

$$E = MW_{HAP} \left[N_{avg} \ln \left[\frac{P_T - \sum_{i=1}^n (P_{i,1})}{P_T - \sum_{i=1}^n (P_{i,2})} \right] - (n_{i,2} - n_{i,1}) \right] \quad (\text{Eq. 6})$$