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Introduction

A typical nursery manager is trained in one of the sciences. Whether it be forestry, agronomy, biology, or another field related to natural resources, the manager’s education and experience concentrates on the biological side of management. However (and some might say unfortunately), a nursery manager must inevitably deal with a number of administrative issues that have little to do with biology or the growing of plants. Government regulations, whether Federal, State, or local, impact nursery operations in virtually every aspect of management, including personnel, equipment, plant protection, sales, and seedling transportation. No manager can possibly be familiar with all the potential regulations affecting the nursery production business. Managers should, however, have some idea of the scope and reach of the more important regulations universally affecting managers production systems.

The following sections provide a general introduction to key regulatory structures affecting nursery production. This information is in no way intended to substitute for sound legal or expert advice, but rather should be used as a first alert to the many serious issues associated with certain aspects of nursery management. The complexities and potential ramifications of these topics must be given due attention, and any manager is strongly encouraged to seek out, consult, and follow the advice of legally trained individuals familiar with these specific areas.

An Agricultural Enterprise

A forest tree nursery growing hardwoods will qualify as an “agriculture enterprise,” a designation that is important for a number of reasons related to taxes, labor management, trucking regulations, and other unique provisions. In States that collect sales tax, most business operations will obtain a sales tax exempt number, which is used to waive sales tax on materials consumed in the supply chain and production process. As an agriculture operation, most States do not require that sales tax be assessed on products grown in the nursery.

The nursery will need to obtain a Federal Employee Identification Number (FEIN). The FEIN is needed to file withholding taxes (Federal and State Income Tax, Medicare, Social Security [FICA], and Federal Unemployment Tax [FUTA]) on employees who are hired directly by the company and not considered as a contract labor. There is a difference between workers hired directly by the company and those that fall under the category of “contract labor” provided to the nursery by an independent contractor. The difference between whether a person is hired as an hourly worker (either permanent or temporary) or as a contract laborer has significantly different tax ramifications and may also limit direct supervision of the worker’s daily activities. Workers’ Compensation Insurance, and other forms of insurance, such as liability, fire, and theft, will also be required by most nurseries. Other permits, licenses, and tax numbers may also be necessary for the business, depending on State or local requirements. Designation as an agricultural enterprise is quite significant to nursery administration for a number of reasons.

Labor

Occupational Safety and Health Act

The Occupational Safety and Health Act of 1970 created the Occupational Safety and Health Administration (OSHA). The Act was intended “to assure safe and healthful working conditions for working men and women by setting and enforcing standards and by providing training, outreach, education, and assistance.” Although most workers in the United States are protected by OSHA coverage, it is not universal and may vary by employer type and number of employees. OSHA has prepared standards across virtually all job types, including agriculture, and periodically updates/modify those standards. The standards can get very specific, such as the need for tractor roll-over bars, or toilet facilities for agricultural workers involved in hand labor activities, labor housing standards, and injury reporting/posting requirements. In addition, OSHA may perform periodic inspections to evaluate standard compliance. OSHA works with States to develop and operate their own job safety programs, and several States in the Eastern United States (as well as a number in the Western and Southwestern United States) have these in place.

Fair Labor Standards Act

The FLSA sets the minimum wage across the United States, as well as overtime pay and recordkeeping standards for private sector and government employees, both part-time and full-time. The Act is enforced by the Wage and Hour Division of the U.S. Department of Labor. The Federal law exempts certain types of employees, particularly professional, administrative, and executive employees. “Farmworkers employed by anyone who used no more than 500 man days of farm labor in any calendar quarter of the preceding calendar year” are exempt (DOL 2018a). Like the Federal wage and hour law, State law often exempts particular occupations or industries from the minimum labor standard generally applied to cover employment. Additionally, some State and local governments set minimum wage standards higher than the respective Federal minimum wage. This hourly wage for a State also determines the minimum wage that can be paid to workers considered as contract laborers. Managers should consult the laws of their respective States in determining the hourly wages engineers, foresters, agronomists, and other professionals. 

Agriculture Industry Standards

There are many standards (and more are added with each year) that impact the nursery industry. Each State and some local governments have their own version of the standards. As of this writing, the USDA is considering national standards developed by the American National Standards Institute (ANSI) and the American Society for Testing and Materials (ASTM). In the meantime Companies are dealing with an increasingly complex system of regulations and standards. 

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whether that State’s minimum wage applies to a particular employment (DOL 2018b). This information often may be found at the websites maintained by State labor departments. Links to these websites are available at www.dol.gov/whd/contacts/State_of.htm. Overtime, time and one half after 40 hours worked, generally does not apply to “agriculture.” However, this exemption can be complex and should be reviewed by management. Records of hours worked and pay records must be maintained for at least 3 years.

**Guest Worker Programs**

**H-2A.** Agricultural enterprises may employ foreign nationals brought into the United States through a guest worker program administered jointly by the U.S. Department of Labor (DOL), and the U.S. Citizenship and Immigration Services (USCIS) of the Department of Homeland Security (DHS). “The Immigration and Nationality Act (INA) authorizes the lawful admission of temporary, nonimmigrant workers (H-2A workers) to perform agricultural labor or services of a temporary or seasonal nature” (DOL 2016b). H-2A employers, however, must first show there are not sufficient numbers of U.S. workers who are qualified and available to do the work, nor will the use of guest laborers affect the wages and earnings of U.S. workers.

The hiring and administration of guest workers can be a very complex process. For example, the hourly minimum wage is used as a benchmark for domestic unskilled labor and the adverse effect wage (AEWR) for guest worker programs. Specifically, the AEWR is the hourly wage set by the Government for foreign H-2A workers and corresponding U.S. citizen workers. The AEWR for each State is based on the “prevailing wage” for a similar class of work in a given State (averaging about $10.80 for the Southern States). Therefore, as the minimum wage for domestic workers increases, the AEWR increases as well. Nurseries that utilize contract labor frequently will use workers from the H-2A program. If so, the integrity of such a contractor should be well established, in addition to having documented experience in providing contract labor for nursery operations.

**H-2B.** The H-2A guest worker program should not be confused with the H-2B program. The former deals specifically with guest workers for agricultural enterprises as defined by the Department of Labor. The latter deals with guest workers for other areas of commerce that may include manufacturing, construction, industrial jobs, and tree planting. For whatever reason, tree planting and other field activities like herbicide spraying, are not considered part of an agricultural enterprise. The regulations covering tree planting, spraying, and other silvicultural operations fall under a different, although related, set of regulations. The Migrant and Seasonal Agricultural Worker Protection Act also applies to this kind of work. In a similar fashion, landscaping work falls under the regulations of the H-2B, while horticultural and forest seedling nursery workers fall under the purview of the H-2A program.

**The Migrant and Seasonal Agricultural Worker Protection Act (MSPA).** The Department of Labor’s Wage and Hour Division is responsible for the administration of the MSPA. The purpose of the MSPA is to safeguard “migrant and seasonal agricultural workers in their interactions with farm labor contractors, agricultural employers, agricultural associations, and providers of migrant housing” (DOL 2016a). The MSPA mandates that farm labor contractors be registered with the Department of Labor before they may begin recruiting, hiring, housing, transporting, and caring for seasonal agricultural workers. It is up to the employer (nursery administration) to verify the registration of individual contractors. The Act also contains a number of specific provisions regarding the interaction between the contractor and the workers in regard to wages, housing, transportation, and other issues. Nurseries and other labor contractors that are subject to the regulations of the MSPA are required to display a poster “explaining the rights and protections for workers required under the MSPA.”

**Employment Eligibility Verification**

The USCIS Form I-9 is used to verify the identity and employment eligibility of individuals working in the United States. It is the employer’s responsibility to make sure that a Form I-9 is properly completed and filed for all employees, both citizens and noncitizens alike. Federal law mandates that employers hire only individuals “who may legally work in the United States, either United States citizens, or foreign citizens who have the necessary authorization” (https://www.uscis.gov/e-verify). E-Verify is a web-based Federal program administered by the Department of Homeland Security in partnership with the Social Security Administration and set up to facilitate employment eligibility verification. Currently, 22 States, including 18 from the Eastern United States, require the use of E-Verify for at least some public and/or private employers. Several of these States—Alabama, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, and Tennessee—require E-Verify for most employers. The use of contractors to hire guest workers through the H-2A program may provide a degree of separation between nursery managers and the legal responsibilities associated with hiring guest workers, but the issue is complex and should be thoroughly investigated. The relationship between the nursery owner/manager and the contractor and their respective regulatory responsibilities must be clearly understood by both parties.
**Pesticides**

**The Federal Insecticide, Fungicide, and Rodenticide Act**

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) was originally passed in 1947 and has been modified various times since then. It is the overarching law that regulates the use of pesticides in the United States with regulation and enforcement given to the Office of Pesticide Programs (OPP) of the U.S. Environmental Protection Agency (EPA). Although a number of other laws impact pesticide use, such as the Food Quality Protection Act of 1996 and the Worker Protection Standards of 1992, FIFRA provides the basic framework for the registration and use of all pesticides, as well as the monitoring and enforcement of pesticide regulation. The following are some of the key provisions of FIFRA:

1. Any pesticide sold or used in the United States must be registered with the EPA according to criteria and procedures set up by the Agency.
2. The Act establishes the categories of “general use” and “restricted use” pesticides, with general use products available to the general public, while restricted use requires specific knowledge and training.
3. The Act sets the requirements for those engaged in “commercial application” to be certified and qualified as such.
4. “Unlawful acts” and penalties are specified as they relate to pesticide use. The most relevant of these is Section 12 (a) (2) (G) “It shall be unlawful for any person to use any registered pesticide in a manner inconsistent with its labeling.”
5. FIFRA also sets up a partnership with the States for implementation of the Act.

It is essential to understand the role and importance of State pesticide authorities for the implementation of FIFRA. Pesticide regulations and even individual product labels may not be easy to interpret or understand. It is essential for pesticide applicators, including nursery managers, to develop a working relationship with their State regulatory authority. State authorities can provide invaluable assistance when seeking a label interpretation for the use of a particular product. In addition, States have the authority through Section 24(c) of FIFRA to “provide registration for additional uses of federally registered pesticides.” The assistance of State regulatory authorities using the “24(c)” process has been instrumental in securing the use of certain compounds for nursery management. Finally, nursery managers need to be aware of any training opportunities that State agencies may provide, as well as notices about label or other regulatory changes that may occur.

**The Worker Protection Standard**

The Worker Protection Standard (WPS) was enacted in 1992 and revised in 2015 with the objective of “reducing the risks of illness or injury to workers and handlers resulting from occupational exposures to pesticides used in the production of agricultural plants on agricultural establishments.” The WPS mandates that employers set up protection for two types of employees—agriculture workers and pesticide handlers. It is the responsibility of the employer that “employees are informed about exposure to pesticides,” that “employees are protected from exposures to pesticides,” and that employers mitigate or “address pesticide exposures that employees may experience.” The employer, therefore, carries the burden of meeting the standards of the WPS, which includes posting of application areas, establishment of a Restricted Entry Interval (REI), pesticide safety training for workers and handlers (in a language they can understand), display of the WPS poster, availability of OSHA Safety Data Sheets, and a number of additional requirements. An excellent source of information regarding the WPS is the EPA manual on “How to Comply With the 2015 Revised Worker Protection Standard For Agricultural Pesticides: What Owners and Employers Need To Know,” at pesticideresources.org/wps/htc/htcmanual.pdf. State regulatory authorities and the State Cooperative Extension System are excellent sources of information regarding the WPS and are typically involved in setting up training opportunities for workers and/or handlers.

**Pesticide Storage Facilities**

All nurseries must have proper pesticide storage facilities to protect workers and the environment. The State and Federal regulations regarding pesticide storage facility regulations are variable and constantly evolving. Concerns over contamination of ground water by agricultural chemicals caused by improper storage or mixing have been targeted by Federal and State legislation across the United States (Hawkins and Sumner, 2012). Pesticide storage facilities should be a lock-and-key structure separate from other work stations, with ventilation that operates independent of electrical service. It is very important that the structure have a leak-proof roof, and, where applicable, a possible source of heating and cooling to prevent freezing of liquids, extend the shelf life of pesticides, and maintain readable package labels on the pesticide container. A trap floor or drainage traps to catch and contain spills and rinse water is advisable. Perhaps the most important emphasis is that multi-lingual placards be posted in every area of pesticide storage with “Danger Pesticides” type of warnings. Wash basins, eye-wash stations, and potable water should be available in pesticide storage facilities. To minimize risk of fires (and personal safety), there should be No Smoking signs posted, and pesticides should never be stored in the...
same area as fertilizers (which may be explosive). In the event of a fire, there should be clear indication of the types of chemicals and the hazards fire-safety personnel will be dealing with (i.e., all fires are not extinguished with water). It is highly recommended that a current inventory be maintained of all the pesticides stored in the facility at any given time. Hawkins and Sumner (2012) have provided detailed information for construction of a pesticide facility. Before construction, or to verify the compliance of an existing facility, check with the appropriate State authority.

**Fuel Storage Regulations for Farm and Commercial Operators**

Federal regulations apply to farm and commercial operators, construction companies, fuel distributors, and others, for operators with fuel storage exceeding 1,320 total gallons. Total storage includes gasoline, diesel, motor oils, transmission and hydraulic fluids, solvents and paint thinners, kerosene and fuel oils. The regulations require a spill containment basin of 110 percent of the fuel storage. They also include a tank design that prevents draining in an accident (top fill and withdrawal), barriers to prevent damage from vehicles hitting tanks, overflow prevention, alarms, and signage. Also required is a written spill mitigation plan for these facilities. Storage over 10,000 gallons require this plan be written by a licensed professional engineer. A detailed publication of these regulations can be found at the University of Tennessee website (Hawkins, 2010): https://utextension.tennessee.edu/publications/Documents/W250.pdf.

**Sales and Marketing**

There is much truth in the statement “Anybody can grow a plant, it’s selling it that’s the challenge.” Over time, a reputable nursery will build a customer base generating repeat business. However, for newer nurseries, connecting with those needing quality seedlings can be quite a challenge. Nurseries should establish membership and contact with State/regional forestry/nursery associations that may provide sales contacts. Also, attending and/or exhibiting at regional tradeshows put on by forestry/nursery associations is a strong marketing tool and will possibly increase sales, but more importantly, this will tell others about your nursery and products. Most nurseries prepare a standard, printed price list for postal delivery and one-on-one distribution, and most also have a website for providing online information and pricing for customers.

**Shipping**

Hardwood seedlings are provided to the customer in two ways: picked up at the nursery by the customer or his agent, or shipped to a location designated by the customer. For customers who request their seedlings be shipped by truck (either refrigerated or nonrefrigerated), a nursery will need to establish contacts with either a trucking broker that handles many independent carriers or a dedicated trucking line. Trucking lines or trucking brokers near a nursery can generally be found online. Most loads of hardwood trees shipped by a nursery will not fill a truck and may require hardwood bundles or boxes be palletized.

For all seedlings leaving the nursery, a shipping ticket should accompany the order and be provided to the person picking up the seedlings with a copy being retained by the nursery. The shipping ticket should contain certain minimum information:

- Date of shipping
- Customer name
- Address for shipment
- Description of each species of seedlings and quantity of each.

Although this is the minimum information required, providing some additional facts on the shipping ticket may help if there are problems with the seedlings after they leave the nursery.

- How were the seedlings picked up? Were they picked up in a pickup truck? A covered or uncovered trailer? Were they covered with a tarp? Were they picked up in a refrigerated or a nonrefrigerated van?
- Were the seedling bundles or boxes stacked directly on one another or stacked to allow air flow between bundles or boxes?
- What were the weather conditions (including approximate air temperature) when they were picked up?
- If a refrigerated transport was used, what instructions were given to the driver as to the proper temperature to maintain and hours of operation?

**Plant Inspection and Certificates**

Nurseries growing plant material are subject to annual inspection by the State Agriculture Office or Commissioner of Agriculture and Industries Agency before shipment from the nursery. Each State has regulatory authority to protect the agricultural enterprises of that State from the spread of plant and animal species deemed injurious to its agricultural sector. Federal law, administered by the Animal and Plant Health Inspection Service of the U.S. Department of Agriculture, is responsible for interstate shipment regulations, as well as the import and export of plant materials. The Federal program is administered in partnership with State regulatory
authorities. Plant health inspections must be conducted, and phytosanitary certificates issued for the shipment of nursery stock within and into any State, indicating the crop is free of noxious and unwanted pests, such as fire ants, cogon grass, and other unwelcome hitchhikers. In the case of Alabama, for example, nursery stock subject to this inspection “includes all plants, trees, shrubs, vines, cuttings, and grafts, scions and buds grown or kept for or capable of propagation, distribution or sale,” and “no inspection certificate shall be issued for the sale, offering for sale or movement of any nursery stock until the stock in question shall have been inspected by the Commissioner and found to be apparently free from seriously injurious plant pests” (ADAI, 2011). Each box, bundle, or package of nursery stock moved from State to State must have a valid official tag bearing a copy of the certificate of inspection and a seal of a State authority from the State of origin conspicuously attached, or an inspection tag of the U.S. Department of Agriculture. Shipments of stock not thus tagged shall be liable to confiscation. It is essential, therefore, that nursery managers work with their State authorities to understand the inspection process, and the requirements necessary for a successful inspection as well as certificate display and recordkeeping. A good source of information may be found on the website of the National Plant Board (http://nationalplantboard.org/), with a current listing of State authorities as well as regulations and other pertinent information.

Recordkeeping

Every nursery is required to maintain certain records. First, of course, are financial records so that taxes can be appropriately filed with the Internal Revenue Service. Pesticide records must be made within 14 days of application and maintained for at least 2 years. The USDA provides helpful guidelines and forms for federally required records: https://www.ams.usda.gov/rules-regulations/pesticide-records. The EPA also requires detailed records be maintained for nurseries that conduct soil fumigation which can be found on the Soil Fumigant Toolbox website: https://www.epa.gov/soil-fumigants. Nurseries should consult their State Department of Agriculture to identify other specific record requirements.

In addition, OSHA requires stringent reporting of death and hospitalization of workers injured in connection to employment. A log of injuries and posting of this log is also required. All employers must keep records of hours worked and pay records of all nonexempt employees. The addition of H2A and H2B greatly increases the recordkeeping requirements and most employers must keep these records for at least 3 years.

References


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Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA’s TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at How to File a Program Discrimination Complaint and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov.

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