

Waste Calculations for *Crapshoot*:
Wednesday, September 15, 2004

1.

$$\frac{620,000 \text{ people}}{\text{Vermont}} \times \frac{915 \text{ lbsN}}{100 \text{ people / year}} \times \frac{\text{ton}}{2000 \text{ lbs}} \approx 2,837 \text{ tonsN}$$

$$\frac{620,000 \text{ people}}{\text{Vermont}} \times \frac{137 \text{ lbsP}}{100 \text{ people / year}} \times \frac{\text{ton}}{2000 \text{ lbs}} \approx 425 \text{ tonsP}$$

2.

$$\frac{146,000 \text{ cows}}{\text{Vermont}} \times \frac{.8 \text{ lbs N}}{\text{day}} \times \frac{365 \text{ days}}{\text{year}} \times \frac{\text{ton}}{2000 \text{ lbs}} \approx 21,316 \text{ tonsN}$$

$$\frac{146,000 \text{ cows}}{\text{Vermont}} \times \frac{.41 \text{ lbsP}}{\text{day}} \times \frac{365 \text{ days}}{\text{year}} \times \frac{\text{ton}}{2000 \text{ lbs}} \approx 10,924 \text{ tonsP}$$

3.

$$\frac{2,837 \text{ tonsN}}{\text{Vermont people}} \times \frac{2000 \text{ lbs}}{\text{ton}} \times \frac{1 \text{ acre potatoes}}{250 \text{ lbsN}} \approx 22,696 \text{ acres}$$

$$\frac{21,316 \text{ tonsN}}{\text{Vermont cows}} \times \frac{2000 \text{ lbs}}{\text{ton}} \times \frac{1 \text{ acre potatoes}}{250 \text{ lbsN}} \approx 170,528 \text{ acres}$$

Extras:

$$\frac{146,000 \text{ cows}}{\text{Vermont}} \times \frac{136.75 \text{ lbs manure}}{\text{day}} \times \frac{365 \text{ days}}{\text{year}} \times \frac{\text{ton}}{2000 \text{ lbs}} \approx 3.6 \text{ million tons}$$

$$\frac{146,000 \text{ cows}}{\text{Vermont}} \times \frac{2.3 \text{ ft}^3 \text{ manure}}{\text{day}} \times \frac{365 \text{ days}}{\text{year}} \approx 123 \text{ million ft}^3 \text{ manure}$$