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Lenny Jones and **Dan White*** (dw9878@ship.edu), Department of Mathematics, Shippensburg University, 1871 Old Main Drive, Shippensburg, PA 17257. *Appending Digits to Generate an Infinite Sequence of Composite Numbers II*. Preliminary report.

Let $D = [d_1, \dots, d_t]$, where $d_i \in \{0, 1, \dots, 9\}$, and let k be a positive integer. We generate an infinite sequence $\{s_n\}_{n=1}^{\infty}$ of positive integers by repeatedly appending, in order, one at a time, the digits from the list D to the integer k , in one of four ways: always on the left, always on the right, alternating and starting on the left, or alternating and starting on the right. For example, if $k = 35$ and $D = [1, 7, 9]$, then the sequence generated by appending the digits from D to k in an alternating manner, starting on the left, is:

$$s_1 = 135, \quad s_2 = 1357, \quad s_3 = 91357, \quad s_4 = 913571, \quad s_5 = 7913571, \dots$$

In each of these four situations, we investigate, for various lists D , when there exist infinitely many positive integers k , such that every term of the sequence $\{s_n\}_{n=1}^{\infty}$ is composite. (Received September 16, 2010)