Table II.1 SOME SELECTED ASPECTS OF AEROBIC ANS ANAEROBIC DECOMPOSITION

CONSIDERATION	AEROBIC DECOMPOSITION	ANAEROBIC DECOMPOSITION
Moisture Levels	40-60%	99+% to less than 50% although less than ~75 % results in very slow activity
Particle Size	for both, generally speaking, the smaller the size, the quicker the process	
Oxygen (as O_2)	large amounts necessary	fatal
Reduction in Carbon	for both, under controlled conditions, loss of dry-weight carbon can be over 60% of that in the original material	
Carbon Dioxide	all carbon lost is in this form	generally between 30-40% of biogas is CO_2
Nitrogen	loss of up to 50% [usually closer to 25%] as N_2 or NH_3 without close control; nitrates dominant in the final product	little control necessary for recovery of essentially all original; ammonia dominant in final product
Carbon/Nitrogen Ratio	both processes have optimums somewhere between 20-35:1 [The problem is that none of the usual laboratory tests give the biologically "decomposable" quantities of C or N. Thus the only way to really determine these levels is to check the losses after the processes have occurred.]	
Other Nutirents	potential leaching of soluable forms in uncovered piles	very well maintained
pH	final products from both processes are neutral to slightly alkaline	
Photosynthetic Energy	largely released as heat	largely contained in the methane produced
Time Required	both can be accomplished in days [or less for digestion of very dilute organic waters] under very controlled conditions--usually weeks or months, although years are required for complete decomposition	
Pathogen Destruction	complete destruction IF all materials reach >55 degrees C for a few hours	very significant, although a subsequent composting of the sludge is necessary for total destruction [espicially of Ascaris eggs]

(Based on innumerable sources)