

# Fact Sheet

## *Wood Chip Pile Leachate*

The current practices for managing waste brush, branches and other wood products include chipping the materials into wood chip piles. This practice has many benefits in reducing air pollution by eliminating wood fires and also produces materials that can benefit the home gardener in amending compost piles, and providing landscape material for areas of plantings. This Fact Sheet is to help understand one of the possible hazards that may be associated with chip piles if they are not managed properly.

Decomposing wood naturally produces materials called tannins and lignins when it decomposes. When trees or large branches fall and remain on the ground they slowly decompose and the levels of tannins and lignins that are produced are slowly and naturally assimilated into the environment. When the wood products are finely divided into chip size pieces and placed in a pile the decomposition can produce undesirable concentrations of tannin and lignin leachate if the piles are too large or maintained in a pile too long. The photo below shows a pile of oak chips that was approximately 8 to 10 feet deep and about 40 feet wide and 80 – 100 feet long. The pile was left for about three years. The resulting leachate had a foul odor characterized as much like rotten or fermenting molasses.



The potential hazards of the leachate material include: a) water pollution that could be harmful to wildlife in the water or surrounding area, b) foul odors that are not as harmful as they are objectionable. Most of the chemicals produced in the process are not likely to cause significant harm to people.