SmartLabel User Guide

The purpose of this Users Guide is to provide instructions for entering a pesticide label into the SmartLabel ".xml" format using an "X-form." This document is intended to be used along with the SmartLabel Model document which provides an overview of information and definitions related to the data entry fields.

The SmartLabel is divided into 11 main label sections (see below). These sections include two types of information collected: Label Content and Data Elements (database information). Throughout the following instructions, the user will be guided through: 1) selecting the information from a picklist or selecting "yes"/"no", 2) entering information into a value field (*e.g.,* a number and unit) or a text field, and 3) entering information directly into a text box. In general, the text box format is where the actual label "content" is entered and the other fields are used to populate the data elements. For some fields, more than one selection may be appropriate and the (+) sign is used to indicate where multiple selections/entries for the same data element may be made. It is possible that not all Label Content text boxes nor Data Elements are applicable to the label being entered. If this is the case, leave the text box/field blank. Do not enter information such as: N/A or Not applicable.

The data elements provide for the ability to query, sort, and filter labels. The data elements also provide for the ability to extract specific information concerning the use patterns of the label, such as; application rates, timing, equipment and retreatment intervals.

There are three levels of hierarchy within the SmartLabel: Product, Use Site, and Scenario. Information entered at the Product level is that which applies to whole product, including all use sites and specific application scenarios. Information entered at the Use Site level is that which applies to the whole use site including all specific application scenarios. Information entered at the Scenario level is that which only applies to that specific scenario as defined by the attributes selected.

With the exception of the Directions for Use (Section 7), all information is related to the Product-Level. Within the Directions for Use Section, information may be entered at the Product, Site, and Scenario level. The Product-level Directions for Use information includes general instructions for using the product regardless of Use Site. The Use Site-Level (Section 7.9) includes all information related to a particular Use Site and the Scenario-Level (Section 7.9.7) includes specific information related to the types of applications within a particular Use Site.

SmartLabel Sections

1. Pesticide Category
2. Product Identification
3. Restricted Use Pesticide
4. Ingredient Statement
5. Net Contents or Net weight
6. Precautionary Statements
7. Directions for Use

8.   Limitation of Warranty and Liability
9.   Label or Marketing Claims
10.   Additional Documentation and Labeling
11.   Final Printed Labels

1. **Pesticide Category:** select from picklist [DE_Pesticide_Category_PID]
   The options are "Conventional (RD)", "Antimicrobial (AD)", and "Biopesticide (BPPD)."
   If the product contains an active ingredient (AI) which can be classified as two or more of these options, select the option which most correctly identifies the Division within the Office of Pesticide Programs (OPP) to which the product is assigned.
   If the product contains two or more AIs, select the option for which the highest percentage AI corresponds with.

   1.1. **Pesticide Sub-Category:** select from picklist [DE_Pesticide_Sub-Category_PID]
   Note: This data element only applies if Biopesticides is selected above.

2. **Product Identification:** enter information in text box.
   This content section is for information that generically addresses the product, such as: the paragraph or phrase typically found under the product name that describes the type of product, formulation, its uses, and pests it controls; and company information that appears on the label (e.g. Company Name, address, phone #, establishment number).

   2.1. **Company Name:** enter the company name on file with the Agency in value field.
   Note: this must be the name associated with the Company EPA Number.

   2.2. **Company EPA Number:** enter the 1-6 digit company number in the value field.
   Note: this must be the company number associated with the name entered above.

   2.3. **Product Number:** enter the 1-5 digit number product number in value field. If applying for a new product, type "NEW."

   2.4. **Primary Brand Name:** enter the name of the product in the text field.

   2.5. **Alternate Brand Name (ABN) (+):** enter any other names under which this product may be sold in the text field, and indicate the status as "active" or "inactive" by selecting from the picklist [DE_ABN_Indicator_PID].
   Records any name under which the product is sold that is not the Primary Brand Name. All ABNs which have been used on packaged products since the product's registration must be entered. If ABNs are proposed, they must also be entered.

   2.6. **Pesticide Classification (+):** select from picklist [DE_Pesticide_Classification_PID]
   Classifies the product according to the type of pest targeted and the function of the pesticide against the pest (e.g., fungicide, herbicide, disinfectant).

2.7. **Product Similarity (+):** select similarity type (whether composition or labeling) from picklist [DE_Product_Similarity_PID] and enter EPA Registration Number of related product in value field.
Note: This information may be claimed as confidential, depending on the type of similarity, and not displayed.

2.8. **Form as Packaged:** select from picklist [DE_Form_as_Packaged_PID]
Describes the physical state and attributes of the product as packaged (e.g. a Water Dispersible Granule product is packed as a "granule" which is coded as a solid). Only a single selection can be made.
If the product is a liquid, the registrant must identify the type of liquid: Solution, Suspension, Emulsion, or Gel/Grease/Paste. If the product is a solid, the registrant must identify the type of solid: Granule, Dust/Powder, Crystalline, Solidified Agar, Impregnated Material, Pellet/Tablet/Rodlet/Briquette, or Encapsulation. If the product is packaged as a Gas, select Gas.

2.9. **Form as Applied (+):** select from picklist [DE_Form_as_Applied_PID]
Describes the physical state of the product when applied (e.g. the product may be formulated as a dry flowable (DF) and applied as either a powder or a liquid solution (dissolved in water)).
Multiple selections can be made, but at least one selection is required.

2.10. **Marketing Status:** enter the start and end date in the value field, and select status indicator for each date.
Provides information on when the product is on or off the market under the Primary Brand Name or any of the Alternate Brand Names.

2.11. **User Restrictions:** select from picklist [DE_Restrictions_User_DFU]
Identifies enforceable restrictions regarding who is ALLOWED to apply the product (e.g. veterinarians/physicians, individuals/firms licensed/registered by a state to apply termiticides, USDA APHIS). If a selection is made from this picklist, the intent is for the product to only be applied by licensed, practicing individuals in the group selected. If a product must be applied by a Certified Applicator as a result of the product being classified as a Restricted Use Pesticide, this information will be captured in section 3**.**

3. **Restricted Use Pesticide** (RUP)**:** If this product is classified as an RUP, provide the description associated with that classification found in the label RUP box in this text box. This content section describes why the product is considered an RUP and provides a summary statement of the terms of the restriction (e.g. "Due to Acute Toxicity and Toxicity to Birds and Mammals. For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.").
Note: If the product is not considered an RUP, leave this section blank.

4. **Ingredient Statement:** enter information in text box.
This content section describes the ingredients contained in the product, including: a listing of active/other ingredients, and their respective nominal concentrations (expressed as a

percentage) that when summed equal 100%; any information regarding concentrations of equivalence of the active ingredients (e.g. elemental metallics, acid equivalents, or other moieties); the concentrations of other ingredients that are required to be identified (e.g. petroleum distilates <10% of the formulation); and a conversion factor expressed as pounds active ingredient (or other standard unit) per gallon product, if the product is packaged in liquid form.

4.1. **Percent Active Ingredient Based on (#, unit):** enter the numeric denominator used to calculate the percentage of active ingredient in value field, and select unit from picklist [DE_Units_of_Measure_PID].
Provides the denominator used to calculate the percentage of active ingredient. If the product is a solid, the unit must be pounds. If the product is a liquid, the unit must be gallons. The value can be any whole number equal to or greater than 1. The value entered must equal the sum of values entered below in the amount of substance sections.

4.2. **Ingredient Type (+):** select form picklist [DE_Ingredient_Type_ING]
Must be entered for each ingredient contained in the product. Identifies whether the ingredient subsequently described is Active (4.2.1), Active (equivalence is a basis of strength) (4.2.2), Identified Inert (4.2.3), or Other (Total) (4.2.4).

   4.2.1. *When **Active** is selected: enter the information below. More than one active can be selected.*

      4.2.1.1. **Substance:** select active ingredient from picklist [DE_Ingredients_ING]

         4.2.1.1.1. **Amount of Substance:** enter amount of the above substance in value field, and select unit from picklist [DE_Units_of_Measure_PID]
This value is the numerator, used to calculate the concentration of the ingredient, when divided by the value entered in 4.1. (e.g. if the numerator is 0.5 pounds and the denominator is 1 pound, the concentration is 50%).

   4.2.2. *When **Active (equivalence is basis of strength)** is selected: enter the information below. "Equivalence" is chosen over "Active" if a functional unit of the selected substance is the regulated chemical, such as elemental metallic and acid equivalence. More than one active based on equivalence can be selected.*

      4.2.2.1. **Substance:** select active ingredient from picklist [DE_Ingredients_ING]

         4.2.2.1.1. **Amount of Substance:** enter amount of the above substance in value field, and select unit from picklist [DE_Units_of_Measure_PID]
This value is the numerator, used to calculate the concentration of the ingredient, when divided by the value entered in 4.1. (e.g if the numerator is 0.5 pounds and the denominator is 1 pound, the concentration is 50%).

4.2.2.2. **Equivalence:** select from picklist [DE_Ingredients_ING]
Refers to a portion of functional unit of a chemical (e.g. the substance selected may be 'copper sulfate pentahydrate', but the equivalence selection would be 'copper' to allow for calculations to be made based on the concentration of the functional unit).

    4.2.2.2.1. **Amount of Equivalence:** enter amount of the above substance in value field, and select unit from picklist [DE_Units_of_Measure_PID]
This is the amount of this particular active (equivalence) in the product, and is the numerator, used to calculate the concentration of the ingredient, when divided by the value entered in 4.1. (e.g. if the equivalence numerator is 0.1 pound and the denominator is 1 pound, the concentration is 10%).
Note: the amount of equivalence entered is the amount in the product as a whole, not as part of the selected active.

4.2.3. *When **Identified Inert** is selected: enter the information below. This should only be selected for inert ingredients which are required to be displayed on the label. More than one identified inert can be selected.*

    4.2.3.1. **Substance:** select inert ingredient from picklist [DE_Ingredients_ING]

4.2.4. *When **Other (Total)** is selected: enter the information below. This is selected to describe the total percentage of substances which are not an active, active (equivalence), or identified inert).*

    4.2.4.1. **Amount of Other Substances:** enter amount of the above substance in value field, and select unit from picklist [DE_Units_of_Measure_PID]
This value is the numerator, used to calculate the concentration of the other ingredients, when divided by the value entered in 4.1. (e.g. if the numerator is 0.5 pounds and the denominator is 1 pound, the concentration is 50%). This calculation will ensure the total amounts entered for the composition of the product equals 100%.

4.3. **Expiration Due to Storage Stability:** enter a description of the expiration of the product in the applicable unit of time in the text box.
Note: this is only required if the active ingredient falls below the certified limits over a given time (e.g. "This product expires 1 year from the production date").

5. **Net Contents or Net Weight:** enter information in text box.
This content section defines the contents or weight of the packaged product. If unit packaging is used, the registrant may indicate the number of units in the package and the value and units of the contents or weight of each unit packaging. If unit packaging is not used, the registrant may indicate the value and units of the contents or weight.

6. **Precautionary Statements:** This is a header for multiple content sections of the label that encompass all pertinent precautionary language as specified in part 156 of the CFR. It describes precautionary statements designed to provide the pesticide user with information regarding the toxicity, irritation and sensitization hazards associated with the use of a pesticide, as well as treatment instructions and information to reduce exposure potential. Each of the 12 subsections are added as free text into the appropriate sections except for the Signal Word and Environmental Hazards (data elements) sections which are selected from picklists.

    6.1. **Signal Word:** select from picklist [DE_Signal_Word_PREC]
    A Signal Word is required for all registered pesticide products unless the product meets the criteria of Toxicity Category IV for all routes of exposure. If a signal word is identified in this case, it must be "Caution." The representation of the signal word can vary depending on whether the product requires WPS labeling, or if the product toxicity requires a skull and crossbones to be included. See [DE_Signal_Word_PREC] for definitions of the selections.

    6.2. **Child Hazard Warning (KOOROC):** enter information in text box.
    This content section usually reads "Keep Out of Reach of Children." Sometimes a modified statement may be more appropriate (see CFR Part 156.66 (b)). In those instances, the alternative statement may be entered into the free text box for approval by the Agency.

    6.3. **First Aid Statement:** enter information in text box.
    This content section includes required and optional first aid statements for the four routes of exposure. Starting with the highest toxicity category, enter each route of exposure (e.g. "If Swallowed") and its required language. This section also includes general information used when calling a poison control center, doctor, or National Pesticides Information Center.

    6.4. **Note to Physician:** enter information in text box.
    This content section includes specific medical treatment directions for a medical professional to follow in situations of exposure.

    6.5. **Hazards to Humans and Domestic Animals:** enter information in text box.
    This content section includes the following: "Precautionary Statements", the product's signal word, and statement(s) that describe the particular hazard, route of exposure, and precautions to be taken. These statements are determined by the acute toxicology assessment and must be written verbatim.

    6.6. **Personal Protective Equipment:** enter information in text box.
    This content section lists all of the required personal protective equipment (PPE). This includes requirements for clothing, respiratory protection, and protective eyewear for uses covered under the Worker Protection Standard (WPS).

    6.7. **Engineering Controls Statement:** enter information in text box.

This content section is conditionally required for products that allow reduced PPE when engineering controls are in place. If applicable, add the appropriate text per the regulatory assessment document or acute toxicity profile.

6.8. **User Safety Requirements:** enter information in text box.
This content section includes label language for maintaining PPE and handling contaminated PPE, as well as any specific user safety requirements described in RED documents and other Agency documentation.

6.9. **User Safety Recommendations:** enter information in text box.
This content section is required for all products that qualify for WPS. If applicable, add the statements as bulleted text, as well as any optional language for additional recommendations for the user.

6.10. **Environmental Hazards:** enter information in text box. This content section provides precautionary information on potential hazards to the environment from transport, use, storage, or spill of the product based on environmental fate and toxicity data. These hazards may be to water, soil, air, or to animals or plants. This section may also contain other mandatory environmental label statements (e.g. Aquatic Weed Control Statement, Irrigation Water Statement, Mosquito Control Statement, Endangered Species Bulletins, Point Discharge Statement, and Seed Treatment Statement).

    6.10.1. **Environmental Hazards (Data Elements) (+):** select applicable hazards from picklist [DE_Environmental_Hazard_PREC].
Identifies the different types of hazards that are described in the Environmental Hazards content section of the label. All selected hazards must align with the free text entered into section 6.10. Multiple hazards may be selected.

6.11. **Pollinator Protection Box:** enter information in text box.
This content section is the standardized advisory pollinator protection language and symbols triggered by specific chemicals with certain uses.

6.12. **Physical and Chemical Hazards:** enter information in text box.
This content section includes language and symbols regarding physical or chemical hazards for the product, as well as the various required precautions identified in the product chemistry review.

7. **Directions for Use:** This is a header for a group of content sections and data elements pertaining to the use of the product.

7.1. **Misuse Statement:** enter information in text box.
This content section is prepopulated with "It is a violation of Federal law to use this product in a manner inconsistent with its labeling." Other products may require additional language (e.g. "Do not apply this product in a way that will contact workers or other persons, either directly or through drift."). Refer to section 11-14 of the Label Review Manual for other misuse statements.

7.2. **Pollinator Restrictions:** enter information in text box.

This content section contains standardized restrictions required for pollinator protection. *Note: this section is only required for specific chemicals and uses, and may change depending on the use sites on the label.*

7.3. **Agricultural Use Requirements:** enter information in text box.
This content section is a content section includes all text associated with the Agricultural Use Requirements box, including early entry PPE and Restricted Entry Interval (REI) information. This WPS-required language can be found in CFR 156.206.

7.4. **Non-Agricultural Use Requirements:** enter information in text box.
This content section includes any applicable use requirements that are not within the scope of WPS. Enter the statement, "The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part170)," as well as any entry restrictions, notification requirements, or other statements and instructions that apply to the non-WPS uses on the label. *Note: This section only needs to be entered if the label includes both WPS and non-WPS use sites.*

7.5. **Resistance Management:** enter information in text box.
This content section details precautions, directions, and restrictions related to resistance management of the chemistries of the product and frequently references the IRAC/HRAC/FRAC groups or Integrated Pest Management (IPM) practices.

7.6. **Instructions for Opening Packaging:** enter information in text box.
This content section describes any directions to the users for opening the package, including specific child-resistant packaging instructions.

7.7. **Product Application Instructions:** enter information in text box.
This content section includes any product application instructions that are consistent across all labeled uses. *Note: If the instructions vary for different types of applications then that information will be added in the Instructions for Application Equipment Categories in section 7.7.1.*

    7.7.1. **Instructions for Application Equipment Categories:** This is a header for multiple content sections that describe application equipment specific directions. Label content addressing use site specific applications and rate information must be entered in section 7.9.6 **Use Site Description and Application Instructions**.

        7.7.1.1. **Aerial Application:** enter information in text box.
This content section includes aerial application instructions for the user, including but not limited to dilution rates.

        7.7.1.2. **Ground Application:** enter information in text box.
This content section includes ground application instructions for the user including but not limited to dilution rates.

        7.7.1.3. **Chemigation:** enter information in text box.

This content section includes ground application instructions for the user including but not limited to dilution rates.

7.7.1.4. **Other Application:** enter information in text box.
This content section pertains to any other type of application equipment instructions for the user, including but not limited to dilution rates (e.g. any instructions for using a backpack sprayers or mechanical handgun sprayers). Instructions entered into this section should be general application instructions that pertain to the product.

7.7.2. **Tank Mix and Compatibility Information:** enter information in text box.
This content section includes instructions for diluting and/or mixing the product with other chemicals prior to application. Refer to section 11-22 of the Label Review Manual for more information on what to include in this section.

7.7.3. **Environmental Information:** enter information in text box.
This content section describes use requirements associated with the ambient environmental considerations prior to application of the product. This includes any soil temperature, soil type, or air temperature requirements/recommendations. For example, "The maximum soil temperature at the depth of injection must not exceed 90°F at the beginning of the application."

7.7.4. **Spray Drift Management:** enter information in text box.
This content section includes any mandatory spray drift prevention language, as well as any advisory language that is applicable to the product.

7.7.5. **Other Restrictions:** enter information in text box.
This content section includes all other product level restrictions which do not fit within sections 7.2 to 7.7.4.

7.7.6. **Other Advisory Statements:** enter information in text box.
This content section includes any other advisory language for the product which does not fit into sections 7.2 to 7.7.4. (e.g. "It is recommended that the area be left undisturbed for two to three days to eliminate existing infestations before filling [with dry goods]").

7.8. **Product Level Use Restrictions/Limitations:** This is a header for multiple data elements that that pertain to product-level restrictions. Product level restrictions apply to all use sites and use scenarios. If any use site or scenario is exempt from the restriction, do not include it at this level. Use sections 7.8.1 – 7.8.18 to identify product level restrictions regarding each topic. For each restriction which is identified, you must indicate the label section where the explanation can be found by selecting from the picklist [DE_Section_Names_PID]. *Note: These restrictions apply to the entire label, if a different restriction is specified for use sites or scenarios, then this information must be entered at the Use Site or Scenario level.*

7.8.1. **Application Target (+):** Choose restricted timing from the picklist [DE_Use_Site_-_Target_DFU], identify the section [DE_Section_Names_PID] where the restriction is described.
Identifies any and all applicable product-level restrictions regarding the intended target of the pesticide application (e.g. if the entire product is restricted so that seed treatments are not permitted select "seed or seed pieces" in the picklist).

7.8.2. **Application Timing (+):** Choose restricted timing from the picklist [DE_Timing_DFU], identify the section [DE_Section_Names_PID] where the restriction is described.
Identifies any and all applicable product-level restrictions regarding the intended timing of the pesticide application (e.g. if the entire product is restricted so that treatment during bloom is not permitted select "During Bloom" in the picklist).

7.8.3. **Application Type (+):** Choose restricted application type from the picklist [DE_Application_Type_DFU], identify the section [DE_Section_Names_PID] where the restriction is described.
Identifies any and all applicable product-level restrictions regarding the method in which the product is applied (e.g. if the entire product is restricted so that dip treatment is not permitted select "dip treatment" in the picklist).

7.8.4. **Application Equipment (+):** Choose from the picklist [DE_Application_Equipment], identify the section [DE_Section_Names_PID] where the restriction is described.
Identifies any product-level restrictions regarding the application equipment restricted for the application of the product (e.g. if chemigation is restricted for use of the product then select "Chemigation Irrigation system" in the picklist).

7.8.5. **Geographic (+):** Chose from the picklist [DE_Territory_ID_DFU], identify the section [DE_Section_Names_PID] where the restriction is described.
This identifies any product-level restrictions regarding states or counties within the US where restrictions on the use of the product exist (e.g. if the product cannot be used in Nassau and Suffolk counties in New York State then select "Nassau County" and "Suffolk County" to restrict the use in those areas. Alternatively, if the product is only allowed for application in Hawaii then all other states must be selected (each state must be selected in the picklist) except for Hawaii).

7.8.6. **Rate:** select yes or no, identify the section [DE_Section_Names_PID] where the restriction is described.
Indicates whether there is a rate restriction which applies to the product and or other products containing the same active ingredient.

7.8.7. **ASABE Droplet Size (+):** choose restricted droplet size from picklist [DE_Restrictions_ASABE_DSD_DFU], identify the section [DE_Section_Names_PID] where the restriction is described.

Identifies any and all applicable product-level restrictions regarding the application droplet size according to the ASABE 572 standard (e.g. if the entire product is restricted so that a minimum droplet size of fine to medium was required for application then select "Fine to Medium" in the picklist).

7.8.8. **Buffer Zone (+):** choose area buffer relates to from picklist [DE_Restrictions_Buffered_Area_DFU], and relevant equipment from picklist [DE_Application_Equipment_DFU], then enter distance (range - if applicable) and unit from picklist [DE_Units_of_Measure_PID]. Identify the section [DE_Section_Names_PID] where the restriction is described.
These various inputs are used to quantify (value) the distance (unit) that a particular application (picklist for application equipment) involves a buffer zone from a given area (picklist for buffered area) (e.g. if there is a 100 foot buffer from drinking water wells for injection fumigations then the inputs would be "100" – "100" and "feet" followed by picklist selections of "fumigation injection, via vehicle" and "drinking water well."). If the buffer is dependent on application rate and/or block size (or other factor) enter the range of buffers in the value fields. Buffers must be fully and clearly explained in the appropriate content section of the label.

7.8.9. **Grazing:** select yes or no, identify the section [DE_Section_Names_PID] where the restriction is described.
Indicates whether there is a product-level grazing restriction (e.g. if there is a grazing restriction across the entire product then select "yes").

7.8.10. **GMO:** select yes or no, identify the section [DE_Section_Names_PID] where the restriction is described.
Indicates whether there is a product-level genetically modified organism (GMO) restriction (e.g. if the product is only for use on GMO crops then select "yes" to indicate there is a GMO restriction).

7.8.11. **Maximum Release Height:** enter value and unit from picklist [DE_Units_of_Measure_PID], identify the section [DE_Section_Names_PID] where the restriction is described.
Defines the maximum distance between point of release and the target of the product application that is applicable for the entire product.

7.8.12. **Maximum Wind Speed (mph):** enter value in MPH, identify the section [DE_Section_Names_PID] where the restriction is described.
Defines the restricted range for maximum wind speed values in mph allowed during application of the product consistent across all product directions.

7.8.13. **Pollinator:** select yes or no, identify the section [DE_Section_Names_PID] where the restriction is described.
Indicates whether there is a product-level pollinator restriction.

7.8.14. **Pre-slaughter Interval (PSI) (+):** enter PSI in days in the value field [DE_Section_Names_PID] where the restriction is described.
Indicates whether there is a product-level pre-slaughter interval as a result of direct application to an animal or dietary exposure.

7.8.15. **Rotational Crop:** select yes or no, identify the section [DE_Section_Names_PID] where the restriction is described.
Indicates whether there are any product-level rotational crop restrictions.

7.8.16. **Secondary Manufacturing Restriction:** select yes or no, identify the section [DE_Section_Names_PID] where the restriction is described.
Indicates whether there is a product-level secondary manufacturing restriction. (e.g. "Do not formulate into other end use products").

7.8.17. **Soil Incorporation:** enter value range and unit from picklist [DE_Units_of_Measure_PID], identify the section [DE_Section_Names_PID] where the restriction is described.
Identifies any product-level soil incorporation restrictions. Enter values to define the range of the soil incorporation and the appropriate unit from the unit picklist.

7.8.18. **Soil Type (+):** select restricted soil type from picklist [DE_Restrictions_Soil_Types_DFU], identify the section [DE_Section_Names_PID] where the restriction is described.
Identifies any product-level soil type restrictions.

7.9. **Use Site (+):** Choose use site(s) from picklist [DE_Use_Site_DFU] or [DE_Use_Site_Noncrop_DFU].
For crop use sites, the list includes all crops and crop groups.
For non-crop use sites, the list is comprised of higher level categories.

For the purpose of this model, sites are grouped by the maximum rate at which the product may be applied per year. Each use site is defined by the combination of site attributes that can be applied with the same maximum yearly rate, using the same set of scenarios (as described below). *Note: only one use site may be listed for each maximum rate per year. If two use sites have identical rates, restrictions, and scenarios the entire site should be cloned and edited to capture the second site.*

7.9.1. **Use Site Attributes:** This is a header for multiple data element sections of the label that further define the site listed above. These describe in detail *where* a product can be applied at the maximum rate per year entered above. Multiple site attributes can be entered if ALL subsequent application information applies to all combinations of the attributes. If any of the elements in this section would cause a change in the allowable maximum annual rate, then a new site must be created.

7.9.1.1. **Location of Pesticidal Activity (+):** Choose location(s) from picklist [DE_Use_Site_-_Location_DFU].
Identifies the location of where the pesticide treatment can take place

(e.g., Greenhouse, Agricultural/Farm Premises/Areas, Aquatic areas, Commercial/ Industrial Area, etc).

7.9.1.2. **Geographic Area (Allowed) (+):** Choose location(s) from picklist [DE_Territory_ID_DFU].
Identifies allowed geographic locations at state and county level for this specific Use Site. Only areas where application is allowed should be listed. If all areas are allowed, select "All United States". *Note: Geographic allowances listed at this level must apply to all scenarios listed below. Geographic allowances can be listed at the scenario level as well.*

7.9.2. **Maximum Annual Application Rate [Amount/Unit/Year]:** Enter the maximum amount of product that may be applied to the Use Site, using all use scenarios described below, in a single year. Enter the numerator into the value field and select the unit [DE_Units_of_Measure_PID], enter the denominator into the value field and select the unit [DE_Units_of_Measure_PID] per year.
For the purpose of this model, the maximum rate per year is the main factor that determines what can be entered as a single Use Site.

7.9.2.1. **Maximum Number of Applications per Year:** Enter the maximum number of times the product may be applied to the Use Site, using all scenarios, in a single year, in the value field.

7.9.3. **Pests (+):** Choose pest from picklist [DE_Target_Pest_DFU]
Identifies all pests that are controlled for in this site.

7.9.3.1. **Stage (+):**choose life stage of pest from picklist [DE_Pest_Development_Phase_DFU]
Identifies specific life stage of the pest (e.g. adult, larvae etc)

7.9.3.2. **Action (+):**choose intended action of the pesticide [DE_Pesticide_Action_DFU]
Identifies how the pest is affected by the application of the pesticide (kill, inhibit, repels, etc).

7.9.4. **Food Site Designation (+):** Choose location(s) from picklist [DE_Use_Site_ Food_Relationship_DFU].
There are three possible selections: 1) nonfood; 2) indirect; and 3) direct.
Direct = the pesticide is applied to a food producing site or crop. This includes any application to food products which have received a "non-food determination" from a residue perspective.
Indirect = the pesticide is applied in a location where contact with food residues may occur.
Nonfood = Nonfood crop designation

7.9.5. **Use Site Level Restrictions/Limitations:** This is a header for multiple data element sections of the label that describe site-level restrictions that are consistent

among all scenarios. Use sections 7.9.5.1-7.9.5.18 to identify the presence of a restriction, then provide the corresponding label restriction language in section 7.9.5.19. *Note: These restrictions are applicable to the Use Site and includes all scenarios. If the restriction does not apply to all scenarios, include the restriction at the scenario level for those scenarios to which it applies.*

7.9.5.1. **Mixing Required?**: Select from picklist [DE_Ready_to_Use_DFU] Identifies whether pesticide is ready to use or must be mixed before application.

7.9.5.2. **Pre-Harvest Interval (PHI):** Enter the PHI in days in the value field Identifies the number of days after an application that must pass before harvest can occur on a per Use Site basis.

7.9.5.3. **Re-Entry Interval (REI) (+):** Enter the REI in the value field and select units from picklist [DE_Units_of_Measure_PID] Identifies the amount of time that must pass between application and worker re-entry. Multiple REIs are allowed to identify different REIs based on different activities (e.g. weeding, detassiling, etc).

7.9.5.4. **Application Target (+):** Choose disallowed application targets from picklist [DE_Use_Site_-_Target_DFU] Identifies any Use Site-level restrictions that disallow a specific target of pesticide application (e.g. if there is a restriction so that seed treatments are not permitted for the Use Site select "seed or seed pieces" from the picklist).

7.9.5.5. **Application Timing (+):** Choose disallowed application timings from picklist [DE_Timing_DFU] Identifies any and all applicable site-level restrictions regarding the timing of pesticide application (e.g. if the entire site is restricted so that preharvest application is not permitted select "preharvest" from the picklist).

7.9.5.6. **Application Type (+):** Choose disallowed application types from picklist [DE_Application_Type_DFU] Identifies any and all applicable product-level restrictions regarding the method in which the product is applied (e.g. if the Use Site is restricted so that dip treatment is not permitted select "dip treatment" in the picklist).

7.9.5.7. **Application Equipment (+):** Choose disallowed equipment from picklist [DE_Application_Equipment_DFU] Identifies any site-level restrictions regarding the application equipment restricted for the application of the product (e.g. if chemigation irrigation systems are restricted for use of the product at this Use Site then select "Chemigation Irrigation System" in the picklist).

7.9.5.8. **ASABE Droplet Size (+):** choose allowable droplet size from picklist [DE_Restrictions_ASABE_DSD_DFU]
Identifies any and all applicable Use Site-level restrictions regarding the application droplet size according to the ASABE 572 standard (e.g. if the Use Site is restricted so that a minimum droplet size of fine to medium was required for application then select "Fine to Medium" in the picklist).

7.9.5.9. **Buffer Zone (+):** choose area buffer relates to from picklist [DE_Restrictions_Buffered_Area_DFU], and relevant equipment from picklist [DE_Application_Equipment_DFU], then enter distance (range - if applicable) and unit from picklist [DE_Units_of_Measure_PID].
These various inputs are used to quantify the distance (value, unit) that a particular application (picklist for application equipment) must be from a given area (picklist for buffered area) (e.g. if there is a 100 foot buffer from drinking water wells for injection fumigations, then the inputs would be "100" – "100" and "feet" followed by picklist selections of "fumigation injection, via vehicle" and "drinking water well."). If the buffer is dependent on application rate and/or block size (or other factor) enter the range of buffers in the value fields.

7.9.5.10. **Grazing:** select yes or no
Indicates whether there is a Use Site-level grazing restriction.

7.9.5.11. **Pre-Slaughter Interval (PSI) (+):** enter PSI in days in the value field
Indicates whether there is a Use Site-level pre-slaughter interval as a result of direct application to an animal or dietary exposure.

7.9.5.12. **Maximum Release Height:** enter value and unit
Defines the maximum distance between point of release and the target of the product application that is applicable for the Use Site.

7.9.5.13. **Maximum Wind Speed (mph):** enter value and unit
Defines the restricted range for maximum wind speed values in mph allowed during application to the Use Site.

7.9.5.14. **Pollinator:** select yes or no
Indicates whether there is a Use Site-level pollinator restriction.

7.9.5.15. **Rotational Crop:** select yes or no
Indicates whether there are any Use Site-level rotational crop restrictions.

7.9.5.16. **Soil Incorporation:** enter value range and unit
Identifies any Use Site-level soil incorporation restrictions. Enter values to define the range of the soil incorporation in the value fields and the appropriate unit from the unit picklist [DE_Units_of_Measure_PID].

7.9.5.17. **Soil Type (+):** choose restricted soil types from picklist
[DE_Restrictions_Soil_Types_DFU]
Identifies any scenario-level soil type restrictions.

7.9.5.18. **Secondary Manufacturing Restriction:** select yes or no
Indicates whether there is a product-level secondary manufacturing
restriction. (e.g. "Do not formulate into other end use products")

7.9.5.19. **Explanation of Use Site Level Restrictions/Limitations:** Enter
explanation of Use Site restrictions indicated above

7.9.6. **Use Site Description and Application Instructions:** enter information in text
box
This content section describes all the directions for use associated with the use
site including restrictions and recommendations for the proper use of the
product.

7.9.7. **Scenario (+):** A scenario is a subsection of a Use Site (7.9) that defines a single
application rate and number of applications as a function of the following
attributes: Application Target, Application Timing, Application Type,
Application Equipment, and Geographic Area Allowed.

Multiple scenarios are allowed and may be necessary to describe the varying
application procedures for a single use site. New scenarios are required when
different application procedures have different single application rates or
number of applications, and when the application rate is not true for all
combinations of selected attributes.

There are two approaches for the triggering of a new scenario within a use site
based on rate. The two approaches are dependent on if the pests [sec] listed at
the use site level include public health pests:

For use sites with non-public health pests – a new scenario is required
whenever the maximum value in the **single application rate** [sec] differs.

For use sites which identify public health pests – a new scenario is
required whenever the minimum or maximum value in the **single
application rate** [sec] differs

In either case, multiple selections can be made for each attribute. For the
selections made, all possible combinations of the attributes must be true. If any
combination of attributes is not true, new scenarios must be created to separate
out the scenario attributes. See example:

Example 1:

Scenario #	Application Target	Application Timing	Application Type	Application Equipment	Geographic Area Allowed	Single Application Rate
1	Foliage/Plant; Soil	During bloom; Delayed dormant	Broadcast	Ground boom	All United States	2 lb/acre

Data representation of the Scenario 1 selections:

Application Target	Application Timing	Application Type	Application Equipment	Geographic Area Allowed	Single Application Rate
Foliage/Plant	During bloom	Broadcast	Ground boom	All United States	2 lb/acre
Foliage/Plant	Delayed dormant	Broadcast	Ground boom	All United States	2 lb/acre
Soil	During bloom	Broadcast	Ground boom	All United States	2 lb/acre
Soil	Delayed dormant	Broadcast	Ground boom	All United States	2 lb/acre

The selections for Scenario 1 imply four different lines based on the combinations of the attributes entered.

Example 2:
If the intent is to allow soil treatments during bloom and delayed dormant, but only delayed dormant application to the Foliage/Plant (possibly because of the presence of pollinators during bloom), this scenario would need to be split, despite the similar single application rate. This situation would require two scenarios despite the same single application rate in order to make all possibilities TRUE.

Scenario #	Application Target	Application Timing	Application Type	Application Equipment	Geographic Area Allowed	Single Application Rate
1	Foliage/Plant	Delayed dormant	Broadcast	Ground boom	All United States	2 lb/acre
2	Soil	During bloom; Delayed dormant	Broadcast	Ground boom	All United States	2 lb/acre

Data representation of Scenario 1:

Application Target	Application Timing	Application Type	Application Equipment	Geographic Area Allowed	Single Application Rate
Foliage/Plant	Delayed dormant	Broadcast	Ground boom	All United States	2 lb/acre

Data representation of Scenario 2:

Application Target	Application Timing	Application Type	Equipment	Geographic Area Allowed	Single Application Rate
Soil	During bloom	Broadcast	Ground boom	All United States	2 lb/acre
Soil	Delayed dormant	Broadcast	Ground boom	All United States	2 lb/acre

While most of the rates on labels are presented in terms of a particular pest, the goal of the Scenario is to capture the maximum (and minimum for Public Health Pests) overall rate for the method at a particular use site. The system is flexible in that if all of the rate parameters are identical, then multiple method parameters may be listed as a single Scenario. Likewise, if a label has more complicated application instructions, then additional Scenarios can be added to isolate caveats to the maximum use. This may also include use of the "Geographic Identifier" when rates differ based on geography. Before entering information to define a Scenario, look across application instructions for the use site to determine if there are unique rate parameters. For example, if there are different application rates associated with a pre-plant, soil in-furrow application vs. a post emergent foliar application, then a separate scenario is entered for each.

7.9.7.1. **Single Application Rate:** Enter the nominator use rate range in the value fields and the unit [DE_Units_of_Measure_PID] and the denominator value and the unit [DE_Units_of_Measure_PID].
For use sites which indicate the control of public health pests, enter in a range in the value fields. The low value represents the minimum single application rate and the high value represents the maximum single application rate.
For use sites which do not include the control of public health pests, leave the low value field blank and only enter a number into the high value field which represents the maximum single application rate.

7.9.7.2. **Annual Number of Applications per Scenario:** Enter the number of times the product may be applied using this scenario in a single year in the value field.
For use sites which indicate the control of public health pests, enter in a range in the value fields. The low value represents the minimum number of applications and the high value represents the maximum number of applications.
For use sites which do not include the control of public health pests, leave the low value field blank and only enter a number into the high value field which represents the maximum number of applications.

7.9.7.3. **Maximum Annual Application Rate per Scenario:** Enter the numerator into the value field and select the unit [DE_Units_of_Measure_PID],

enter the denominator into the value field and select the unit
[DE_Units_of_Measure_PID] per year.

7.9.7.4. **Minimum Retreatment Interval (MRI) per Scenario:** Enter the
shortest minimum retreatment interval for the scenario in the value field.

7.9.7.5. **Application Target (+):** Choose from the picklist [DE_Use_Site_-
_Target]
Identifies what is physically being treated in the Scenario (e.g.
commodity, soil, foliar/plant, skin, fur, etc).

7.9.7.6. **Application Type (+):** Choose from the picklist
[DE_Application_Type_DFU]
Identifies the specific type of application in the Scenario (e.g. Broadcast,
Band, Spot treatment, Drench etc.).

7.9.7.7. **Application Timing (+):** Choose from the picklist [DE_Timing_DFU]
Application timing indicates the intended timing based on crop status,
construction status, timing of the pest, and/or time of day

7.9.7.8. **Application Equipment (+):** Choose from the picklist
[DE_Application_Equipment_DFU]
Identifies the type of equipment used to apply the pesticide in the
Scenario (e.g. airblast sprayer, fixed wing, ground boom sprayer, collar,
etc).

7.9.7.9. **Geographic Area Allowed (+):** Choose from picklist
[DE_Territory_ID_DFU].
Identifies ALLOWED geographic areas to which this scenario can be
used. Only areas where application is allowed should be listed. If all areas
are allowed, select "All United States". Note: these geographic areas
must apply to the combination of all attributes
(target/timing/type/equipment) selected in the scenario. If a geographic
allowance applies only to some attributes, a new scenario must be used.

7.9.7.10. **Scenario Level Restrictions/Limitations** is a header for multiple data
element sections of the label that pertain to scenario-level restrictions that
are consistent among all use sites and use scenarios.

7.9.7.10.1. **ASABE Droplet Size (+):** choose restricted droplet size from
picklist [DE_Restrictions_ASABE_DSD_DFU]
Identifies any and all applicable scenario-level restrictions
regarding the application droplet size according to the ASABE
572 standard (e.g. if the scenario is restricted so that a
minimum droplet size of fine to medium was required for
application then select "Fine to Medium" in the picklist).

7.9.7.10.2. **Buffer Zone (+):** choose area buffer relates to from picklist [DE_Restrictions_Buffered_Area_DFU], and relevant equipment from picklist [DE_Application_Equipment_DFU], then enter distance (range - if applicable) and unit from picklist [DE_Units_of_Measure_PID].
These various inputs are used to quantify the distance (value, unit) that a particular application (picklist for application equipment) must be from a given area (picklist for buffered area) (e.g. if there is a 100 foot buffer from drinking water wells for injection fumigations, then the inputs would be "100" – "100" and "feet" followed by picklist selections of "fumigation injection, via vehicle" and "drinking water well."). If the buffer is dependent on application rate and/or block size (or other factor) enter the range of buffers in the value fields.

7.9.7.10.3. **Grazing:** select yes or no
Indicates whether there is a scenario-level grazing restriction (e.g. if there is a grazing restriction for the scenario then select "yes" and add the appropriate restriction information).

7.9.7.10.4. **Maximum Release Height:** enter value and unit from picklist [DE_Units_of_Measure_PID]
Defines the maximum distance between point of release and the target of the product application that is applicable for the scenario.

7.9.7.10.5. **Maximum Wind Speed (mph):** enter value in MPH
Defines the restricted range for maximum wind speed values in mph allowed during application by the scenario.

7.9.7.10.6. **Pollinator:** select yes or no
Indicates whether there is a scenario-level pollinator restriction.

7.9.7.10.7. **Soil Incorporation:** enter value range and unit from picklist [DE_Units_of_Measure_PID]
Identifies any scenario-level soil incorporation restrictions. Enter values to define the range of the soil incorporation and the appropriate unit from the unit picklist.

7.9.7.10.8. **Soil Type (+):** select restricted soil type from picklist [DE_Restrictions_Soil_Types_DFU]
Identifies any scenario-level soil type restrictions.

7.9.7.10.9. **Explanation of Scenario Level Restrictions/Limitations:**
Enter explanation of scenario restrictions indicated above.

7.10. **Storage and Disposal:** enter the storage and disposal instructions for the pesticide and pesticide container in this free text section.

    7.10.1. **Container Type:** enter the type of container used for the product from the picklist. [DE_Container_Type_PID] (e.g. Metal (non-aerosol), 5 gallons or smaller (size <= 5 gal))

8. **Limitation of Warranty and Liability:** enter any language describing the limitation of warranty and liability, and/or terms of use for the product.

9. **Label or Marketing Claims:** enter a comprehensive list of optional language used to market the product or make claims about the effectiveness or characteristics of the product.

    9.1. **Seals and Certifications (+):** enter any third party seals of certification approved for this product from the picklist. [DE_Certifications_and_Seals_PID]
Includes: NOP, OMRI, NSF, Bio-Based, WQP, and others.

        9.1.1. **Seals and Certifications Text:** enter in text associated with any third party seals or certifications which will be displayed on the label (e.g. This certification does not imply enhanced safety or efficacy).

10. **Additional Documentation and Labeling:** enter or upload any additional labeling that accompanies the product.
Includes application manuals, vial/packaging labels, etc.

11. **Final Printed Labels:** upload at least one final printed package label.