Good agricultural and collection practices and good manufacturing practices for botanical materials

Company Information

Company name			
Street Address			
City/State		**Country**	
Contact name		**Contact phone**	
Contact email		**Company website**	
Botanical material operation	<Describe the scope of the botanical material operation addressed by this form>		

This form is for use in conjunction with Section 7 Post-Harvest Handling. Supporting information for specific elements can be attached to this form.

Post-harvest activities are critical to ensuring the botanical material meets appropriate quality specifications. Temporary storage, sorting and inspection, washing and cleaning, and dehydration are steps commonly applied to the harvested material; these require proper attention in order to prevent degradation and contamination.

This section recommends basic practices to be used on farms of all types; it does not include any specialized requirements established in 21 CFR 112 for covered produce farms.

In most cases, these activities when applied to food crops on a farm are regulated by FDA as farm activities, rather than food processing activities; however, in some cases FDA may consider certain routine farm activities to be food processing subject to food GMPs.

For certain materials, additional steps are required to separate the target plant part. Many harvested materials, especially roots, need to be washed after harvest to remove dirt and soil. Cleaning is also needed to remove any foreign matter that may have been inadvertently mixed in with the harvest.

Many of the plants that are grown or collected for use in food must be properly dried prior to use, and drying of plant materials is often performed by the same individuals and companies that harvest the plants. Drying conditions can either preserve or degrade naturally occurring botanical constituents and can greatly affect the quality of the material. Insufficient drying can result in microbial or mold growth, while either insufficient or excessive drying can result in degradation of organoleptic characteristics and botanical constituents. Adherence to proper dehydration conditions is therefore essential when drying is performed.

PH7 Post-Harvest Handling		**Assessment**[1]			
Element	**Description**	**N/A**	**Meet**	**Partial**	**Deficient**
PH7.1 Handling immediately after harvest					
PH7.1 ii)	Freshly harvested botanicals are handled to avoid compaction.				
Comments:					
PH7.1 iii)	Harvested material is protected from contact with birds, rodents, insects, and other animals, as well as dirt, dung, smoke, and exhaust.				
Comments:					
PH7.1 iv)	The harvested material is protected from exposure to the elements as appropriate.				
Comments:					
PH7.1 v)	The transit time from the point of harvest to the location used for consolidation and cleaning is minimized.				
Comments:					
PH7.1 vi)	Harvested materials brought from diverse locations or collectors to one location for consolidation and cleaning are examined to determine whether the material appears to be generally uniform and acceptable.				
Comments:					
PH7.1 vii)	Multiple harvest lots are consolidated together are assigned a new lot number and records of the consolidation are maintained.				
Comments:					
PH7.1 viii)	Both the temperature and moisture of the harvested material are controlled throughout post-harvest handling as appropriate to prevent degradation.				
Comments:					
PH7.2 Separating the desired plant part					
PH7.2 i-ii)	Any separation of plant parts is performed in accordance with specifications for the botanical material.				
Comments:					
PH7.3 Washing and cleaning					
PH7.3 iii), iv.1-4)	Washing of the botanical material is performed to remove dirt, soil, etc.				
Comments:					
PH7.3 iv.5)	Either before or after washing, the botanical material is inspected for all types of visible foreign matter and sub-standard material, which is removed to an acceptable level.				
Comments:					
PH7.3 v)	Records are kept of the washing and cleaning processes.				

PH7 Post-Harvest Handling		**Assessment[1]**			
Element	**Description**	**N/A**	**Meet**	**Partial**	**Deficient**
Comments:					
PH7.4 Dehydration					
PH7.4 iv.1)	Dehydration is conducted as quickly as possible after the harvested crop is ready for drying.				
Comments:					
PH7.4 iv.2)	Dehydration processes take into consideration whether exposure to light is appropriate.				
Comments:					
PH7.4 iv.3)	Temperatures are controlled at a level that is appropriate for the specific crop.				
Comments:					
PH7.4 iv.4)	Botanical materials that are large or that have a high water content are sliced, chopped, or split into relatively uniform pieces to ensure they dry quickly, thoroughly, and consistently.				
Comments:					
PH7.4 v.1)	Outdoor drying operations are designed with sufficient covering over the dehydrating botanical material (e.g., a net, tarp or roof) to protect against contamination from birds and other flying animals.				
Comments:					
PH7.4 v.2)	Indoor drying operations are designed to ensure that there is sufficient ventilation for airborne moisture to escape.				
Comments:					
PH7.4 v.3)	Adequate air circulation is provided throughout the drying area.				
Comments:					
PH7.4 v.4)	Food grade surfaces are used for dehydration processes.				
Comments:					
PH7.4 v.6)	Adequate ventilation of the heating equipment is provided.				
Comments:					
PH7.4 vi)	Mechanical drying equipment, such as belt, drum, rotary, or oven-tray dryers, is used in accordance with manufacturer instructions and established operating procedures to ensure that quality of the botanical material is maintained.				
Comments:					

PH7 Post-Harvest Handling		**Assessment[1]**			
Element	**Description**	**N/A**	**Meet**	**Partial**	**Deficient**
PH7.4 vii)	The moisture content of the botanical material after drying is tested to ensure conformance to any established specifications.				
Comments:					
PH7.4 viii.1-3)	Records are kept and maintained of the dehydration procedures and the drying performed on botanical materials.				
Comments:					
PH7.4 ix.1-3)	A retention sample is kept of each lot of dehydrated material.				
Comments:					
[1] Assessments are used to indicate the degree of compliance or adherence to the specific element. N/A = This element is not applicable to the operation Meet = Fully compliant or adherent to the element Partial = Greater than 50% compliant to the element Deficient = Less than 50% or no compliance to the element					

I attest that all the information contained in this form is correct to the best of my knowledge.

Signature:_____ Date:_____