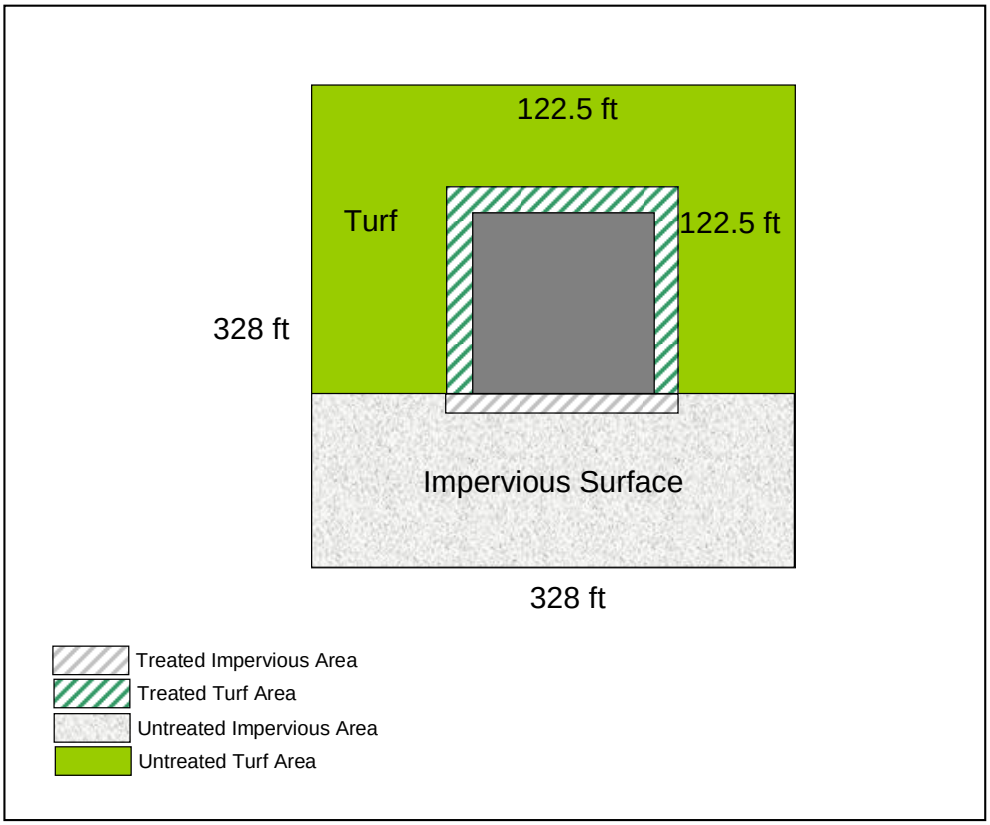
Appendix D. Treated area estimate for outside building usage

Assumptions. An office building resides in each hectare in the 10 hectare square. Each office building is 15,000 square feet in size (EIA, 2003), with sides roughly 122.5 feet in length. Fifty percent of each hectare is impervious and fifty percent is turf (See Figure 1).



To estimate the area treated on the turf sides of the building, it was assumed that a 10 foot wide swath of turf on three sides of the building would be treated. The area of treatment was 3675 square feet (3 sides x 10 ft x 122.5 ft), or approximately 3.4% of the total area.

To estimate the area treated on the impervious sides of the building, it was assumed that the building side would be treated from the ground to a height of 3 feet and that this would then translate to a 3 foot swath on the ground. The area of treatment was 367.5 square feet (3 ft x 122.5 ft), or approximately 0.34% of the total area.

Concentrations derived for the o,p' and p,p'-dicofol isomers for the turf scenario were summed and then multiplied by 3.4% to develop the turf EEC. This same process was repeated for the impervious scenario, multiplying the total dicofol concentration by 0.34%. Then the turf and impervious concentrations were summed to estimate the total EECs for the outside building scenario.

Source: Energy Information Agency (EIA) (2003) Commercial Buildings Energy Consumption Survey. Based on average square footage per building for warehouses and offices in Pacific West.