and regeneration begins to hide it. The PSU expert concluded by telling undersigned counsel, "frankly there is no good reason to remove it."

For all these reasons, the Township's requirement that tops/slash be removed is a violation of state law as such a mandate constitutes an unreasonable restriction on forestry activities.

### **CLEAR CUTTING**

The same is true of the Township's prohibition against clear cutting.<sup>8</sup> *Woodland protections and logging standards*, §399-102.1.E(2), states that "[c]lear-cutting...shall not be permitted as part of any logging operation."

The PSU expert has advised that clear-cutting is a recognized silvicultural tool leading to the regeneration and establishment of even-aged forests, which are predominant across the State. "Like large-scale natural disturbances, clear-cutting promotes the establishment and growth of intolerant and intermediate species, such as black cherry and oak," which require full sunlight to reproduce and grow well. See PSU College of Agricultural Sciences, *Timber Harvesting in Pennsylvania, Information for Citizens and Local Government Officials*, p. 5 (Exhibit C). "Clear-cutting is appropriate for Pennsylvania's two major forest types, northern hardwood and oak/hickory" and "[w]ithout clear-cutting or other even-aged management and harvesting techniques, the proportion of black cherry and oak in Pennsylvania will be reduced in the future." *Id.*

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<sup>8</sup> "Clear-cutting refers to the forestry practice whereby all trees are removed for the purpose of reestablishing an even aged stand." PSU College of Agricultural Sciences, *Dealing with Local Timber Harvesting Ordinances*, p. 17 (Exhibit B).

Moreover, a PSU publication explains that:

Restricting clear-cutting in forests is an unreasonable ordinance provision. Often, these provisions are developed and included based on a common misperception that this type of harvesting is ugly and detrimental to the forest ecosystems. This is not true, and in fact, shade-intolerant forest stands require clear-cutting to ensure proper regeneration. Additionally, this type of management practice is often beneficial with respect to the landowner's opportunities for the stand's future management...There are a variety of acceptable silvicultural methods, and clear-cutting is one of them. It can be used to meet goals at a timber harvesting site and to ensure the proper regeneration. To restrict its use is unreasonable.

PSU College of Agricultural Sciences, *Dealing with Local Timber Harvesting Ordinances*, pp. 17-18 (Exhibit B). For these reasons, the Township's prohibition on clear-cutting is an unreasonable restriction on timber harvesting.

### **STEEP SLOPES**

*Woodland protections and logging standards*, §399-102.1.E(3) prohibits timber harvesting on slopes exceeding 25% or greater. This blanket restriction in the Ordinance conflicts with best management practices ("BMPs") recognized in the field of forestry.

The PSU expert advises that both an Erosion and Sedimentation ("E&S") plan and the timber harvesting plan address harvesting on steep slopes. The BMPs for runoff or soil degradation are a mandatory part of any E&S plan. Those BMPs include precluding use of operating equipment and haul and skid roads on steep slopes. *See e.g.* PSU College of Agricultural Sciences, *Best Management Practices for Pennsylvania Forests*, pp. 27-28 (Attached hereto as Exhibit D). Timber harvesting on steep slopes typically involves using cables to remove logs from the felling site. The expert explained that removing timber in accordance with the BMPs does little to change water infiltration or destabilize soils because tree roots, even from harvested trees, continue to hold the soil in place. Conversely, naturally fallen trees pull up their roots in what foresters call a "root ball" and are more likely to destabilize the soils from water infiltration.

As explained in a PSU publication, "[c]ertain sites require specific silvicultural methods to ensure proper regeneration of species and forest stands. Timber harvesting operations should be given flexibility to determine what method or methods will best allow for future forest stands." PSU College of Agricultural Sciences, *Dealing with Local Timber Harvesting Ordinances*, p. 17 (Exhibit B). For these reasons, the Township's prohibition on timber harvesting on all slopes exceeding 25% is an unreasonable restriction on forestry activities in violation of the MPC.

### **COPY OF E&S PLAN WITH LETTER OF ADEQUACY FROM THE CHESTER COUNTY CONSERVATION DISTRICT**

*Woodland protections and logging standards*, §399-102.1.D(2)(e)(2) requires the owner or logger to include in their permit application a "[c]opy of erosion and sedimentation control plan with a letter of adequacy from the Chester County Conservation District, and including all associated permits as applicable."

The Department of Environmental Protection's ("DEP") erosion and sediment control regulations do not require submission of an E&S plan to the local Conservation District for review

and approval. The Township cannot independently impose this requirement because it is stricter than State law. See 25 Pa. Code § 102.4(b)(8). The DEP requires that the written E&S plan, inspection reports and monitoring records be available “at the project site during all stages of the earth disturbance activities.” *Id.* § 102.4(b)(8). The Township may require that an applicant provide it with a copy of the written E&S Plan. We also note that the Township may, at its own expense, submit an applicant’s E&S Plan to the Conservation District for review to check compliance with the regulations. What the Township cannot do is require the owner/logger to get preapproval of the E&S plan from the Conservation District.

### SITE MAP INFORMATION REQUIREMENTS

*Woodland protections and logging standards*, §399-102.1.D(2)(f), mandates that the owner/logger provide a site map with his/her permit application. This site map must include the six (6) items listed in subsections [1]-[6].<sup>9</sup>

Pursuant to its authority under the Clean Streams Law<sup>10</sup>, the DEP regulates erosion and sediment control and “requires persons proposing or conducting earth disturbance activities to develop, implement, and maintain BMPs to minimize the potential for accelerated erosion and sedimentation and to manage post construction stormwater.” 25 Pa.Code § 102.2(a). Timber harvesting is subject to the DEP’s E&S regulations. *Id.*, §§ 102.4(b) & 102.5(b) & (d). A timber harvest operation that disturbs more than 5,000 square feet must develop and implement a written E&S Plan. *Id.*, § 102.4(b)(2)(i). An E&S plan is “[a] site specific plan consisting of both drawings and a narrative that identifies BMPs to minimize accelerated erosion and sedimentation before, during and after earth disturbance activities.” *Id.*, § 102.1. As a result, the information required under the six subsections of the Township’s Ordinance is already included in the E&S plan prepared under 25 Pa.Code § 102.4(b)(2)(i). By preparing the state mandated E&S plan, [REDACTED] and [REDACTED] have essentially complied with the Township’s Ordinance.

Regardless, state law preempts those six subsections. Under ACRE, “[a] local government unit shall not adopt or enforce an unauthorized local ordinance.” 3 Pa.C.S. § 313(a). An “unauthorized local ordinance” is one that is “preempted under State law...” *Id.*, § 312(1)(ii). A local municipality cannot duplicate a state regulatory scheme nor can it “impede a comprehensive, statewide scheme of regulation.” *Com., Office of Attorney Gen. ex rel. Corbett v. E. Brunswick Twp.*, 980 A.2d 720, 733 (Pa.Cmwlth. 2009). When a municipality has ordinances that duplicate and/or impede upon state standards those state requirements override the local regulations. That is the situation here. The six subsections of §399-102.1.D(2)(f)[1]-[6] identified above duplicate requirements found in the DEP regulations pertaining to erosion and sediment control and are therefore invalid.

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<sup>9</sup> (1) Site location and boundaries including the boundaries of the property on which the logging will occur as well as the boundaries of the proposed harvest area within the property; (2) the location of all earth disturbance activities such as road, landings, and water control measures and structures; (3) the location of all proposed crossing of waters of the Commonwealth; (4) the general location of the operation in relation to Township and state roads; (5) Topography including slopes of 15%-25%, those over 25%, and the soils on the harvest site; and (6) the location of wetlands or other sensitive environmental areas and the measure to protect those areas.

<sup>10</sup> 35 P.S. §691.1 *et. seq.*

## REFORESTATION PLAN

*Woodland protections and logging standards*, §399-102.1.D(2)(j) states the forestry/logging plan required with the permit application “shall include a plan for the reforestation of the site” which means that the “[p]lant material to be used for reforestation purposes shall...have been grown within the same USDA hardiness zone as the site and shall be nursery grown....” In other words, the Township is making owners/loggers replant trees on the harvest site. This it cannot do.

The PSU expert advises that in Pennsylvania, forest management plans are developed to achieve desired forest *regeneration*, not “reforestation.” According to the expert, “reforestation” suggests artificial regeneration treatments to a forest. However, “most of Pennsylvania’s forests will regenerate naturally from seeds...or sprouts...” PSU College of Agricultural Sciences, *Timber Harvesting in Pennsylvania, Information for Citizens and Local Government Officials*, p. 5 (Exhibit C); See also PSU College of Agricultural Sciences, *Dealing with Local Timber Harvesting Ordinances*, p. 18 (Exhibit B).<sup>11</sup> There are situations for which trees may need to be planted to achieve actual regeneration, which include “reforesting former strip mines, old fields, conifer plantations, and areas where insects or diseases have killed all the seed-producing trees.” PSU College of Agricultural Sciences, *Timber Harvesting in Pennsylvania, Information for Citizens and Local Government Officials*, p. 5 (Exhibit C). However, these situations are not involved with an application for a timber harvesting permit. It is “unreasonable, both economically and ecologically, to require a forestry operation to artificially regenerate the site.” PSU College of Agricultural Sciences, *Dealing with Local Timber Harvesting Ordinances*, p. 18 (Exhibit B). And as discussed previously, an unreasonable municipal ordinance violates state law and cannot stand.

## SPECIMEN VEGETATION

*Woodland protections and logging standards*, §399-102.1.D(2)(i) concerns the treatment of what is known as “specimen vegetation.” The Township expects the owner/logger to identify specimen trees and then explain what measures will be taken to protect those particular trees.<sup>12</sup>

The common understanding of a “specimen” tree is one that is the focus of interest or that has unique or noteworthy characteristics. See e.g. <https://www.gardeningknowhow.com/ornamental/trees/tgen/what-is-a-specimen-tree.htm> and [https://www.matthewsnc.gov/files/documents/Chapter99\\_TreeOrdinance1315113715012717AM.pdf](https://www.matthewsnc.gov/files/documents/Chapter99_TreeOrdinance1315113715012717AM.pdf). The Township defines a specimen tree as one of sixteen (16) different species of a certain diameter at breast height (“DBH”)<sup>13</sup> The Township’s DBH requirement, while perhaps well-

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<sup>11</sup> Artificial regeneration is manually “reseeded or replanting an area where a forestry operation took place...” whereas natural regeneration consists of seeds already in the soil or sprouts from tree stumps growing in time into mature trees. “These naturally regenerated trees have been shown to grow faster and survive better than the planted trees.” *Id.*

<sup>12</sup> Subsection “i” directs one to § 350 where the measures to protect specimen trees are identified. If counted correctly, §350-53.C, *Natural features conservation, Conservation of woodlands and other vegetation*, lists at least fifteen (15) different measures that must be taken up to and including an outright prohibition on harvesting specimen trees in certain circumstances.

<sup>13</sup> The 16 species are ash, basswood, beech, cherry, elm, hemlock, hickory, locust, maple, oak, sassafras, spruce, sycamore, tulip poplar, walnut, and white pine. § 300-17, *Definitions, Specimen Vegetation*. The OAG respectfully submits that this lists most of the major species of trees in the Commonwealth. East Brandywine defines DBH as

meaning, is in reality counterproductive. The PSU College of Agricultural Sciences warns against using diameter limits in ordinances:

[d]iameter limit harvesting is a technique in which all trees above a certain specified diameter are removed. This technique, which results in taking only the largest, best trees of the most valuable species, can affect future health and value of the forest stand...mandating a diameter limit on timber harvesting operations can be detrimental. In Pennsylvania forest stands, the smaller trees are typically of the same age as the large trees. The difference in size is often the result of a difference in tree species, a genetically inferior tree, or the result of poor location. Diameter limiting harvesting will eventually shift the composition of the forest and may even degrade the quality of the forest by promoting inferior trees. This practice may also limit future options for forest management and slow the stand's ability to recover from disturbance through the elimination of seed trees for the species removed. As a result, requiring this method of harvest is unreasonable.

PSU College of Agricultural Sciences, *Dealing with Local Timber Harvesting Ordinances*, p. 17 (Exhibit B).

Moreover, PSU experts advise that requiring identification of specimen vegetation is time consuming and cost prohibitive to a timber harvesting operation; precluding the harvesting of "specimen vegetation" impacts the economic value of a timber harvest; and interferes with prescribed silvicultural practices for forest management and regeneration.<sup>14</sup>

It must be remembered that "[z]oning ordinances may not unreasonably restrict forestry activities," and to that end, the Legislature has made "timber harvesting...a permitted use of right in all zoning districts in every municipality. 53 P.S. §10603(f). East Brandywine's restrictions surrounding specimen trees is economically unreasonable, environmentally damaging, and violates the MPC. The Township's list of specimen trees is so broad as to include the most commercially viable species in the Commonwealth. As if identifying these trees at the harvesting site is not time and cost prohibitive enough, East Brandywine imposes at least 15 more protective measures making what is already an overly restrictive timber harvesting process essentially impossible to satisfy. The Township's reliance on the DBH method not only lessens the monetary value of the timber but also affects the long-term health of the forest stand. Basing harvesting on DBH instead of the more widely accepted and environmentally friendly intermediate treatments, regeneration methods, and the crops tree method is counterproductive to both the owner/logger and the Township.

## CONCLUSION

I respectfully submit that the shortcomings in the Township's timber harvesting ordinances are numerous. Trying to change each one of the specific shortcomings would be time and resource heavy and ultimately result in a confusing ordinance that gives owners/loggers little guidance on

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"[t]he outside bark diameter of a tree at breast height which is defined as 4.5 feet above the forest floor on the uphill side of the tree." § 300-17, *Definitions, Diameter at Breast Height (DBH)*.

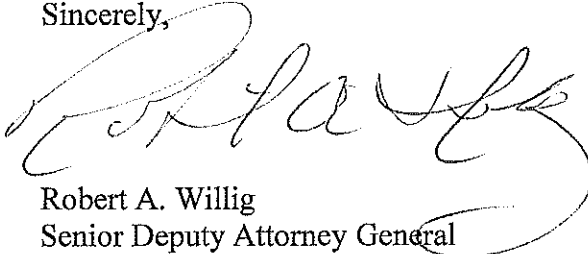
<sup>14</sup> Prescribed silvicultural practices such as intermediate treatments (cleanings, thinning and improvement cuts); regeneration methods (single tree and group selections; shelterwood, seed tree, and clear cut methods); and the crops tree method. See PSU College of Agriculture Sciences, *Best Management Practices for Pennsylvania Forests*, pp. 11-13 (Exhibit D).



what actions are permissible or what the Township requires of them. The OAG respectfully submits that instead of trying to cut around the edges of a fatally flawed ordinance the Township adopt the PSU Pennsylvania Model Forestry Regulations attached hereto as Exhibit A. The Township and the OAG can utilize this model ordinance as the base and customize it where appropriate to recognize circumstances specific to the Township. Several townships have already done so at the OAG's recommendation with positive results.

Please respond to me within thirty (30) days of the receipt of this letter to inform me how the Township intends to proceed in this matter and whether litigation can be avoided. I thank you in advance for your assistance.

Sincerely,

A handwritten signature in black ink, appearing to read 'R. Willig', with a large, sweeping flourish extending from the end of the signature.

Robert A. Willig  
Senior Deputy Attorney General