

STATEMENT OF WORK

2018 COMPETING VEGETATION REMOVAL PROJECT BASAL SPRAY

BUREAU OF FORESTRY TUSCARORA STATE FOREST (Perry, Juniata, Mifflin and Huntington Counties)

A. SCOPE OF WORK:

The Pennsylvania Department of Conservation and Natural Resources (DCNR), Bureau of Forestry, Tuscarora State Forest, requires the services of a contractor to provide a basal spray application of herbicide in specific forested areas of the Tuscarora State Forest to aid in the establishment of stands of high-value trees by eliminating competing understory vegetation.

The services shall include, but not limited to, the furnishing of all materials, herbicides, labor, supervision, tools, and equipment required to apply the herbicides as per these specifications.

This contract requires the contractor to provide the herbicide and its cost must be included in the per-acre bid.

Any questions concerning the technical aspects of this contract should be directed to William Devore, Forester, at 717-536-3191 or e-mail at wdevore@pa.gov, Monday through Thursday between 7:00 a.m. and 4:00 p.m. Questions regarding the bidding or contracting procedures should be directed to Nancy Weibley at 717-783-2566.

B. PROJECT LOCATIONS:

The Bureau of Forestry estimates a total of 438 acres for treatment, consisting of the following six (6) blocks:

Block 1: This spray block consists of 39 acres located in Northeast Madison Township, Perry County. From Kistler, travel north on state route 850 for 3.5 miles to Little Valley Road; the spray block is located along route 850. The block is marked with blue bands.

Block 2: This spray block consists of 167 acres located in Milford Township, Juniata County. From Mifflin, travel north on State Route 333 for 4.2 miles then make a left onto Vincent Tram Road. Go through the gate and proceed 300 feet until the blue bands are reached. The spray block is located on the north side of Vincent Tram Road until the end of the drivable road, then the boundary line follows the state forest boundary line. The block is marked with blue bands.

Block 3: This spray block consists of 88 acres located in Tuscarora Township, Juniata County. From Mifflin, turn onto East Licking Creek Road (which turns into East Licking Creek Drive on State Forest) for 13.8 miles. Turn right onto Spectacle Gap road for 0.35 miles; then turn onto Pine Ridge Road for 2.5 miles. Stay to the left at the Y-intersection and follow Steltzer Road for 0.5 miles. At the next Y-intersection stay left onto Spruce Gap Haul Road for 0.2 miles. The block will be located south of Spruce Gap Haul Road. The block is marked with blue bands.

Block 4: This spray block consists of 32 acres located in Tuscarora Township, Juniata County. From Mifflin, turn onto East Licking Creek Road (which turns into East Licking Creek Drive on State Forest) for 13.8 miles. Turn right onto Spectacle Gap road for 0.35 miles; then turn onto Pine Ridge Road for 2.5 miles. Stay to the left at the Y-intersection and follow Steltzer Road for 0.5 miles. At the next Y-intersection stay left onto Spruce Gap Haul Road for 1.7 miles. The block will be located on both sides of Spruce Gap Haul Road. The block is marked with blue bands.

Block 5: This spray block consists of 53 acres located in Bratton Township, Mifflin County. From Mifflin, turn onto East Licking Creek Road (which turns into East Licking Creek Drive on State Forest) for 19.1

miles. The block is located across from McVeytown Road on the south side of Licking Creek Drive. The block is marked with blue bands.

Block 6: This spray block consists of 59 acres located in Shirley Township, Huntington County. From Mount Union turn onto State Route 103 for 3.3 miles. Turn right onto Germany Valley Road for 0.2 miles; then turn right onto Blacklog Mountain Road for 3.2 miles. Turn left onto Blacklog Bench Road for 2.3 miles. The block is located on the north side of Blacklog Bench Road. The block is marked with blue bands.

Maps of the treatment areas are attached.

C. SITE INSPECTION:

A site inspection is highly recommended. A tour of the treatment blocks will be given on Wednesday, December 13, 2017 at 9:00 a.m. Prospective bidders should meet at the Tuscarora State Forest District Office, 4455 Big Spring Road, Blain, PA 17006. The district office is located five (5) miles west of Blain, Pennsylvania, along PA Route 274. William Devore will conduct the tour.

D. CONTRACTOR QUALIFICATIONS:

Prospective bidder must be a Licensed Pesticide Applicator currently licensed with the Commonwealth and have an office(s), maintenance facilities, equipment, employees, and qualified equipment operators and mechanics, and have tools, equipment, and spare parts for the make and type of equipment indicated in these specifications.

E. CONTRACT ADMINISTRATIVE REQUIREMENTS:

All contracts must be completed by the termination date. The Bureau of Forestry reserves the right to evaluate the proposed spray operation, including but not limited to equipment operators, spray equipment and operating plan, and reject any part of the operation that, in the Bureau of Forestry's said opinion, will result in unsatisfactory performance.

F. CONTRACT TERM:

The contract shall commence on June 1, 2018, and terminate on September 15, 2018. The service delivery dates may vary, but cannot exceed September 15, 2018. The contractor must notify the Bureau of Forestry seven (7) days prior to the start of operations. No extensions will be given under any circumstances.

G. DEPARTMENT PERSONNEL:

1. **PERSONNEL** - The Bureau of Forestry will furnish personnel to supervise and direct the spray operation in the following capacities:

a. Program Supervisor - The Resource Assistant District Forester, Stephen Wacker, in the Tuscarora State Forest, is responsible for the overall operation of the vegetation control program and represents the Bureau of Forestry in settling minor contractual matters. This person is responsible for coordinating the activities of all people working on the program within a forest district and communicating with the contractor's project supervisor concerning any operational problems or changes in plans.

b. Field Contract Coordinator - These persons are Forest District personnel who serve as the Bureau of Forestry's field liaison with the contractor and are responsible for reviewing and approving/disapproving the spraying operations plan, verifying calibration of all spray equipment, verifying acceptable spraying conditions, and conducting quality control checks on the spray equipment and application during the spraying operations.

H. GENERAL CONTRACT TASKS:

1. **PURPOSE** - It is the purpose and intent of this document to provide specifications for herbicide(s), equipment, application, and other operational requirements necessary for a properly prepared and

executed contract and for securing proper equipment, dispersal systems, service facilities, qualified ground personnel, and qualified equipment operators capable of making a proper application of herbicide and performing necessary related functions.

2. **ACREAGE** - The Bureau of Forestry has 6 blocks totaling 438 acres for treatment in this contract. The treatment area consists of stands set to receive timber harvests to stimulate desired regeneration.
3. **START AND COMPLETION DATES** - All blocks must be completed by September 15, 2018. The contract shall commence upon June 1, 2018, and terminate on September 15, 2018.
4. **RECALL** - The Contractor may be recalled to treat any area(s) or tree(s) that were missed or to retreat area(s) because of faulty application, wash-off, or inadequate herbicide effectiveness. The Bureau of Forestry will resolve any disputes between the Contractor and the Bureau of Forestry. Recall spraying and re-spraying resulting from misses and faulty application will be at the Contractor's expense. The Contractor will be required to treat, without any additional compensation, areas not treated due to skips, faulty application or equipment limitations that were not immediately apparent after initial application. The Program Supervisor will make this decision three (3) weeks after the initial application or three (3) weeks following bud break and will transmit a final written decision to the Contractor with the exact locations and time frames of the areas that must be retreated. Thereafter, the Contractor will be required to complete the re-treatment by the date specified in the Program Supervisor's letter.
5. **DAMAGE TO COMMONWEALTH PROPERTY** - The contractor shall be responsible for any damage to Commonwealth property resulting from the improper use of equipment for this spray operation. The contractor will be given one (1) written warning that damage is becoming excessive, and if the action continues damages will be assessed.
 - a. **Timber Damages** - When, in the opinion of the Program Supervisor, damage to the residual stand becomes excessive, the contractor shall pay the Commonwealth a fair base current value determined by the Program Supervisor per unit of volume. If this value for damage due to contractor's carelessness or negligence is less than \$25.00 per tree, then a minimum charge of \$25.00 per tree will be made whether the tree is commercial, non-commercial, merchantable or non-merchantable.
 - b. **State Forest Facilities** - Contractor shall immediately repair, in a manner which meets with the approval of the Program Supervisor, any damage to State Forest roads and/or other facilities, including camp access roads, resulting from the contractor's use for this spray operation. General wear and tear is accepted. The Program Supervisor may notify the contractor in writing to temporarily discontinue use of any of the above, whenever in their opinion such action is necessary to prevent serious damage.
6. **OPERATIONAL REPORT** - A separate report on the contractor's designated personnel and equipment to be used on the project must be submitted to the Program Supervisor seven (7) days prior to the beginning of the spray operation.
7. **REPORT** - The report must be formatted and include all information as follows:

Purchase Order Number:

Contractor:

Name of Contractor
 Name of President or Owner (specify)
 Address
 Telephone Number

Subcontractor(s): (If any)

Name of Subcontractor(s)
 Name of President or Owner(s) (specify)
 Address(s)
 Telephone Number(s)

On-Site Project Supervisor:

Name(s)
Address(s)
Telephone(s)

Person Holding Pesticide Applicators License(s)

Name(s)

Spray Equipment Operator(s)

Name(s)

Garlon 4 Formulation:

Trade Name

Diluents:

8. **Daily Application Records** - Upon completion of each individual spray block, a copy of the application records for each day of work must be provided for the Program Supervisor. These include: the BU number, the names of applicators with license numbers, the EPA number of actual brand of pesticide applied and rate of mixture, the brand of diluents and rate, the marker dye and/or surfactants used, the total amount of mix applied each day, and the area that was covered each day.

I. INDIVIDUAL CONTRACT SPECIFICATIONS:

1. SERVICE/BID DOCUMENT CONTRACT

- a. Townships/County Involved: Bratton Township – Mifflin County; Northeast Madison Townships – Perry County; Tuscarora and Milford Township – Juniata County; Shirley Township – Huntingdon County.
- b. Forest District: Tuscarora Forest District #3
- c. Type of Areas to Be Treated: State Forest
- d. Total Acres: 438 acres
- e. Estimated Starting Date: June 1, 2018.
- f. Estimated Completion Time: Project must be completed by September 15, 2018.
- g. Herbicides: Blocks 1, 2, 3, 4, 5, and 6 are to be treated with spray equipment and will have the following mix applied: Garlon 4 [(3, 5, 6-trichloro-2-pyridinyl) oxy] acetic acid, butoxy ethyl ester] diluted in oil or an oil based liquid at a 20 percent dilution rate, or comparable herbicide mixture rate and product at the Bureau of Forestry's approval.
- h. Diluents: Must use environmentally safe diluents with a colored basal oil dye that **clearly defines that a stem has been treated**. No kerosene, diesel fuel, or by-product, thereof may be used as the diluents. The diluents may be mineral oil or equivalent. Water may be used only as a diluent for the glyphosate being applied with the stem injection method (hack-and-squirt).
- i. **Description of species to be treated:**

Blocks 1,2, 3, 4, 5, and 6.

All striped maple, paulownia, ailanthus and witch hazel stems greater than or equal to 2 feet tall will be treated with a basal bark application in accordance with label directions. Also, all black birch, ironwood, and red maple stems greater than or equal to 0.5 inch in diameter at DBH and less than or equal to 5 inches in diameter at DBH will be treated with a basal bark application in accordance with label directions. This method requires that the lower 12" to 15" of the stem be wetted with the herbicide mixture. The entire bark surface in the target area must be thoroughly wetted.

J. OBLIGATIONS OF THE DEPARTMENT:

1. **MAPS** - The Bureau of Forestry will supply, for use by the Contractor, copies of maps on which the areas to be treated have been delineated. The Bureau of Forestry will also supply for operational purposes, copies of forest district maps.

K. OBLIGATIONS OF THE CONTRACTOR:

1. **GENERAL** - The Contractor is obligated to furnish spray equipment, spray materials, support equipment, and personnel necessary to produce an herbicide application in accordance with the Invitation for Bid (IFB), and contract specifications. Other sections in these contract specifications give more specific information on the equipment and personnel required. **The Contractor maintains responsibility for an entire contract even if another organization is providing part of the equipment and personnel.**
2. **PESTICIDE APPLICATION BUSINESS LICENSE** - The Contractor must show proof of a valid Pesticide Application Business License issued by the Pennsylvania Department of Agriculture (PADA), in the category appropriate for ground spraying of forests.
3. **PROOF OF INSURANCE** - The Contractor must provide proof of insurance as specified in the Terms and Conditions for equipment owned, leased, rented, subcontracted, or otherwise utilized by the Contractor and for all personnel hired, subcontracted, or otherwise employed by the Contractor.
4. **SPRAY MATERIALS** - The Contractor is responsible for the purchase of the herbicide and any diluents used in this project. Specific details on herbicides and diluents are given in Section N.
5. **START DATE** - The Contractor must notify the Program Supervisor seven (7) days prior to the beginning of application.
6. **MAINTENANCE** - The Contractor must maintain a readily available on-site inventory of commonly needed spare parts and spare equipment including, but not limited to, pumps, pump seals, and other components to provide current maintenance on the spray system and equipment, the mixing and pumping system, the support trucks, and the storage tanks, and to provide for immediate replacement of critically needed parts and equipment. Routine maintenance must be conducted only at times that will not interfere with the spray operation. Care must be taken at all times to prevent leakage of spray material.
7. **SECURITY** - Guard service for the spray equipment and/or support equipment is the responsibility of the Contractor.
8. **FIELD EXPENSES AND TRANSPORTATION** - Costs incurred in the operation and maintenance of all contractor equipment are the responsibility of the contractor.
9. **SPILL CLEANUP EXPENSES** - The Contractor is responsible for all cleanup activity and costs resulting from any contamination caused by the accidental or intentional spilling, leakage, or dumping of herbicide, fuel, oil, or any other contaminant from contractor supplied equipment.
10. **SAFETY** - The Contractor is required to conduct all operations in a safe manner. The contractor must provide essential safety equipment including, but not limited to, properly sized and coded fire extinguishers and spill-containment materials and supplies.

L. CONTRACTOR PERSONNEL:

1. **PROJECT SUPERVISOR** - The Contractor must designate one of its personnel to serve as the on-site project supervisor and to represent the company in all contractual matters that require prompt attention. This person must be familiar with all equipment being used and, as necessary, must be certified or registered as required by the Pennsylvania Pesticide Control Act rules and regulations of the Pennsylvania Department of Agriculture. If the project involves the simultaneous spraying of two spray blocks, the project supervisor will not be assigned to regularly operate spray equipment or serve as ground support for any equipment.
2. **GROUND SUPPORT PERSONNEL** - The Contractor must supply properly qualified, trained and experienced ground support personnel, unless otherwise specified in writing by the Program Supervisor, to drive all necessary support vehicles, handle and mix herbicides, help apply the herbicide solution, operate and maintain the equipment used to transfer and mix herbicides, and properly fuel, service, and maintain each piece of spray equipment. Providing people with no training or no prior experience is not permitted. All ground personnel involved with the mixing of herbicide must be supervised, certified, or registered as required by the Pennsylvania Pesticide Control Act rules and regulations of the Pennsylvania Department of Agriculture.
3. **SPRAY EQUIPMENT OPERATORS** -
 - a. **Qualifications** - The Contractor must provide equipment operators that are qualified to operate the spray equipment specified in the bid in a safe and efficient manner.
 - b. **Spray Equipment Operator Protective Gear** - All spray equipment operators and ground personnel must wear protective gear provided by the Contractor as specified by the herbicide label requirements.

M. APPLICATION SPECIFICATIONS, CONDITIONS, AND RESTRICTIONS:

1. **SAFETY** - The Bureau of Forestry and Contractor personnel are required to conduct themselves in a safe manner at all times. The contractor must provide spray equipment suitable for the safe application of herbicide on all types of terrain encountered on the contract.
2. **MARKING** - The boundary of all blocks is marked with a blue band.
3. **WATERWAYS AND SPRINGS** - The application of herbicides within 30 feet of seasonal springs or drainages is prohibited. It will be the Contractor's duty to be aware of and identify these drainages, and make sure no herbicides are applied within 30 feet from them.

N. HERBICIDES AND ADJUVANTS:

1. **PURCHASING, STORAGE, AND TRANSPORTATION** - The Contractor must purchase the herbicide used on this project, pay all applicable sales and use taxes, and arrange for delivery of the product to a suitable site where it will be secure and protected from damage. The Contractor must assure that adequate supplies of herbicide are strategically located in the contract area to assure an efficient operation. The contractor must also assure that its personnel and Bureau of Forestry personnel are aware of the locations of these supplies.

Commonwealth property may be used to store spray material and equipment if prior arrangements are made with the District Forester.

The Contractor is also responsible for handling and transporting the herbicide from the storage site to the treatment area.

2. **MSDS** - The Contractor must keep a copy of the Material Safety Data Sheet (MSDS) available on site throughout the course of the project for any herbicide or other materials requiring an MSDS which are supplied by the manufacturer for the project.

3. **ACCEPTABLE GARLON 4 FORMULATIONS** - Areas to be treated with spray equipment will have the following mix applied: Garlon 4 [(3,5,6-trichloro-2-pyridinyl) oxy] acetic acid, butoxy ethyl ester] diluted in oil or an oil based liquid at a 20 percent dilution rate.
4. **DILUENTS** - Must use an environmentally safe diluent. No kerosene, diesel fuel, or by-product of may be used as the diluent. The diluent may be mineral oil or equivalent.
5. **OPERATIONAL PROBLEMS** - The Contractor must determine what, if any, operational problems exist with any product. These problems may include handling, mixing, storage, transportation, and spraying difficulties. To the best of the Bureau of Forestry's knowledge at this time, no adverse characteristics exist with any of the listed products. It is the contractor's responsibility to insure a trouble-free operation with the material purchased. If a delivered product presents operational problems, it must be immediately replaced.
6. **CONTAINER DISPOSAL** - The Contractor is responsible for the proper disposal of all herbicide and adjuvant containers, as specified on the product label.

7. HERBICIDE MIXING

a. When to Mix - All herbicides must be mixed at the work-site (unless purchased pre-mixed) as needed only in quantities sufficient to keep the spray equipment in operation. The decision to mix herbicide as well as the quantity to mix is the responsibility of the contractor. Material may be required to be mixed in the presence of Bureau of Forestry personnel. It will be at the option of the Program Supervisor if spray material is to be mixed in the presence of Bureau of Forestry personnel. Any material deemed unsuitable must be properly disposed of at the contractor's expense as outlined in the specimen label.

b. Mixing Procedures - All herbicides must be mixed in strict accordance with the herbicide manufacturer's recommendations. Detailed mixing procedures along with allowable storage periods for the mixed herbicide are prepared by the Bureau of Forestry for the formulations used based upon the manufacturer's recommendations, and are given to all personnel involved in herbicide mixing. All herbicide mixtures must be thoroughly mixed if permitted to set eight (8) hours or more.

c. Time Limits on Holding Mixed Herbicide - Mixed material must be sprayed within the following time limits established by the Bureau of Forestry:

1. **Garlon 4** - Mixed batches of Garlon 4 may be sprayed within 8 hours of mixing (unless purchased pre-mixed) without concern as long as the batch is properly re-agitated.

d. Rates, Applications, and Spray Volume - Specifics on the number of applications and application rates for the contract are given in Section 4. Final spray volumes per acre are as follows for all routine spraying:

1. Garlon 4 [(3,5,6-trichloro-2-pyridinyl) oxy] acetic acid, butoxy ethyl ester] diluted in oil or an oil based liquid at a 20 percent dilution rate.
2. Glyphosate: N-(phosphonomethyl) glycine, isopropylamine salt or comparable herbicide mixture diluted in water at 50 percent dilution rate.
3. The herbicides are to be applied to the lower 12-15 inches of the stem to and including the root collar for all stems.
4. In Blocks 1, 2, 3, 4, 5, and 6, enough herbicide is to be applied to the stem to cover the stem. The herbicide is to be applied until runoff at ground line is noticeable. The herbicide will be applied at 0.5 fluid ounces (15 milliliters) per 1 inch diameter stem. Stem diameter is measured at DBH (the diameter at breast height). The amount of herbicide applied to each individual stem will be determined by the actual stem diameter.

8. **SAFETY** - The Contractor must follow all safety procedures that apply to general pesticide handling and to the specific material being used. Persons handling the Garlon 4 and/or glyphosate formulation or the open

containers in which it is packaged, must wear rubber gloves provided by the contractor. Persons must also be wearing long sleeved shirts, long pants, and footwear with socks.

O. BID AWARD:

Bidder must complete and return the following for award of the bid:

1. The electronic Invitation for Bid to be found at www.pasupplierportal.state.pa.us,

The per acre price shall include the cost of herbicides, labor, insurance, and all miscellaneous expenses necessary for the completion of the tasks.

The contractor will NOT be reimbursed via a separate line item for the actual cost of herbicide applied to each spray block. Herbicide costs must be included in the per acre bid price.

Bid will be awarded based on the total sums or all the blocks. In the event of a discrepancy between the unit price and extension of figures, the unit price will prevail.

The contract quantities herein are estimated only and may increase or decrease depending on the needs of the Bureau of Forestry. The Contractor shall be paid at the unit price bid for actual services performed.

Due to budgetary constraints, the Department reserves the right to award any combination of blocks as deemed appropriate if total bid award exceeds available funds.

Note: The Department will only accept out to two (2) decimal points when entering your bid.

P. REFERENCES:

After the bid opening and prior to awarding of the contract, the Department has the right to request references (names, address, and telephone numbers) of similar work performed in the previous two (2) years as proof of qualifications to perform the work involved in this contract.

Q. PAYMENT TERMS:

Payment shall be on a reimbursement basis for actual services performed and will be based on the Bureau of Forestry's GPS surveyed acreage. Payment will be upon satisfactory completion of each project, contingent upon satisfactory completion as determined by field inspection conducted by a Bureau of Forestry representative.

R. INVOICES:

Invoice format shall be in accordance with the IFB – Invitation for Bid. All invoices for this contract MUST either be:

1. Emailed to the following for a Paperless Email Invoice Option:

Email a copy of the correctly executed invoice to: 69180@pa.gov.

For information on the Commonwealth's E-Invoicing Program, visit:
<http://www.budget.pa.gov/Programs/Pages/E-Invoicing.aspx>.

2. Or, mailed to the following address:

Commonwealth of PA – PO Invoice
P.O. Box 69180
Harrisburg, PA 17106

All invoices **MUST** have the purchase order number, project number, as well as your SAP Vendor Number on the invoice. The name and address listed on the purchase order must also be listed on each invoice. Failure to provide this information will result in a delay of payment.

S. RECEIPT AND OPENING OF BIDS:

Bids will be submitted via the PA Supplier Portal, to be found at www.pasupplierportal.state.pa.us. Faxed bids and mailed bids **will not** be accepted.

No responsibility will be attached to any employee of the Department for the premature opening of, or the failure to open, a bid for any reason whatsoever.

T. BID RESULTS:

Bidders can obtain bid results by accessing www.emarketplace.state.pa.us/bidtabs.aspx. The bids will be posted within three (3) business days following the bid opening. The results are the apparent bidders, and all bids are under review until final award of the purchase order.

Attachments: Maps of Contract Areas