

Quantification Protocol for Including Edible Oils and/or Increasing Concentrates in Cattle Feeding Regimes

Alberta Protocol Stakeholder Consultations
Baseline Emissions Management Inc.

Including Edible Oils and/or Increasing Concentrates in Cattle Feeding Regimes

- Seed Materials
 - Good Practice Guidance
 - CDM protocols
 - Project evaluations
- Technical Review
 - Alberta process with gov't and industry stakeholders

Including Edible Oils and/or Increasing Concentrates in Cattle Feeding Regimes

- **Project Condition**

- Reduction in enteric methane emissions from changes in the finishing diet of cattle.
- Modification to include edible oils (4-6%) and/or a higher percentage of concentrates (>90%)

- **Baseline Condition**

- Operating conditions at the project farm prior to the change in practises
- Diet that does not include 4-6% edible oils and/or percentage of concentrates in the diet was below 90%

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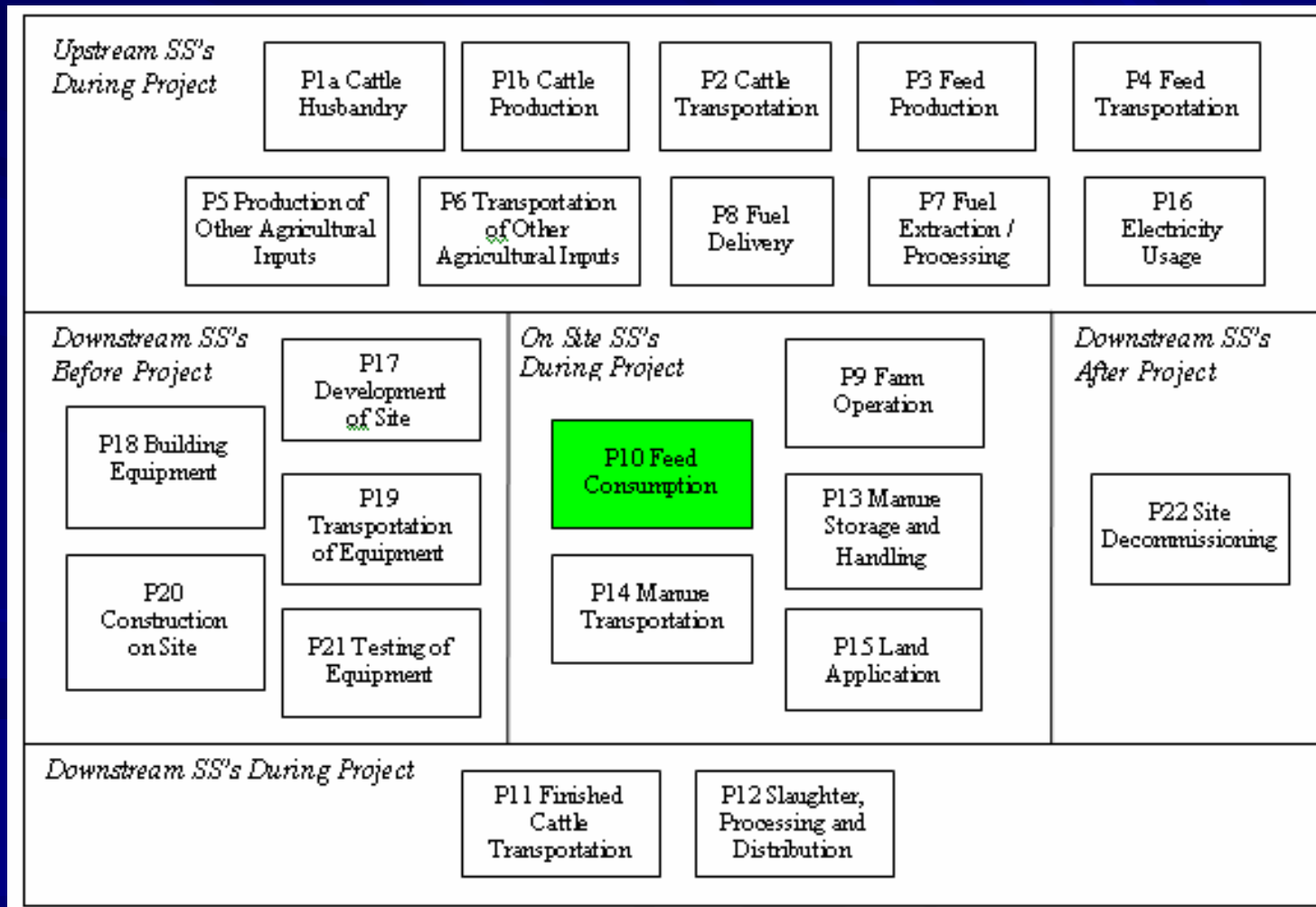
- Functional Equivalence
 - Equivalent energy production
 - No change to the product or service
- Emission Reduction Mechanisms
 - Modify the finishing diet for cattle to include edible oils and/or including a higher percentage of concentrates.
- Applicability criteria
 - Farms must be currently storing manure and applying manure or custom applying manure to land;
 - Farms must demonstrate a change in the edible oils and/or concentrates in the feeding regime, and;
 - The quantification of reductions achieved by the project is based on actual measurement and monitoring.

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- Flexibility mechanisms
 - Farms that reduce the length of the feeding regimes for finishing cattle may also apply the Days on Feed protocol in parallel with this protocol
 - Site specific emission factor usage
 - Farms without three years of data may use available data and industry practice to establish a baseline
 - Grouping of animals with similar weights/days on feed characteristics

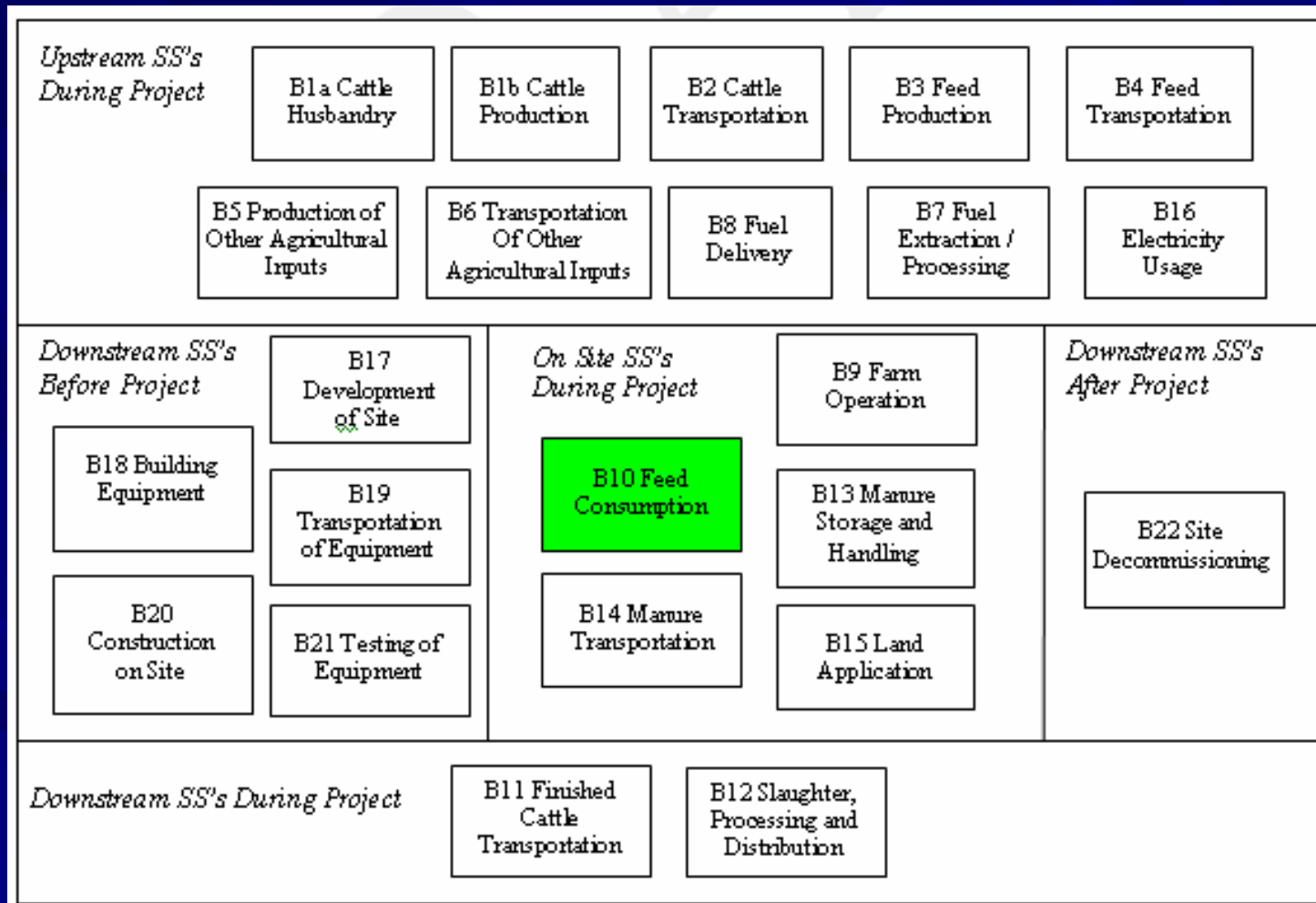
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Project Condition



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Baseline Condition



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$$\text{Emission Reduction} = \text{Emissions}_{\text{Baseline}} - \text{Emissions}_{\text{Project}}$$

$$\text{Emissions}_{\text{Baseline}} = \text{Emissions}_{\text{Cattle}}$$

$$\text{Emissions}_{\text{Project}} = \text{Emissions}_{\text{Cattle}}$$

- Data Capture
 - Days on Feed
 - Number of cattle in each grouping

Including Edible Oils and/or Increasing Concentrates in Cattle Feeding Regimes

- Questions and Comments
 - Technical issues?
 - Policy concerns?
 - Customization questions?
 - Linkage issues?