

# Dilution calculation worksheet

July 2008

## Step 1 – Level of Contamination

Result as reported (record the maximum possible level if the lab report a range)

Unit of measure reported by lab

Factor (insert lab advised factor, else 1 for beta-lactam, 2 for others or unknown)

X				
1 or 2	=			
		X		

## Step 2 – Volume Contaminated<sup>1</sup>

Volume Contaminated (ie volume in farm bulk milk tank)

		÷		

## Step 3 – Diluted Volume

Minimum Silo content during processing

Blend Factor (default = 2)

X				
0.5	=			
		=		

## Final Residue Concentration<sup>2</sup>

<sup>1</sup>Where multiple consignments containing residues went into the silo, complete steps 1 and 2 for each and add the sub-totals from step 2 together, then proceed with step 3.

<sup>2</sup>If: - the Final Residue Concentration exceeds the initial level of contamination; and the residue was a beta-lactam (penicillin); and there was only 1 consignment affected in step 1 then apply the initial concentration as the final concentration.

### Working example

8,000 litres milk collected, pumped into a silo that contained between 140,000 and 180,000 litres with no agitation.

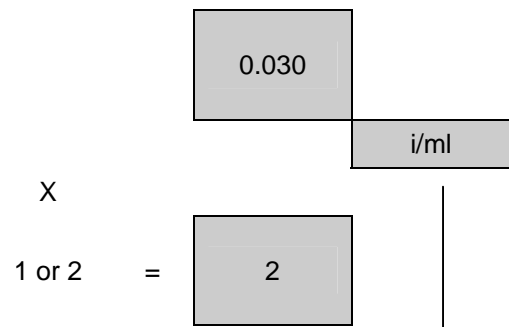
Residue identified as non beta-lactam (not penase sensitive), lab estimate concentration as being in the range 0.010 - 0.030 iu/ml penicillin equivalent.

#### Step 1 – Level of Contamination

Result as reported (record the maximum possible level if the lab report a range)

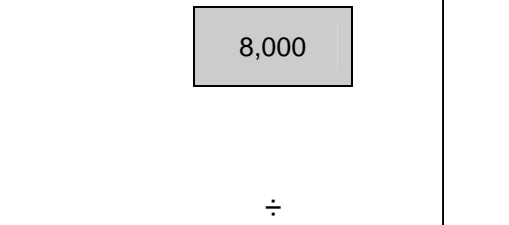
Unit of measure reported by lab

Factor (insert lab advised factor, else 1 for beta-lactam, 2 for others or unknown)



#### Step 2 – Volume Contaminated

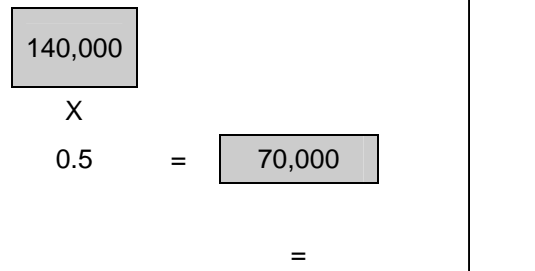
Volume Contaminated (ie volume in farm bulk milk tank)



#### Step 3 – Diluted Volume

Minimum Silo content during processing

Blend Factor (default = 2)



#### Final Residue Concentration

0.007 ug/kg