



**NORTHWEST NATURAL
RESOURCE GROUP**
LEADERS IN ECOLOGICAL FORESTRY

Environmental and Social Risk Assessment: Additional Chemicals

September 2023

FSC takes a risk-based approach to chemical pesticide use that requires certified organizations to complete an environmental and social risk assessment (ESRA). The assessment considers both the hazard of the chemical's active ingredient as well as the exposure to humans and the environment that results from its use.

1. Dedicated ESRA's

Chemical pesticides that are more commonly used by our members have their own dedicated documents that can be found on NNRG's [page for certified members](#). The links as of 2023 are also included in the list below.

NNRG has adopted ESRA's for the following:

- [ESRA for 2,4-D](#)
- [ESRA for Aminopyralid](#)
- [ESRA for Clopyralid](#)
- [ESRA for Glyphosate](#)
- [ESRA for Imazapyr](#)
- [ESRA for Imidacloprid](#)
- [ESRA for Metsulfuron-methyl](#)
- [ESRA for Sulfometuron-methyl](#)
- [ESRA for Triclopyr](#)

2. Infrequently Used Chemicals

For chemical pesticides that are not frequently used by our membership, members should alert NNRG's Director of Programs before application. Members will need to take additional steps to ensure they are aware with the potential risks and proactive mitigation of those risks before using or applying those chemicals.

Members are required to do their due diligence in assessing risks associated with the use of a particular chemical, and record their plans to mitigate these risks, in advance of using any of these chemicals. Members can find links to a starting point for doing this research at the links below, and are welcome to contact NNRG's Director of Programs or Director of Forestry for additional support in their assessments.

Infrequently used chemicals include, but are not limited to:

Clethodim

[USFS Risk Assessment for Clethodim](#)

Dicamba

[USFS Risk Assessment for Dicamba](#)

Fluazifop-P-butyl

[USFS Risk Assessment for Fluazifop-P-butyl](#)

Indaziflam

[USFS Risk Assessment for Indaziflam](#)

Oxyfluorfen

[USFS Risk Assessment for Oxyfluorfen](#)

Picloram

[USFS Risk Assessment for Picloram](#)

Sethoxydim

[USFS Risk Assessment for Sethoxydim](#)

3. Risk Reduction

Following the exposure variables outlined in FSC-POL-30-001 V3-0 EN FSC, Annex 2, Section 2.2, to reduce the risk of chemical pesticide use, the following variables, at a minimum, shall be considered:

- Formulation (type and components).
- Mixture of active ingredients (composition and mixing process).
- Concentration of the active ingredient(s).
- Dose of the active ingredient(s).
- Frequency and interval of application.
- Scale of treatment area.
- Method of application (e.g., spot, foliar, spray, aerial, broadcast)
- Application system and equipment (e.g., knapsack sprayer, helicopter, drone, plane)
- Number of previous applications.
- Metabolites of the active ingredient.
- Capacity and skills of workers (license to handle pesticides, training, ability to read and understand labels and instructions).
- Personal protective equipment.
- Emergency related equipment (e.g., first aid, spill kits).
- Site conditions (e.g., soil type, topography of the area).
- Predicted weather and climatic conditions (e.g., wind speed and direction, temperature, humidity).
- Spray drift.
- Waste management systems.
- Information available to neighbors about pesticide application (e.g., risks associated with pesticide use, reentry period after application).

4. Additional Resources

The USFS has prepared Human Health and Ecological Risk Assessments (HERAs). These assessments are a recommended starting point for members who are looking for reliable information about the chemical pesticide they plan to use:

[USFS Pesticide-Use Risk Assessments and Worksheets](#)

For details on FSC's approach to risk assessments, members can consult:

[Environmental and Social Risk Assessment: National Guidance for the United States Fillable Template for Risk Assessments](#)