$$P(V > t) = P(log(V) > log(t)) = P(-X^T\gamma + \epsilon > log(t)) \quad = P(\epsilon > log(t) + X^T\gamma) = \exp(-N(log(t) + X^T\gamma))$$

$N(t)$ cumulative hazard of $\nu(t)$
Therefore hazard is

$$-D_t log(S_v(t)) = D_t(N(log(t) + X^T\gamma)) = \frac{1}{t}\nu(log(t) + X^T\gamma)$$