

Mandatory Condition Requirements for Roundup Ready Sugar Beets

Mandatory Conditions/Restrictions Imposed on Root Production Activities

Mandatory conditions imposed on root crop production would be enforced through compliance agreements between APHIS and the sugar beets cooperatives or processors. The conditions include geographic restrictions on where the crop can be grown, surveillance and monitoring requirements, equipment handling procedures, personnel training, reporting, and movement and handling standards. The following mandatory conditions and restrictions will be imposed on H7-1 sugar beets intended for root production via a compliance agreement:

1. Planting of H7-1 sugar beets is not allowed in the state of California, and the following counties in Washington State: Clallam, Clark, Cowlitz, Grays Harbor, Island, Jefferson, King, Kitsap, Lewis, Mason, Pacific, Pierce, San Juan, Skagit, Skamania, Snohomish, Thurston, Wahkiakum, and Whatcom.
2. Root growers shall ensure that root crop fields are surveyed to identify and eliminate any bolters before they produce pollen or set seed. Fields shall be surveyed every 3-4 weeks beginning April 1. Root growers shall ensure that field personnel maintain records of their field observations and removal of bolters. Reports where bolters are not observed must be maintained as well. Root growers shall notify APHIS/BRS within 48 hours after finding bolters, with the location and action taken by the field personnel. Root growers shall maintain all records of inspection and bolter removal and records must be made available to APHIS/BRS and/or to authorized third party inspectors upon request.
3. Third party inspectors procured by beet processors (usually a cooperative) shall randomly choose a statistically representative sample of fields and conduct inspection for bolters. If bolters are identified, field personnel shall be notified immediately and those bolters must be removed. APHIS will provide an inspection form to be used to capture this data.
4. Planting/cultivating/harvesting equipment that might be used in chard/red beet production shall not be used or shared for regulated GE material in the same growing year.
5. Root crop fields shall be monitored for three-year following harvest for volunteers and any volunteer plants must be destroyed. If the same land is used for crop cultivation during the volunteer monitoring period, that crop shall be visually distinct from sugar beets or the fields must be left fallow. Records of observations must be maintained and provided to APHIS/BRS or third party auditors upon request.
6. All root crop growers and field personnel must receive all conditions and restrictions identified in the compliance agreements and must be trained in the all processes and procedures necessary to comply with the terms of the agreement.

7. Root growers shall maintain records of all the activities being carried out under the compliance agreements to demonstrate adherence to the mandatory conditions and restrictions. These records shall be made available to APHIS/BRS and/or to authorized third party inspectors/auditors upon request.

Mandatory Conditions on Importation and Interstate Movements Associated with Root Production

The following mandatory conditions and restrictions would be imposed on the interstate movement and importation of H7-1 seeds and roots associated with root production activities via a compliance agreement:

1. The Responsible party shall ensure that all personnel have received all conditions and restrictions identified in the compliance agreements and are trained in the all processes and procedures necessary to comply with the terms of the agreement.
2. The Responsible party shall maintain records of all the activities being carried out under the compliance agreements to demonstrate adherence to the mandatory conditions and restrictions. These records shall be made available to APHIS/BRS and/or to authorized third party inspectors/auditors upon request.
3. During transport, chain of custody and records shall be maintained. Records shall be made available to APHIS/BRS and/or to authorized third party inspectors/auditors upon request
4. Trucks used for the movement of root crop from field to storage/processing shall be loaded in a manner to minimize loss of beets during transport or equipped with a retaining device.
5. Sugarbeet seeds shall be transported in a sealed plastic bag, envelope, or other suitable container (primary container) to prevent seed loss.
6. The primary container for transporting seeds shall be placed inside a sealed secondary container that is independently capable of preventing spillage or loss of seed during transport.
7. Each set of containers (primary and secondary) for transporting seeds shall then be enclosed in a sturdy outer shipping container constructed of corrugated fiberboard, corrugated cardboard, wood, or other material of equivalent strength. Each container shall clearly identify that the seed contents within shall only be used for the planting of sugar beet root crop.
8. The shipping containers for transporting seeds shall be transported in enclosed trucks or trailers with closed sides.

Mandatory Permit Conditions – Seed Production Activities

Mandatory conditions would be imposed through permit conditions. Those conditions include geographic restrictions, isolation distances, recordkeeping and reporting, movement and handling standards, training, and monitoring. The following mandatory permit conditions would be imposed on plantings of H7-1 sugar beets intended for seed production activities via permit conditions where the seed producer (permit holders) will acknowledge and adhere to these mandatory conditions:

1. Planting of H7-1 sugar beets is not allowed in the state of California and the following counties in Washington State: Clallam, Clark, Cowlitz, Grays Harbor, Island, Jefferson, King, Kitsap, Lewis, Mason, Pacific, Pierce, San Juan, Skagit, Skamania, Snohomish, Thurston, Wahkiakum, and Whatcom.
2. A four-mile separation distance shall be maintained between male *fertile* H7-1 sugar beets and all other commercial *Beta* seed crops (i.e., table beets, Swiss chard) US wide.
3. An inventory of H7-1 male *fertile* planting locations shall be provided to APHIS within two weeks of planting.
4. A four-mile separation distance shall also be maintained between male *sterile* H7-1 sugar beets and all other commercial *Beta* seed crops US wide. During flowering, fields shall be scouted for male sterile H7-1 plants that shed pollen and such plants shall be destroyed.
5. A visual identification system, such as labeling, that accompanies the regulated material (e.g. basic seed, stock seed, stecklings, and commercial seed) throughout the production system, is required.
6. A companion seed-lot based tracking and tracing system that is fully auditable shall be maintained. Records must be retained for five years.
7. Other than non-GE *Beta* seed material used in the production of hybrid-seed, all H7-1 material shall be physically separated from non-regulated material to prevent commingling at all points throughout the production process.
8. Planting, cultivation, and harvesting equipment shall be cleaned to prevent H7-1 stecklings or seed from being physically transferred out of production areas or mixed with non-GE *Beta* material by inadvertent means.
9. All unused H7-1 stecklings shall be treated as regulated articles until devitalized and discarded.
10. All H7-1 seed and steckling material shall be moved in contained transport systems to avoid inadvertent release into the environment. Vehicles or movement containers shall be thoroughly cleaned after transport and any regulated material recovered shall be devitalized.
11. Sexually compatible varieties (e.g. chard/red beet) cannot be planted or produced in the same location (the same field) as H7-1 in the same growing year.

12. Planting/cultivating/harvesting equipment that might be used in chard/red beet seed production shall not be used for regulated GE material in the same growing year.
13. Measures to force same year sprouting of H7-1 seed left in production fields are required. Any seed which sprout from such leftover seed shall be destroyed. Fields shall be monitored for three years and any volunteer beet plants shall be destroyed. If the same land is used for crop cultivation during the three-year volunteer monitoring period, that crop shall be visually distinct from sugar beets or the fields left fallow.
14. A management plan shall be submitted and followed. The management plan will set forth best practices for oversight of the movement, transportation, and confined field production of H7-1 seed. The management plan shall include, but not be limited to, required resources, training of relevant personnel, monitoring of growers, record keeping, and verifying compliance with the permit conditions. The applicant shall also provide the SOPs that will be utilized to conduct the field trials and comply with the permit and permit conditions.
15. No H7-1 seed shall be cleaned or processed in any processing facility that also cleans and processes red beet or Swiss chard seed.
16. Interstate movement of H7-1 sugar beet stecklings and seed may only be authorized with a movement notification or permit consistent with regulations described in 7 CFR 340.
17. The applicant shall ensure that all site cooperators/growers have received the permit conditions and are trained in all the processes and procedures.
18. The applicant shall maintain records of all the activities authorized under the permit to demonstrate adherence to 7 CFR 340, the permit, and the permit conditions. These records shall be made available to APHIS/BRS.