
Electronic Confidential Statement of Formulation (eCSF) XML Guide



Environmental Protection Agency

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1 Introduction

The United States Environmental Protection Agency (EPA) Office of Pesticide Programs (OPP) developed the electronic Confidential Statement of Formulation (eCSF) application within the Central Data Exchange's (CDX) Pesticide Submission Portal (PSP). The eCSF application provides pesticide registrants the option to create EPA Form 8570-4 in an Extensible Markup Language (XML) format that can be easily updated and reused by registrants and more efficiently reviewed by EPA. Use of the eCSF application and corresponding XML format is not compulsory at this time.

Please refer to the following resources for additional information:

- [Central Data Exchange](#)
- [Pesticide Submission Portal](#)

1.1 Purpose

This document provides pesticide registrants guidance on how to construct an XML file that is both acceptable for use in the eCSF application and submittable to EPA through PSP.

1.2 Application Support

Assistance is available by contacting the CDX Help Desk (CDXHD) using one of the following options:

- **By Telephone:**

Person-to-person telephone support is available from 8:00 am to 6:00 pm eastern standard time/eastern daylight time (EST/EDT). Call the CDXHD's toll-free line at (888) 890-1995 or +1 (970) 494-5500 for international callers.

- **By Email:**

Send an email to helpdesk@epacdx.net with "Technical Support" in the 'Subject' line.

- **By Chat:**

Select the 'Chat with the CDX Help Desk' link on the '[Contact Us](#)' screen to initiate a live chat with a CDXHD agent.

- **By Contact Form:**

Enter information in the text fields under the 'Contact Form' section of the '[Contact Us](#)' screen.

- **By Website:**

Users can contact the CDXHD from the 'Contact Us' screen at <https://cdx.epa.gov/Contact> and read the help section at <https://cdx.epa.gov/Help>.

2 eCSF XML File Creation

An XML file in the eCSF format may be submitted via PSP regardless of how the file was created. It is highly recommended, but not required, that pesticide registrants utilize the eCSF builder application to ensure the file is properly formatted and validated.

The following subsections detail how to create a complete eCSF XML file.

2.1 File Creation Dos and Don'ts

- Do use the preferred file naming convention of '[EPA Registration Number]_[Basic/Alternate]_[Date Signed].xml'. For example, '98765-1_Basic_10102016.xml'
- Do **not** use "&", "<", and ">" within field values.
- Do use characters in the 'UTF-8' character set. Commonly used characters that are not part of the 'UTF-8' character set include: ™, ®, ©, em dash, and en dash.
- Do use starting and end commands for each XML section.
- Do use starting and end commands for each XML element. The applications use the value between these commands as the data element.
- Do format XML tags exactly as described in the below sections of this document. XML tags are case sensitive and will not be accurately interpreted by eCSF and PSP applications when improperly formatted.
- Do upload outside created XML files into the eCSF application and navigate through all screens to ensure that the XML file is properly formatted and no validation errors are present.

2.2 Preliminary Questions

This section of the XML corresponds to the fields located on the 'Preliminary Questions' screen within the eCSF application.

Tips:

- A <RepackActiveList> section is required to pass validation for 100% repackaged products
- The <ActiveIngredientRepackPdfInfo> tag is used by the eCSF application and is not required to be in a submission

2.2.1 Preliminary Questions XML Tags

XML Tag	Application Field Name or Description	Data Type	Rules and Validations
<PreliminaryQuestions>			
<ProductName>	Product Name - Box 3	String (255)	- Required - Cannot match an existing product name when 'Reg. No./File Symbol - Box 4' (<RegNo>) is null
<NameOfApplicant>	Name of Applicant/Registrant	String (255)	Required
<AddressOfApplicant>			
<AddressLine1>	Address	String (255)	Required
<AddressLine2>	Address Cont.	String (255)	Optional
<City>	City	String (255)	Required
<ProvinceOrState>	State	String (255)	- Required - Must be a value in approved list of states
<Country>	Country	String (255)	- Required - Must be 'United States'
<PostalCodeOrZIP>	ZIP Code	String (255)	- Required - Must be in either the '#####' or '#####-####' format
</AddressOfApplicant>			
<CompanyNumber>	Company #	String (255)	Required
<RegNo>	Reg. No./File Symbol - Box 4	String (255)	- Required when <Repack> is 'True' - Optional when <Repack> is 'False'
<EPABasicFormulation>	EPA Formulation - Box A	- Valid values include: - True - False	Required
<EPAAlternateFormulation>	Alternate Formulation Number	String (255)	- Required when <EPABasicFormulation> is 'False' - Must be an integer
<ProductManagerTeamNumber>	EPA Product Manager/Team	String (255)	Optional

XML Tag	Application Field Name or Description	Data Type	Rules and Validations
	Number - Box 5		
<Repack>	Is this product a 100% Repack?	- Valid values include: - o True - o False	Required
<OriginalProductRegNo>	Registration Number for the Repackaged Product	String (255)	- Required when <Repack> is 'True' - The entered number must be for a registered, active product
<ProductType>	What is the product type?	- Valid values include: - o tga - o manufacturingUseProduct - o ep	Required
<Isp>	Is this an Integrated Systems Product (ISP)?	- Valid values include: - o True - o False	Optional when <ProductType> is 'MUP' and/or when <Repack> is 'True'; otherwise required
<Microbial>	Is product microbial?	- Valid values include: - o True - o False	Optional when <Repack> is 'True'; otherwise required
<FoodUses>	Does product have food uses?	- Valid values include: - o True - o False	Optional when <Repack> is 'True'; otherwise required
<ApplyingForClearanceOfInert>	Applying for Inert Clearance?	- Valid values include: - o True - o False	Optional when <Repack> is 'True'; otherwise required
<RepackInfo>			
<OriginalProductName>	The name of the repackaged product (only displayed on rendered PDF)	String (255)	Required when <Repack> is 'True'
<RepackActiveList>			
<RepackActive>			
<Name>	The chemical name for an Active Ingredient in a repackaged product (only displayed on rendered PDF)	String (255)	At least one <RepackActive> set comprised of <Name> and <Percent> fields is required when <Repack> is 'True'
<Percent>	The percent purity for an Active Ingredient in a repackaged product	String (255)	At least one <RepackActive> set comprised of <Name> and

XML Tag	Application Field Name or Description	Data Type	Rules and Validations
	(only displayed on rendered PDF)		<Percent> fields is required when <Repack> is 'True'
</RepackActive>			
</RepackActiveList>			
</RepackInfo>			
</PreliminaryQuestions>			

Exhibit 2-1: Table of Preliminary Questions XML Tags

2.3 Product Properties

This section of the XML corresponds to the fields located on the 'Product Properties' screen within the eCSF application.

Tips:

- The <ProductProperties> section is not required for 100% repack products (i.e., <Repack> is 'True') and may be excluded from an XML file in that case. The below listed validations assume file is for a non-repack product.

2.3.1 Product Properties XML Tags

XML Tag	Application Field Name or Description	Data Type	Rules/Validation/Format
<ProductProperties>			
<FormulationType>	Formulation Type Code	- Valid values include: - o Solid - o Liquid - o Gas - o Plant Incorporated Protectant	Required
<IsImpregnatedMaterial>	Is this an impregnated material?	- Valid values include: - o True - o False	Required when 'FormulationType' is 'Solid'
<Pressure>	Is the product under pressure?	- Valid values include: - o True - o False	Required when 'FormulationType' is 'Liquid'
<containSubstrate>	Does this product contain substrate/towelette/wipe?	- Valid values include: - o True - o False	Required when 'FormulationType' is 'Liquid'
<TissueType>	Tissue Type	- Valid values include: - o Whole Plant	- Optional - Only applicable when 'FormulationType' is 'Plant'

		- o Leaf - o Kernel (Seed) - o Root - o Other	Incorporated Protectant'
<TissueTypeOther>	Specify Other Tissue Type	• String (255)	• Required when 'TissueType' is 'Other'
<WaterSoluble>	Is this a water soluble package?	• Valid values include: - o True - o False	• Optional • Only applicable when 'FormulationType' is 'Solid' or 'Liquid'
<WeaveCount>	Weave Count	• String (255)	• Required when 'containSubstrate' is 'True'
<WeaveSize>	Weave Size	• String (255)	• Required when 'containSubstrate' is 'True'
<MaterialType>	Material Type	• String (255)	• Required when 'FormulationType' is 'Plant Incorporated Protectant'
<InkType>	Ink Type	• String (255)	• Required when 'FormulationType' is 'Solid' or 'Liquid' and 'WaterSoluble' is 'True'
<FilmType>	Film Type	• String (255)	• Required when 'FormulationType' is 'Solid' or 'Liquid' and 'WaterSoluble' is 'True'
<IsPetCollar>	This product is a pet collar	• Valid values include: - o True - o False	• Optional • Only applicable when 'FormulationType' is 'Solid'
<IsEarTag>	This product is an ear tag	• Valid values include: - o True - o False	• Optional • Only applicable when 'FormulationType' is 'Solid'
<PlasticType>	Plastic Type	• String (255)	• Optional • Only applicable when 'IsPetCollar' and/or 'IsEarTag' is/are 'True'
<Viscosity>	Viscosity	• String (255)	• Optional • Must be a number
<ViscosityUnits>	Viscosity Units	• Valid values include: - o mPa(s) - o 1cP - o 1St - o 1cSt	• Required when <Viscosity> is not null
<DensityNotApplicable>	Check if Density is N/A	• Valid values include: - o True - o False	• Required • Should only be 'True' when <FormulationType> is 'Plant Incorporated Protectant'
<DensityRangeFlag>	Is there a Density range?	• Valid values include: - o True	• Required when <DensityNotApplicable> is 'False'

		o False	
<DensityComments>	Reason Density is N/A	• String (255)	• Required when <DensityNotApplicable> is 'True'
<Density>			
<From>	Used for both the 'Lower Limit' and 'Density' fields (depending on the <DensityRangeFlag> value)	• String (255)	• Required when <DensityNotApplicable> is 'False' • Must be less than the entered density <To> value • Must be a number
<To>	Upper Limit	• String (255)	• Required when <DensityNotApplicable> is 'False' and 'DensityRangeFlag' is 'True' • Must be greater than the entered density <From> value • Must be a number
</Density>			
<DensityUnits>	Density Unit	• Valid values include: - o kilograms per cubic meter (kg/m³) - o grams per cubic centimeter (g/cm³) - o kilograms per liter (kg/L) - o grams per milliliter (g/mL) - o pounds per cubic foot (lb/ft³) - o pounds per US gallon (ppg) - o N/A (Specific Gravity)	• Required when <DensityNotApplicable> is 'False'
<Temperature>	@Temperature	• String (255)	• Required when <DensityNotApplicable> is 'False' • Must be a number
<TemperatureUnits>	Temperature Unit	• Valid options include: - o F - o C	• Required when <DensityNotApplicable> is 'False'
<pHNotApplicable>	Check if pH is N/A	• Valid values include: - o True - o False	• Required
<phRangeComments>	Reason pH is N/A	• String (255)	• Required when <pHNotApplicable> is 'True'
<phRangeFlag>	Is there a pH range?	• Valid values include: - o True - o False	• Required when <pHNotApplicable> is 'False'
<pHRange>			
<From>	Used for both the 'Lower Limit' and 'pH' fields	• String (255)	• Required when

	(depending on the 'phRangeFlag' value)		<pHNotApplicable> is 'False' • Must be between '0' and '14' • Must be less than the entered pH <To> value • Must be a number
<To>	Upper Limit	• String (255)	• Required when <pHNotApplicable> is 'False' and 'Is there a pH range?' is 'True' • Must be between '0' and '14' • Must be greater than the entered pH <From> value • Must be a number
</pHRange>			
<phPhase>	Phase	• Valid values include: - o Neat - o Dispersion - o Emulsion - o Solution	• Optional
<FlashPointApplicable>	Does Flash Point apply?	• Valid values include: - o True - o False	• Required
<FlashPoint>	Flash Point Value	• String (255)	• Required when 'FlashPointApplicable' is 'True' • Must be a number
<FlashPointUnits>	Flash Point Unit	• Valid options include: - o F - o C	• Required when 'FlashPointApplicable' is 'True'
<FlashPointComments>		• String (255)	• Required when 'FlashPointApplicable' is 'False'
<flameExtensionApplicable>	Does Flame Extension apply?	• Valid values include: - o True - o False	• Required
<FlameExtension>	Flame Extension (Inches)	• String (255)	• Required when 'flameExtensionApplicable' is 'True' • Must be a number
<FlameExtensionComments>	Reason Flame Extension is N/A	• String (255)	• Required when 'flameExtensionApplicable' is 'False'
</ProductProperties>			

Exhibit 2-2: Table of Product Properties XML Tags

2.4 Box 2 - Producers and Product Repackaging Sites

This section of the XML corresponds to the fields located on the 'Box 2 - Producers and Product Repackaging Site' screen within the eCSF builder application.

2.4.1 Box 2 - Producers and Product Repackaging Sites XML Tags

XML Tag	Application Field Name or Description	Data Type	Rules/Validation/Format
<Producers>			
<ProducerId>	Unique identifier for a producer or repackaging site. This item is not displayed in the builder application nor the rendered PDF.	• String (255)	• Required
<ProducerName>			•
<AddressLine1>	Address	String (255)	• Required
<AddressLine2>	Address Cont.	String (255)	• Optional
<City>	City	String (255)	• Required
<ProvinceOrState>	State	String (255)	• Required when <Country> is 'United States' • Must be a value in the approved list of states when <Country> is 'United States'
<Country>	Country	String (255)	• Required • Must be a value in the approved list of countries
<PostalCodeOrZIP>	ZIP Code	String (255)	• Required when <Country> is 'United States' • Must be in either the '#####' or '#####-####' format when <Country> is 'United States'
<EstablishmentNumber>		String (255)	•
<Name>		String (255)	•
<PhoneNumber>	Phone Number	String (255)	• Required • Must be in the '(###) ###-####' format
</Producers>			

Exhibit 2-3: Table of Certification of Approving Official XML Tags

2.5 Manufacturing Sites and Component Suppliers

This section of the XML corresponds to the fields located on the 'Box 11 – Manufacturing Sites and Component Suppliers' screen within the eCSF builder application.

Tips:

- 'Manufacturing Site' and 'Component Supplier' entries must be linked to a 'Component' entry using the <RelatedComponents> and <ComponentId> XML tags to be displayed in the PDF rendering.
- At least one (1) 'Manufacturing Site' or 'Component Supplier' (i.e., <SitesAndSuppliers> section) is required for non-repack products. This section is not required for 100% repack products (i.e., <Repack> is 'True') and may be excluded from an XML file in that case. The below listed validations assume file is for a non-repack product.

2.5.1 Manufacturing Sites and Component Suppliers XML Tags

XML Tag	Application Field Name or Description	Data Type	Rules/Validation/Format
<SitesAndSuppliers>			
<SiteSupplierId>	Unique identifier for a site/supplier. This item is not displayed in the builder application nor the rendered PDF	• String (255)	• Required
<SupplierType>	Supplier Type	• Valid values include: o Manufacturing Site o Component Supplier	• Required
<AddressNotApplicable>	Address Not Applicable	• Valid values include: o True o False	• Optional
<AddressNotApplicableJustification>	Reason Why Address is N/A	String (255)	• Required when <AddressNotApplicable> is 'True'
<Name>	Site/Supplier Name	String (255)	• Required
<SitesAndSuppliersAddress>			
<AddressLine1>	Address	• String (255)	• Required when <AddressNotApplicable> is 'False'
<AddressLine2>	Address Cont.	• String (255)	• Optional
<City>	City	• String (255)	• Required when <AddressNotApplicable> is 'False'
<ProvinceOrState>	State	• String (255)	• Required when <Country> is 'United States' and <AddressNotApplicable> is 'False' • Must be a value in the approved list of states when <Country> is 'United States'
<Country>	Country	• String (255)	• Required when <AddressNotApplicable> is

			'False' Must be a value in the approved list of countries
<PostalCodeOrZIP>	ZIP Code	String (255)	- Required when <Country> is 'United States' and <AddressNotApplicable> is 'False' - Must be in either the '#####' or '#####-####' format when <Country> is 'United States'
</SitesAndSuppliersAddress>			
<CompanyCode>			
<RelatedComponents>			
<ComponentId>	Unique identifier for components related to a site/supplier. This item is not displayed in the builder application nor the rendered PDF	String (255)	Must match a corresponding <SiteSupplierId> value
</RelatedComponents>			
<LinkedTradeName>	Used to associate a specific 'Trade Name' for a linked component to a site/supplier	String (255)	
</SitesAndSuppliers>			

Exhibit 2-4: Table of Manufacturing Sites and Component Suppliers XML Tags

2.6 Components

This section of the XML corresponds to the fields located on the 'Preliminary Questions' screen within the eCSF builder application.

Tips:

- 'Manufacturing Site' and 'Component Supplier' entries must be linked to a 'Component' entry using the <RelatedComponents> and <ComponentId> XML tags to be displayed in the PDF rendering.
- At least one (1) component (i.e., <Components> section) is required for non-repack products. This section is not required for 100% repack products (i.e., <Repack> is 'True') and may be excluded from an XML file in that case. The below listed validations assume file is for a non-repack product.

2.6.1 Component XML Tags

XML Tag	Application Field Name or Description	Data Type	Rules/Validation/Format
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<Components>			
<ComponentId>	Unique identifier for a component. This item is not displayed in the builder application nor the rendered PDF		Required
<Active>	Component Type	- Valid values include: - True - False	Required
<Inert>	Component Type	- Valid values include: - True - False	Required
<Impurity>	Component Type	- Valid values include: - True - False	Required
<Dye>	Component Type	- Valid values include: - True - False	Required
<Fragrance>	Component Type	- Valid values include: - True - False	Required
<Fertilizer>	Component Type	- Valid values include: - True - False	Required
<Towelette>	Component Type	- Valid values include: - True - False	Required
<WaterSolublePackagingMaterial>	Component Type	- Valid values include: - True - False	Required
<WaterSolublePackagingInkType>	Component Type	- Valid values include: - True - False	Required
<AlternateActive>	Component Type	- Valid values include: - True - False	- Required - Can only be 'True' when <Active> is also 'True'
<AlternateActiveParent>	Add Alternate Source for		- Required when <AlternateActive> is 'True' - Must match the <ComponentId> for the parent AI

<RegisteredActiveIngredient>	Is this a registered active ingredient?	- Valid values include: - True - False	- Required when <Active> is 'True' - Must be 'True' when <AlternateActive> is 'True'
<RegOrSubNo>	Reg. No. - Box 12		- Required when <RegisteredActiveIngredient> is 'True' - Required when <AlternateActive> is 'True' - Optional when <RegisteredActiveIngredient> is null and <ProductType> is 'tgai' - Optional when <Inert> is 'True'
<CommonName>	Common Name (ISO Proposed or Accepted) - Box 10		- Required when <Towelette>, <WaterSolublePackagingMaterial>, or <WaterSolublePackagingInkType> are 'True' - Optional for all other component types
<ChemicalName>	Chemical Name - Box 10		Required
<OverrideChemicalName>	Override Chemical Name	- Valid values include: - True - False	- Optional when <Active> and <Inert> are 'True' - Not applicable to other component types
<ReasonForChemicalNameOverride>	Reason for Chemical Name Override		Required when <OverrideChemicalName> is 'True'
<pcCode>	PC Code - Box 10		- Optional when <Active> and/or <AlternateActive> is 'True' - Not applicable to other component types
<CASNumber>	CASRN - Box 10		- Required when <Towelette>, <WaterSolublePackagingMaterial>, or <WaterSolublePackagingInkType> are 'True' - Optional for all other component types
<Mixture>	Is this Inert component a mixture?	- Valid values include: - True - False	Required when <Inert> is 'True'
<ContainsNitrogen>	Contains Nitrogen?	- Valid values include: - True - False	Required when <Fertilizer> is 'True'
<Nitrogen>	Maximum Nitrogen Percentage Tested - Box 10		Required when <ContainsNitrogen> is 'True'
<TradeName>	Trade Name - Box 10		- Up to ten (10) may be added per component - Only one (1) may be added to an Inert component when <Mixture> is 'True' - Cannot be duplicated within the same component or across components

			- Required when 'Towelette', <WaterSolublePackagingMaterial>, or <WaterSolublePackagingInkType> are 'True' - Optional when <Active>, 'Inert', <Dye>, <Fragrance>, or <Fertilizer> are 'True'
<Purity>	% Purity - Box 10		- Cannot be zero (0) - Required when <Active>, <Inert>, or <Fertilizer> are 'True' - Optional when <Dye> or <Fragrance> is 'True' - When <AlternateActive> is 'True' the value must equal the <Purity> for the 'AlternateActiveParent' - Must be '100' when <Mixture> is 'True'
<Amount>	Amount - Box 13a		- Cannot be zero (0) - Required when <Active>, <AlternateActive>, 'Inert', <Dye>, <Fragrance>, or <Fertilizer> are 'True' - Optional when <Impurity> is 'True'
<PercentW>	% Weight / Total Weight - Box 13b		- Cannot be zero (0) - Required when <Active>, <AlternateActive>, 'Inert', <Dye>, <Fragrance>, or <Fertilizer> are 'True' - Optional when <Impurity> is 'True' - When <AlternateActive> is 'True' the value must equal the 'PercentW' for the 'AlternateActiveParent'
<NominalPerc>	% Nominal - Box 13b		- Optional when <Active>, <AlternateActive>, <Inert>, <Fragrance>, or <Fertilizer> are 'True' - When <AlternateActive> is 'True' the value must equal the 'NominalPerc' for the 'AlternateActiveParent'
<LCLPerc>	% Lower Certified Limit - Box 14b		- Optional when <Active>, <AlternateActive>, 'Inert', <Dye>, <Fragrance>, or <Fertilizer> are 'True' - When <AlternateActive> is 'True' the value must equal the 'LCLPerc' for the 'AlternateActiveParent'
<LCLPercNominal>	% Lower Certified Limit - Box 14b (Nominal)		Optional when <Active>, <Inert>, <Fragrance>, or <Fertilizer> are 'True'
<UCLPerc>	% Upper Certified Limit - Box 14a		Optional when <Active>, <Inert>, <Fragrance>, or <Fertilizer> are 'True'
<UCLPercNominal>	% Upper Certified Limit - Box 14a (Nominal)		Optional when <Active>, <Inert>, <Fragrance>, or <Fertilizer> are 'True'
<ExpandedCertifiedLimits>	Request Wider Certified Limits	- Valid values include: - o True - o False	Optional when <Active>, 'Inert', <Dye>, <Fragrance>, or <Fertilizer> are 'True'
<CertifiedLimitsJustification>	Justification for Wider Certified		Required when

	Limits		'ExpandedCertifiedLimits' is 'True'
<PurposeInFormulation>	Purpose in Formulation - Box 15		- Required when <Active>, <AlternateActive>, 'Inert', <Dye>, <Fragrance>, '<Fertilizer>', 'Towelette', 'WaterSolublePackagingMaterial', or 'WaterSolublePackagingInkType' is 'True' - Only one value allowed per component - When <Active> or <AlternateActive> is 'True' must be 'Active Ingredient' - When <Dye> is 'True' must be 'Dye/Coloring Agent/Colorant/Pigment' - When <Fragrance> is 'True' must be <Fragrance> - When 'Fertilizer' is 'True' must be <Fertilizer>
<Nano>	Is this component a Nanomaterial?	- Valid values include: - o True - o False	- Required when <Active>, <AlternateActive>, <Inert>, <Impurity>, <Dye>, <Fragrance> is 'True' - When <AlternateActive> is 'True' the value must equal the 'Nano' for the 'AlternateActiveParent'
<CultureCollectionDeposit>	Culture Collection Deposit - Box 10		Optional when <Active> is 'True' and 'Microbial' is 'True'
<Potency>	Potency - Box 10		Optional when <Active> is 'True' and 'Microbial' is 'True'
<Viability>	Viability - Box 10		Optional when <Active> is 'True' and 'Microbial' is 'True'
<OtherInfo>	Other Information		Optional when <Active>, <Inert>, <Impurity>, <Dye>, <Fragrance>, '<Fertilizer>' is 'True'
<SiteSupplierId>	Related Sites & Suppliers		- Used to link a site/supplier to a component - All components in a 'Basic Formulation' product are only allowed to be related to one 'Site/Supplier' - All components must have a related site/supplier except Impurities. - Optional when <ProductType> is 'tgai' - Registered Active components may only be associated with a Component Supplier. (EUP/MP) - Unregistered Active components may only be associated with a single <i>Manufacturing Site</i>. (EUP/MP)
<PrimarySupplierId>	Primary Site/Supplier		- Used to indicate the Site/Supplier that prints to the main form of the PDF rendering. All others print on addendum pages. - Must match a <SiteSupplierId> value for the component - Only one (1) per component allowed

<Blended>	Not displayed	- Valid values include: - o True - o False	Required when <Active> or <AlternateActive> is 'True'
<ChemicalName>	Active Ingredient Name (Blended Chemical List)		Required in Blended Chemical List when <Blended> is 'True'
<PcCode>	Not displayed (Blended Chemical List)		Required in Blended Chemical List when <Blended> is 'True'
<Casrn>	Not displayed (Blended Chemical List)		Required in Blended Chemical List when <Blended> is 'True'
<PercentW>	% Weight / Total Weight - Box 13b (Blended Chemical List)		Required in Blended Chemical List when <Blended> is 'True'
<LowerLimit>	% Lower Certified Limit - Box 14b (Blended Chemical List)		Required in Blended Chemical List when <Blended> is 'True'
<UpperLimit>	% Upper Certified Limit - Box 14a (Blended Chemical List)		Required in Blended Chemical List when <Blended> is 'True'
<OriginalWeight>	Not displayed (Blended Chemical List)		Required in Blended Chemical List when <Blended> is 'True'
<UpperCertifiedLimitExpressed>	% Upper Certified Limit - Expressed (Blended Chemical List)		Required in Blended Chemical List when <Blended> is 'True'
<NominalExpressed>	% Nominal - Expressed (Blended Chemical List)		Required in Blended Chemical List when <Blended> is 'True'
<LowerCertifiedLimitExpressed>	% Lower Certified Limit - Expressed (Blended Chemical List)		Required in Blended Chemical List when <Blended> is 'True'

Exhibit 2-5: Table of Component XML Tags

2.7 Certification of Approving Official

This section of the XML corresponds to the fields located on the 'Certification of Approving Official' screen within the eCSF builder application.

2.7.1 Certification of Approving Official XML Tags

XML Tag	Application Field Name or Description	Data Type	Rules/Validation/Format
<CertificationOfApprovingOfficial>			
PositionTitleOfApprovingOfficial	Position Title - Box 19		Required
NameOfApprovingOfficial	Name - Box 16		Required
Signature	Signature - Box 18		Required
Certification	I certify that all the information contained within this form is true and complete.		Required
<AddressLine1>	Address	String (255)	Required
<AddressLine2>	Address Cont.	String (255)	Optional
<City>	City	String (255)	Required
<ProvinceOrState>	State	String (255)	- Required - Must be a value in approved list of states
<Country>	Country	String (255)	- Required - Must be "United States"
<PostalCodeOrZIP>	ZIP Code	String (255)	- Required - Must be in either the '#####' or '#####-####' format
Date	Date - Box 21		- Required - Must be in 'mm/dd/yyyy' format - Cannot be a future date
PhoneNumber	Phone Number - Box 20		- Required - Must be in the '(###) ###-####' format
Fax	Fax Number		- Optional - Must be in the '(###) ###-####' format
Email	Email Address		- Required - Must be in the 'user@domain' format (e.g., user@domain.com)
</CertificationOfApprovingOfficial>			

Exhibit 2-6: Table of Certification of Approving Official XML Tags

2.8 System Tags

This section of the XML corresponds to fields that are applicable to the entire application.

2.8.1 System Tags XML Tags

XML Tag	Application Field Name or Description	Data Type	Rules/Validation/Format
<ReviewPreliminaryQuestions>	Mark for Registrant Review ('Preliminary Questions' screen)	•	•
<ReviewProductProperties>	Mark for Registrant Review ('Product Properties' screen)	•	•
<ReviewProducers>	Mark for Registrant Review ('Box 2 - Producers and Product Repackaging Sites' screen)	•	•
<ReviewSiteSuppliers>	Mark for Registrant Review ('Manufacturing Sites and Component Suppliers' screen)	•	•
<ReviewComponents>	Mark for Registrant Review ('Components' screen)	•	•
<ReviewCertification>	Mark for Registrant Review ('Certification of Approving Official' screen)	•	•
<TotalWeight>		•	•
<totalPercentW>		•	•
<ReviewerComments>		•	•
<XslVersion>		•	•
		•	•

Exhibit 2-7: Table of System XML Tags

2.8.2 Non 100% Repack Example

```
<PreliminaryQuestions>
  <ProductName>A Test Pesticide Product</ProductName>
  <NameOfApplicant>CDX TESTING COMPANY</NameOfApplicant>
  <AddressOfApplicant>
    <AddressLine1>1 Main Street</AddressLine1>
    <AddressLine2>Suite 300</AddressLine2>
    <City>Crystal City</City>
```

```

    <ProvinceOrState>VA</ProvinceOrState>
    <Country>UNITED STATES</Country>
    <PostalCodeOrZIP>57350</PostalCodeOrZIP>
  </AddressOfApplicant>
  <PMRARegistration>False</PMRARegistration>
  <EPAREgistration>True</EPAREgistration>
  <PMRAFormulation>0</PMRAFormulation>
  <PMRAVersion>0</PMRAVersion>
  <CompanyNumber>222</CompanyNumber>
  <regNo>98765-1</regNo>
  <EPABasicFormulation>False</EPABasicFormulation>
  <ProductManagerTeamNumber>5</ProductManagerTeamNumber>
  <EPAAAlternateFormulation>1</EPAAAlternateFormulation>
  <PmraRepack>False</PmraRepack>
  <PMRACSPSConfidential>False</PMRACSPSConfidential>
  <ProductType>tgai</ProductType>
  <Isp>False</Isp>
  <Microbial>False</Microbial>
  <FoodUses>True</FoodUses>
  <ApplyingForClearanceOfInert>False</ApplyingForClearanceOfInert>
  <DateReceived></DateReceived>
  <RepackInfo>
    <RepackActiveList/>
  </RepackInfo>
</PreliminaryQuestions>

```

2.8.3 100% Repack Example

```

<PreliminaryQuestions>
  <ProductName>A Repack Product</ProductName>
  <NameOfApplicant>AndyTest</NameOfApplicant>
  <AddressOfApplicant>
    <AddressLine1>123 Street</AddressLine1>
    <AddressLine2>Suite 5</AddressLine2>
    <City>Lafayette</City>
    <ProvinceOrState>LA</ProvinceOrState>
    <Country>UNITED STATES</Country>
    <PostalCodeOrZIP>70506</PostalCodeOrZIP>
  </AddressOfApplicant>
  <PMRARegistration>False</PMRARegistration>
  <EPAREgistration>True</EPAREgistration>
  <PMRAFormulation>0</PMRAFormulation>
  <PMRAVersion>0</PMRAVersion>
  <CompanyNumber>222</CompanyNumber>
  <regNo>222-123</regNo>
  <EPABasicFormulation>False</EPABasicFormulation>
  <EPAAAlternateFormulation>1</EPAAAlternateFormulation>

```

```
<PmraRepack>True</PmraRepack>
<OriginalProductRegNo>10324-224</OriginalProductRegNo>
<PMRACSPSConfidential>False</PMRACSPSConfidential>
<ProductType>manufacturingUseProduct</ProductType>
<DateReceived></DateReceived>
<RepackInfo>
  <ActiveIngredientRepackPdfInfo>1-Decanaminium, N-decyl-N,N-dimethyl-, chloride?6|
Pentanedial?24</ActiveIngredientRepackPdfInfo>
  <OriginalProductName>MAQUAT 1010N-24-A</OriginalProductName>
  <RepackActiveList>
    <RepackActive>
      <Name>1-Decanaminium, N-decyl-N,N-dimethyl-, chloride</Name>
      <Percent>6</Percent>
    </RepackActive>
    <RepackActive>
      <Name>Pentanedial</Name>
      <Percent>24</Percent>
    </RepackActive>
  </RepackActiveList>
</RepackInfo>
</PreliminaryQuestions>
```

3 Appendix A – Valid Country Names

Country Name/Code
ARUBA
ANTIGUA AND BARBUDA
AFGHANISTAN
ALGERIA
AZERBAIJAN
ALBANIA
ARMENIA
ANDORRA
ANGOLA
AMERICAN SAMOA
ARGENTINA
AUSTRALIA
ASHMORE AND CARTIER ISLANDS
AUSTRIA
ANGUILLA
ANTARCTICA
BAHRAIN
BARBADOS
BOTSWANA
BERMUDA
BELGIUM
BAHAMAS
BANGLADESH
BELIZE
BOSNIA AND HERZEGOVINA
BOLIVIA
BURMA
BENIN
BELARUS
SOLOMON ISLANDS
NAVASSA ISLAND
BRAZIL

BASSAS DA INDIA
BHUTAN
BULGARIA
BOUVET ISLAND
BRUNEI
BURUNDI
CANADA
CAMBODIA
CHAD
SRI LANKA
CONGO
ZAIRE
CHINA
CHILE
CAYMAN ISLANDS
COCOS (KEELING) ISLANDS
CAMEROON
COMOROS
COLOMBIA
NORTHERN MARIANA ISLANDS
CORAL SEA ISLANDS
COSTA RICA
CENTRAL AFRICAN REPUBLIC
CAPE VERDE
COOK ISLANDS
CYPRUS
DENMARK
DJIBOUTI
DOMINICA
JARVIS ISLAND
DOMINICAN REPUBLIC
ECUADOR
EGYPT

IRELAND
EQUATORIAL GUINEA
ESTONIA
ERITREA
EL SALVADOR
ETHIOPIA
EUROPA ISLAND
CZECH REPUBLIC
FRENCH GUIANA
FINLAND
FIJI
FALKLAND ISLANDS (ISLAS MALVINAS)
FEDERATED STATES OF MICRONESIA
FAROE ISLANDS
FRENCH POLYNESIA
BAKER ISLAND
FRANCE
FRENCH SOUTHERN AND ANTARCTIC LANDS
GAMBIA, THE
GABON
GEORGIA
GHANA
GIBRALTAR
GRENADA
GUERNSEY
GREENLAND
GERMANY
GLORIOSO ISLANDS
GADELOUPE
GUAM
GREECE
GUATEMALA
GUINEA
GUYANA

GAZA STRIP
HAITI
HONG KONG
HEARD ISLAND AND MCDONALD ISLANDS
HONDURAS
HOWLAND ISLAND
CROATIA
HUNGARY
ICELAND
INDONESIA
MAN, ISLE OF
INDIA
BRITISH INDIAN OCEAN TERRITORY
CLIPPERTON ISLAND
ISRAEL
ITALY
IRAQ
JAPAN
JERSEY
JAMAICA
JAN MAYEN
JORDAN
JOHNSTON ATOLL
JUAN DE NOVA ISLAND
KENYA
KYRGYZSTAN
KINGMAN REEF
KIRIBATI
KOREA, REPUBLIC OF
CHRISTMAS ISLAND
KUWAIT
KAZAKHSTAN
LAOS
LEBANON

LITHUANIA
LIBERIA
SLOVAKIA
PALMYRA ATOLL
LIECHTENSTEIN
LESOTHO
LUXEMBOURG
LATVIA
LIBYA
MADAGASCAR
MARTINIQUE
MACAU
MOLDOVA
MAYOTTE
MONGOLIA
MONTSERRAT
MALAWI
MACEDONIA
MALI
MONACO
MOROCCO
MAURITIUS
MIDWAY ISLANDS
MAURITANIA
MALTA
OMAN
MALDIVES
MONTENEGRO
MEXICO
MALAYSIA
MOZAMBIQUE
NEW CALEDONIA
NIUE
NORFOLK ISLAND

NIGER
VANUATU
NIGERIA
NETHERLANDS
NORWAY
NEPAL
NAURU
SURINAME
NETHERLANDS ANTILLES
NICARAGUA
NEW ZEALAND
PARAGUAY
PITCAIRN ISLANDS
PERU
PARACEL ISLANDS
SPRATLY ISLANDS
PAKISTAN
POLAND
PANAMA
PORTUGAL
PAPUA NEW GUINEA
TRUST TERRITORY OF THE PACIFIC ISLANDS (PALAU)
GUINEA-BISSAU
QATAR
REUNION
MARSHALL ISLANDS
ROMANIA
PHILIPPINES
PUERTO RICO
RUSSIA
RWANDA
SAUDI ARABIA
ST. PIERRE AND MIQUELON
ST. KITTS AND NEVIS

SEYCHELLES
SOUTH AFRICA
SENEGAL
ST. HELENA
SLOVENIA
SIERRA LEONE
SAN MARINO
SINGAPORE
SOMALIA
SPAIN
SERBIA
ST. LUCIA
SVALBARD
SWEDEN
SOUTH GEORGIA AND THE SOUTH SANDWICH
SWITZERLAND
UNITED ARAB EMIRATES
TRINIDAD AND TOBAGO
TROMELIN ISLAND
THAILAND
TAJIKISTAN
TURKS AND CAICOS ISLANDS
TOKELAU
TONGA
TOGO
SAO TOME AND PRINCIPE
TUNISIA
TURKEY
TUVALU
TAIWAN
TURKMENISTAN
TANZANIA
UGANDA
UNITED KINGDOM

UKRAINE
UNITED STATES
BURKINA
URUGUAY
UZBEKISTAN
ST. VINCENT AND THE GRENADINES
VENEZUELA
BRITISH VIRGIN ISLANDS
VIETNAM
VIRGIN ISLANDS
NAMIBIA
WEST BANK
WALLIS AND FUTUNA
WESTERN SAHARA
WESTERN SAMOA
SWAZILAND
YEMEN
ZAMBIA
ZIMBABWE

4 Appendix B – Valid State Codes

State Names
Alabama
Alaska
American Samoa
Arizona
Arkansas
California
Colorado
Connecticut
Delaware
Dist. of Columbia
Florida
Georgia
Guam
Hawaii
Idaho
Illinois
Indiana
Iowa
Kansas
Kentucky
Louisiana
Maine
Maryland
Marshall Islands
Massachusetts
Michigan
Micronesia
Minnesota
Mississippi

Missouri
Montana
Nebraska
Nevada
New Hampshire
New Jersey
New Mexico
New York
North Carolina
North Dakota
Northern Marianas
Ohio
Oklahoma
Oregon
Palau
Pennsylvania
Puerto Rico
Rhode Island
South Carolina
South Dakota
Tennessee
Texas
Utah
Vermont
Virginia
Virgin Islands
Washington

5 Appendix C - Definitions, Acronyms, and Abbreviations

Acronym	Full Name
CDX	Central Data Exchange
CDXHD	CDX Help Desk
eCSF	Electronic Confidential Statement of Formulation
EDT	Eastern Daylight Time
EPA	United States Environmental Protection Agency
EST	Eastern Standard Time
OPP	Office of Pesticide Programs
PDF	Portable Document Format
PSP	Pesticide Submissions Portal
UTF	Unicode Transformation Format
XML	Extensible Markup Language