$$\frac{d[(\text{EnvZ}-\text{P})\text{OmpR}]}{dt} = k_1[\text{EnvZ}-\text{P}][\text{OmpR}] \\ -(k_{-1}+k_t)[(\text{EnvZ}-\text{P})\text{OmpR}]$$

$$\frac{d[(\text{EnvZ})\text{OmpR}-\text{P}]}{dt} = k_2[\text{EnvZ}][\text{OmpR}-\text{P}] \\ -(k_{-2}+k_p)[(\text{EnvZ})\text{OmpR}-\text{P}]$$

$$\frac{d[\text{EnvZ}-\text{P}]}{dt} = k_{-1}[(\text{EnvZ}-\text{P})\text{OmpR}] - k_{-k}[\text{EnvZ}-\text{P}] \\ +k_k[\text{EnvZ}] - k_1[\text{EnvZ}-\text{P}][\text{OmpR}]$$

$$\frac{d[\text{EnvZ}]}{dt} = k_{-k}[\text{EnvZ}-\text{P}] + (k_p+k_{-2})[(\text{EnvZ})\text{OmpR}-\text{P}] \\ -k_k[\text{EnvZ}] + (k_p+k_{-2})[(\text{EnvZ}-\text{P})\text{OmpR}] \\ -k_2[\text{EnvZ}][\text{OmpR}-\text{P}]$$

$$\frac{d[\text{OmpR}]}{dt} = k_{-1}[(\text{EnvZ}-\text{P})\text{OmpR}] - k_1[\text{EnvZ}-\text{P}][\text{OmpR}] \\ + k_p[(\text{EnvZ})\text{OmpR}-\text{P}]$$

$$\frac{d[\text{OmpR}-\text{P}]}{dt} = k_t[(\text{EnvZ}-\text{P})\text{OmpR}] - k_2[\text{EnvZ}][\text{OmpR}-\text{P}] \\ + k_{-2}[(\text{EnvZ})\text{OmpR}-\text{P}]$$