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Dissertation Title: A Study of the Relationship between Ecological Risk Communication and Lay Public Participation in Federal Rulemaking Concerning Ecological Risks

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ABSTRACT

A Study of the Relationship between Ecological Risk Communication and Lay Public Participation in Federal Rulemaking Concerning Ecological Risks

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There is a significant need to increase lay citizen involvement in governmental decision-making processes to manage ecological risks. Lay public involvement is particularly important because it can potentially enhance the quality of these processes. Research scholars assert that the impediment to lay public participation in regulatory decision making regarding ecological risks entails the failure to communicate ecological risks in a manner that effectively: 1) reduces the complexity of the findings and 2) makes the ecological risk message salient and relevant to their concerns. Given the

lack of research efforts concerning the communication of ecological risks to lay citizens and given the need to more effectively engage lay citizens in governmental decision making proceedings to manage these risks, this study successfully researched a means of using the mental models approach to risk communication to develop pesticide ecological risk assessment materials that were carefully adapted to lay knowledge levels and that communicated in a way that was applicable to public concerns and interests.

The study found a positive correlation between lay citizen pro-environmental attitudes and their interest in participating in a US EPA rulemaking proceeding to regulate pesticide ecological risks particularly when the risks message is: 1) carefully adapted to lay knowledge levels using the mental models approach to risk communication, and 2) communicated to them in a way that is applicable to their concerns or interests. This positive correlation was demonstrated based on a Sig. (2-tailed) value of 0.015 at an alpha of 0.05. These research findings could have significant implications in helping the US government to obtain its goal of being a more transparent and participatory government especially in regards to policy development to manage ecological risks.