

## **69505.5 Alternatives Analysis: First Stage**

The first stage of the AA shall include the six (6) steps described below:

### **(a)**

Step 1, Identification of Product Requirements and Function(s) of Chemical(s) of Concern. (1) The responsible entity shall identify the functional, performance, and legal requirements of the Priority Product that must also be met by the alternatives under consideration. (2) The responsible entity shall identify the role(s), if any, of the Chemical(s) of Concern in meeting the Priority Product's requirements identified under paragraph (1). (3) (A) The responsible entity shall determine if the Chemical(s) of Concern or alternative replacement chemical(s) is/are necessary to meet the Priority Product's requirements identified under paragraph (1). (B) If the responsible entity determines that neither the Chemical(s) of Concern nor alternative replacement chemical(s) is/are necessary to meet the Priority Product's requirements identified under paragraph (1), the responsible entity shall evaluate removal of the Chemical(s) of Concern from the Priority Product without the use of any replacement chemical(s) as one of the alternatives to the Priority Product. Alternatively, the responsible entity may submit Chemical Removal Intent and/or Confirmation Notifications to the Department in lieu of completing the Alternatives Analysis and submitting the required AA Reports.

### **(1)**

The responsible entity shall identify the functional, performance, and legal requirements of the Priority Product that must also be met by the alternatives under consideration.

**(2)**

The responsible entity shall identify the role(s), if any, of the Chemical(s) of Concern in meeting the Priority Product's requirements identified under paragraph (1).

**(3)**

(A) The responsible entity shall determine if the Chemical(s) of Concern or alternative replacement chemical(s) is/are necessary to meet the Priority Product's requirements identified under paragraph (1). (B) If the responsible entity determines that neither the Chemical(s) of Concern nor alternative replacement chemical(s) is/are necessary to meet the Priority Product's requirements identified under paragraph (1), the responsible entity shall evaluate removal of the Chemical(s) of Concern from the Priority Product without the use of any replacement chemical(s) as one of the alternatives to the Priority Product. Alternatively, the responsible entity may submit Chemical Removal Intent and/or Confirmation Notifications to the Department in lieu of completing the Alternatives Analysis and submitting the required AA Reports.

**(A)**

The responsible entity shall determine if the Chemical(s) of Concern or alternative replacement chemical(s) is/are necessary to meet the Priority Product's requirements identified under paragraph (1).

**(B)**

If the responsible entity determines that neither the Chemical(s) of Concern nor alternative replacement chemical(s) is/are necessary to meet the Priority Product's requirements identified under paragraph (1), the responsible entity shall evaluate removal of the Chemical(s) of Concern from the Priority Product without the use of any replacement

chemical(s) as one of the alternatives to the Priority Product. Alternatively, the responsible entity may submit Chemical Removal Intent and/or Confirmation Notifications to the Department in lieu of completing the Alternatives Analysis and submitting the required AA Reports.

**(b)**

Step 2, Identification of Alternatives. (1) (A) In addition to any alternative identified under subsection (a)(3)(B), the responsible entity shall identify and consider alternatives that meet the definition of "alternative" under section 69501.1 and meet the Priority Product's requirements identified under subsection (a)(1). (B) The responsible entity shall research and evaluate available information that identifies existing possibly viable alternatives for consideration in the AA. This research and evaluation shall include, but is not limited to, information posted on the Department's website. The responsible entity shall consider any identified alternative in the AA, or explain in the AA Report why such an alternative is not viable for consideration. (2) Alternatives that do not involve the use of one or more replacement chemicals, or otherwise adding chemicals to the product, do not require compliance with subsection (d).

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(A) In addition to any alternative identified under subsection (a)(3)(B), the responsible entity shall identify and consider alternatives that meet the definition of "alternative" under section 69501.1 and meet the Priority Product's requirements identified under subsection (a)(1). (B) The responsible entity shall research and evaluate available information that identifies existing possibly viable alternatives for consideration in the AA. This research and evaluation shall include, but is not limited to, information posted on the Department's website. The responsible entity shall consider any identified alternative in the AA, or explain in the AA Report why such an alternative is not viable

for consideration.

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In addition to any alternative identified under subsection (a)(3)(B), the responsible entity shall identify and consider alternatives that meet the definition of "alternative" under section 69501.1 and meet the Priority Product's requirements identified under subsection (a)(1).

**(B)**

The responsible entity shall research and evaluate available information that identifies existing possibly viable alternatives for consideration in the AA. This research and evaluation shall include, but is not limited to, information posted on the Department's website. The responsible entity shall consider any identified alternative in the AA, or explain in the AA Report why such an alternative is not viable for consideration.

**(2)**

Alternatives that do not involve the use of one or more replacement chemicals, or otherwise adding chemicals to the product, do not require compliance with subsection (d).

**(c)**

Step 3, Identification of Factors Relevant for Comparison of Alternatives. (1) A factor listed in paragraph (2), in conjunction with an associated exposure pathway and life cycle segment, if applicable, is relevant if: (A) The factor makes a material contribution to one or more adverse public health impacts, adverse environmental impacts, adverse waste and end-of-life effects, and/or materials and resource consumption impacts associated with the Priority Product and/or one or more alternatives under consideration; and (B) There is a material difference in the factor's contribution to such impact(s) between the Priority Product and one or more alternatives under consideration and/or between two or more alternatives.

(2) The responsible entity shall use available quantitative information and

analytical tools, supplemented by available qualitative information and analytical tools, to identify the factors listed below and the associated exposure pathways and life cycle segments, if applicable, that are relevant for the comparison of the Priority Product and the alternatives under consideration: (A) Adverse environmental impacts; (B) Adverse public health impacts; (C) Adverse waste and end-of-life effects; (D) Environmental fate; (E) Materials and resource consumption impacts; (F) Physical chemical hazards; and (G) Physicochemical properties. (3) The responsible entity's identification of relevant exposure pathways shall consider both of the following: (A) Chemical quantity information: 1. Quantities of the Chemical(s) of Concern or alternative replacement chemical(s) necessary to manufacture the Priority Product and each alternative under consideration; and 2. Estimated volume and/or mass of the Chemical(s) of Concern or alternative replacement chemical(s) that is/are or would be placed into the stream of commerce in California as a result of the Priority Product and each alternative under consideration. (B) Exposure factors specified in section 69503.3(b).

**(1)**

A factor listed in paragraph (2), in conjunction with an associated exposure pathway and life cycle segment, if applicable, is relevant if: (A) The factor makes a material contribution to one or more adverse public health impacts, adverse environmental impacts, adverse waste and end-of-life effects, and/or materials and resource consumption impacts associated with the Priority Product and/or one or more alternatives under consideration; and (B) There is a material difference in the factor's contribution to such impact(s) between the Priority Product and one or more alternatives under consideration and/or between two or more alternatives.

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The factor makes a material contribution to one or more adverse public health impacts, adverse environmental impacts, adverse waste and end-of-life effects, and/or materials and resource consumption impacts associated with the Priority Product and/or one or more alternatives under consideration; and

**(B)**

There is a material difference in the factor's contribution to such impact(s) between the Priority Product and one or more alternatives under consideration and/or between two or more alternatives.

**(2)**

The responsible entity shall use available quantitative information and analytical tools, supplemented by available qualitative information and analytical tools, to identify the factors listed below and the associated exposure pathways and life cycle segments, if applicable, that are relevant for the comparison of the Priority Product and the alternatives under consideration: (A) Adverse environmental impacts; (B) Adverse public health impacts; (C) Adverse waste and end-of-life effects; (D) Environmental fate; (E) Materials and resource consumption impacts; (F) Physical chemical hazards; and (G) Physicochemical properties.

**(A)**

Adverse environmental impacts;

**(B)**

Adverse public health impacts;

**(C)**

Adverse waste and end-of-life effects;

**(D)**

Environmental fate;

**(E)**

Materials and resource consumption impacts;

**(F)**

Physical chemical hazards; and

**(G)**

Physicochemical properties.

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The responsible entity's identification of relevant exposure pathways shall consider both of the following: (A) Chemical quantity information: 1. Quantities of the Chemical(s) of Concern or alternative replacement chemical(s) necessary to manufacture the Priority Product and each alternative under consideration; and 2. Estimated volume and/or mass of the Chemical(s) of Concern or alternative replacement chemical(s) that is/are or would be placed into the stream of commerce in California as a result of the Priority Product and each alternative under consideration. (B) Exposure factors specified in section 69503.3(b).

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**2.**

Estimated volume and/or mass of the Chemical(s) of Concern or alternative replacement chemical(s)

that is/are or would be placed into the stream of commerce in California as a result of the Priority Product and each alternative under consideration.

**(B)**

Exposure factors specified in section 69503.3(b).

**(d)**

Step 4, Initial Evaluation and Screening of Alternative Replacement Chemicals. (1) For those alternatives under consideration that involve removing or reducing the concentration of the Chemical(s) of Concern and using one or more alternative replacement chemicals, or otherwise adding chemicals to the product, the responsible entity shall use available quantitative information and analytical tools, supplemented by available qualitative information and analytical tools, to evaluate and compare each of the alternative replacement chemicals under consideration with the Chemical(s) of Concern in the Priority Product with respect to each of the following factors to the extent relevant: (A) Adverse environmental impacts; (B) Adverse public health impacts; (C) Environmental fate; (D) Physical chemical hazards; and (E) Physicochemical properties. (2) The responsible entity may eliminate from further consideration in the AA any alternative replacement chemical(s) that it determines has/have the potential to pose adverse impacts equal to or greater than those posed by the Chemical(s) of Concern.

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For those alternatives under consideration that involve removing or reducing the concentration of the Chemical(s) of Concern and using one or more alternative replacement chemicals, or otherwise adding chemicals to the product, the responsible entity shall use available quantitative information and analytical tools, supplemented by available qualitative information and analytical tools, to evaluate and compare each of the alternative replacement chemicals under consideration with the Chemical(s) of



Concern in the Priority Product with respect to each of the following factors to the extent relevant: (A) Adverse environmental impacts; (B) Adverse public health impacts; (C) Environmental fate; (D) Physical chemical hazards; and (E) Physicochemical properties.

**(A)**

Adverse environmental impacts;

**(B)**

Adverse public health impacts;

**(C)**

Environmental fate;

**(D)**

Physical chemical hazards; and

**(E)**

Physicochemical properties.

**(2)**

The responsible entity may eliminate from further consideration in the AA any alternative replacement chemical(s) that it determines has/have the potential to pose adverse impacts equal to or greater than those posed by the Chemical(s) of Concern.

**(e)**

Step 5, Consideration of Additional Information. In the first stage of the AA, the responsible entity may consider pertinent factors and information not specifically identified in this section. This may include, but is not limited to, consideration of the factors and information specified in section 69505.6. A responsible entity may eliminate an alternative from further consideration based on the additional factors and information as long as the reason for its elimination is explained in the Preliminary AA Report and there are alternatives remaining to be evaluated in the

second AA stage.

**(f)**

Step 6, Preliminary AA Report Preparation.(1) The responsible entity shall prepare, for inclusion in the Preliminary AA Report, a work plan and proposed implementation schedule for completion of the second AA stage and preparation and submittal of the Final AA Report. (2) The responsible entity shall prepare and submit to the Department a Preliminary AA Report as specified in section 69505.7.

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The responsible entity shall prepare, for inclusion in the Preliminary AA Report, a work plan and proposed implementation schedule for completion of the second AA stage and preparation and submittal of the Final AA Report.

**(2)**

The responsible entity shall prepare and submit to the Department a Preliminary AA Report as specified in section 69505.7.