PDA - Industrial Hemp Certification Process

(It is recommended that not more than one variety of Industrial Hemp be grown under the management of one grower.)

I. Certification Application

- (1) The Grower shall complete a *Certification Application* form (including field maps) and submit it to Pennsylvania Department of Agriculture (PDA) certification office no later than 21 days after planting, and no later than June 15th.
- (2) All applications <u>must</u> include Varietal descriptions from seed breeder or certified seed supplier, and documentation of certification class (Foundation, or Registered).
- (3) Field Inspections report forms will be generated and sent to respective PDA Regional Inspectors.

II. Field Inspection and THC Sampling

(1) The first inspection should be conducted before female (pistillate) flowers of the inspected crop are receptive and after the formation of male (staminate) flowers before pollen is shed.

PDA inspectors shall contact the grower to confirm the field's location and schedule a time for inspection(s).

(2) The second inspection should be conducted during the receptive stage of the female plants in the inspected field, normally within three weeks of first inspection.

PDA inspectors shall contact the grower to schedule a time for inspection(s).

(3) A harvest notification, from the Grower to PDA certification office, triggers the third inspection (within 10 days of harvest) and sample collection by a PDA inspector.

PDA inspectors shall contact the grower to schedule a time for inspections and sample collection prior to harvest.

- (4) During the inspection, the grower or an authorized representative shall be present at the growing site.
- (5) Inspectors shall be provided with complete and unrestricted access to all industrial hemp, and land for the cultivation.
- (6) The grower shall harvest the seed not more than 10 days following the date of sample collection by PDA.
 - a) Failing to achieve harvest within the 10-day timeframe will trigger a fourth inspection and new samples will be taken and tested. All costs from the fourth inspection will be the responsibility of the grower.
- (7) A copy of the field Inspection forms will be sent to the certification office and the Grower.
- (8) The grower selected laboratory must send lab results to both the certification office (jzook@pa.gov) and the Hemp Program (RA-AGPLHEMP@pa.gov). Following this, the grower will be notified by the certification office of the eligibility of their harvested seed to be approved for certification.
- (9) Harvested seed from form different plots/fields shall not be comingled with other harvests until the THC level test results are known.
- (10)Harvested seed from those fields testing higher than 0.3% THC concentration by dry weight shall be considered non-compliant and must be destroyed.

III. Third Inspection THC Sampling Procedure

- (1) All samples become the property of PDA and are non-returnable.
- (2) Equipment Used:
 - a) Inspection Form,
 - b) Pruning shears,
 - c) Alcohol wipes to clean shears before each sample,
 - d) Paper Sample Bags,
 - e) Stapler
 - f) Sharpie marker to write certification number on bag,
 - g) Maps.
- (3) The material selected for sampling will be determined by PDA, not the grower. Cuttings will be collected to make one representative sample.
 - a) Clip the top 13-20 cm (5-8 inches) of hemp plant's primary stem, including female floral material.
 - b) Take cuttings from at least five* (5) non-adjacent hemp plants within the plot, from different areas representative of the entire plot at the discretion of the inspector.
 - *For lots larger than 5 acres, follow the chart from PDA's Hemp Sampling Protocol for appropriate number of clippings.
 - i) For small or square plots use an "X" pattern for sampling
 - ii) For rectangular or irregular shape plots use a "zig-zag" pattern.
 - c) Place the complete sample in a paper bag.
 - d) Seal the bag by folding over the top once and stapling the bag shut.
 - e) A separate sample must be taken from each lot, or contiguous plot of a single variety.
 - f) Samples shall be secured in a paper bag (to allow for air-drying during transport).
 - g) Label the sample container with a certification number provided by the certification office and a sample number using PDA's hemp sampling protocol format.
 - h) The sample(s) shall be delivered to or shipped to PDA's testing laboratory or the laboratory selected from PDA's registry of approved hemp testing laboratories for testing.

IV. Handling Procedures of THC Samples

- (1) Samples will be delivered to or shipped to PDA's testing laboratory or a laboratory selected from PDA's registry of approved hemp testing laboratories.
- (2) Laboratory should dry and homogenize samples before testing.
- (3) Drying oven will be used when possible, at a temperature not to exceed 100°F.

V. THC Testing

(1) Testing shall be completed by PDA's testing lab; or a laboratory from PDA's registry of

- approved hemp testing laboratories.
- (2) Quantitative determination of Total THC concentrations will be measured using gas chromatography with flame ionization detector (GC-FID) or by high-performance liquid chromatography (HPLC).
- (3) Test results shall be reported to Licensees by PDA or by the selected laboratory.

VI. Post-THC Testing Actions

The THC concentration for certified hemp seed produced in the PDA shall not exceed the 0.3% Total THC concentration by dry weight.

- (1) THC Sample Test Results of less than or equal to 0.3% Total THC concentration by dry weight:
 - a) PDA or the selected laboratory will report results to grower.
 - b) The variety is eligible for certification pending analytical seed testing.
- (2) THC Sample Test Results of greater than 0.3% Total THC concentration by dry weight, but less than 1.0% Total THC concentration by dry weight:
 - a) PDA or the selected laboratory will report results to grower.
 - b) The Licensee is not allowed to transfer an Individual plot's harvest. The seed must remain segregated from other seed and is not eligible for seed certification.
- (3) THC Sample Test Results equal to or greater than 1.0% Total THC concentration by dry weight:
 - a) PDA or the selected laboratory will report results to grower.
 - b) PDA may report to the PA State Police and other law enforcement agencies.
 - c) The variety may be labeled a Prohibited Variety and excluded from the PDA certified seed Program.

VII. Seed Sampling and Analytical Testing

- (1) Grower will contact the certification office when seed is conditioned and the seed product is in its final form identifiable as a seed Lot.
 - a) Seed conditioned separately will be considered a new lot and addressed separately.
- (2) A PDA Inspector will take an official sample of the Lot(s) (\$25.00 per sample)
- (3) The PDA Seed laboratory will conduct analytical seed testing including Noxious Weed exam, purity analysis, and germination analysis on each Lot (\$32.00 fee for complete tests).
 - a) Depending on the analytical seed and THC level testing results the Lot will be considered:
 - i) Does Not Meet Standards
 - ii) Approved Pending Tags
- (4) Lots not meeting the Seed Certification Standards, with ≤ 0.3% THC concentration by dry weight, may be recleaned and resampled additional sampling and testing fees will be applied.

VIII. Final Approval

- (1) Lots meeting Seed Certification Standards will be approved for certification pending the purchase of certification tags.
- (2) Once certifications tags (\$0.12 per tag) have been purchased "Final Approval" will be granted for the Lot and the seed will be considered Certified.