

APPENDIX G

Chemical and Environmental Properties of Herbicides Most Likely to be Used

Proposed Herbicide	Leaching Index ¹	Soil Half-life days (range) ²	Selective Non selective
Dicamba	4.24	14 (3-35)	Selective
Glyphosate	-0.64	47 (21-60)	Non selective
Picloram	5.46	90 (20-277)	Selective
2,4-D	1.00	10 (2-41)	Selective

Half-life = typical length of time needed for one half of the total amount applied to break down to substances which are no longer of toxicological concern (BLM FEIS, 1991).

¹ Relative ranking of leaching potential using the equation $L.I. = \text{Log}(\text{half-life}) * (4 - \text{Log}(Koc))$, (Goss, 1988) The higher the value, the greater potential the herbicide will move through the soil profile with infiltrating water. Prediction of actual amounts of the herbicides reaching ground water must also consider the method and rate of application, as well as the soil characteristics and other environmental and climactic factors described above.

² Most representative half-life value and range of reported values (BLM FEIS, 1991)

SOURCE: Final Environmental Impact Statement for Vegetation Treatment on BLM Lands in Thirteen Western States, May 1991.