

Ammonia emission from laying hens - Nesbuegg

The values are taken from Stable balance made in Vera for values of 2024 production
Vera is a calculation tool developed by the Swedish Board of Agriculture

Laying hens

Animal units 65 000

Stable balance N	In	Out	Stable balance P	In	Out
Feed	66 693		Feed	11 178	
Bedding	22		Bedding	2	
Pullets + roosters	1 843		Pullets + roosters	410	
Eggs		20 072	Eggs		2 124
Animals to slaughter		2 171	Animals to slaughter		482
Discarded eggs		100	Discarded eggs		11
Carcass		143	Carcass		32
	68 558	22 486		11 590	2 649
Nitrogen from animals	46 072		Phosphorus from animals	8 941	
Excreted N, kg/animal unit and year	0,71		Excreted P, kg/animal unit and year	0,14	
BAT-reference value, BAT 3	0,4-0,8		Excreted P ₂ O ₅ , kg/animal unit and year	0,32	
			BAT-reference value (P), BAT 4	0,04-0,19	
			BAT-reference value (P2O5), BAT 4	0,10-0,45	

Ammonia-N from stable	Solid manure
Nitrogen from animals	46 072
Nitrogen loss from stable	4 607
Ammonia loss from stable	5 594
Ammonia, kg/animal unit and year	0,09
BAT-limit value cage system, BAT 31	0,02-0,08
BAT-limit value Non-cage system, BAT 31	0,02-0,13 ⁽¹⁾

(1) For existing plants using a forced ventilation system and an infrequent manure removal (in case of deep litter with a manure pit), in combination with a measure achieving a high dry matter content of the manure, the upper end of the BATAEL is 0,25 kg NH₃/animal place/year.

Ammonia-N from storage, kg	Solid manure
Nitrogen after stable	41 465
Nitrogen loss from storage	8 293
Ammonia loss from storage	10 070

Ammonia loss from stable + storage	
Ammonia-N, kg	12 900
Ammonia, kg	15 664

Comments

The production is within the framework of BAT conclusions.