Chapter 15: Odor

Development projects which may create odor problems include landfills, transfer stations, livestock confinement operations, and various processing and manufacturing plants. There are also facilities common to many development projects which may be the source of odor such as sewerlines and treatment plants.

Usually odor problems can be controlled. Many activities which formerly caused problems can now be conducted within a large building where negative air pressure and filters are used to prevent offsite odor impacts. For activities which cannot be conducted in doors, other measures are available for reducing odor problems.

For example, hydrogen sulfide can be released from landfills accepting construction and demolition (C&D) waste. This gas, which has the odor of rotten eggs, comes from the decomposition of gypsum (calcium sulfate) wallboard in the wet, organically rich environment of an unlined C&D landfill. Quality of life has been impaired by hydrogen sulfide in homes located up to three miles away from a C&D landfill.[113] This and other impacts have caused property value to decline by 10% within a mile of a C&D facility. But the likelihood of hydrogen sulfide formation can be reduced by excluding wallboard from the landfill. Less reliable solutions would include preventing water from entering the landfill by installing an impermeable cap-liner system or segregating wallboard from wood and other organic material.

If you identify a potential solution, then look for similar facilities where the solution has been applied. Visit the facility to see if you can detect offensive odors. Talk with long time residents to get their take on odor control effectiveness.

[113] See the reports on landfills available for download from the CEDS website.