Appendix G: WIN PST Example

WIN PST can be used for golf course conditions such as a sand green. In this example, the soil is sand at a typical greens depth of 12 inches and the average organic content for the 12 inch profile is 1%, by weight. The pesticides were applied to the turf foliage under two rainfall conditions: low potential for rainfall and a high potential for rainfall. Appendix G contains the WIN PST risk screening for pesticide leaching for most pesticides registered in NYS for use on golf courses. Under the low rainfall potential scenario, most of the pesticides evaluated had a low or very low risk (four had a high/extra high) to humans (long term exposure as a drinking water source) and only one pesticide has a high or extra high risk to fish, even when applied to this very high leaching-groundwater contamination soil like sand. When applied under a high potential rainfall scenario, however, 15 pesticides had a high/extra high risk to humans, and 20 had high/extra high risk to fish.

Based on these result, one of the BMPs for this example is to only apply pesticides when the potential for rainfall is low. On sites where greens drainage is discharged near streams or near drinking water wells, extreme care needs to be taken if a pesticide application is needed during a period with a high potential for rain. Appendix G can be used to select pesticides that have a low risk even under these conditions.