



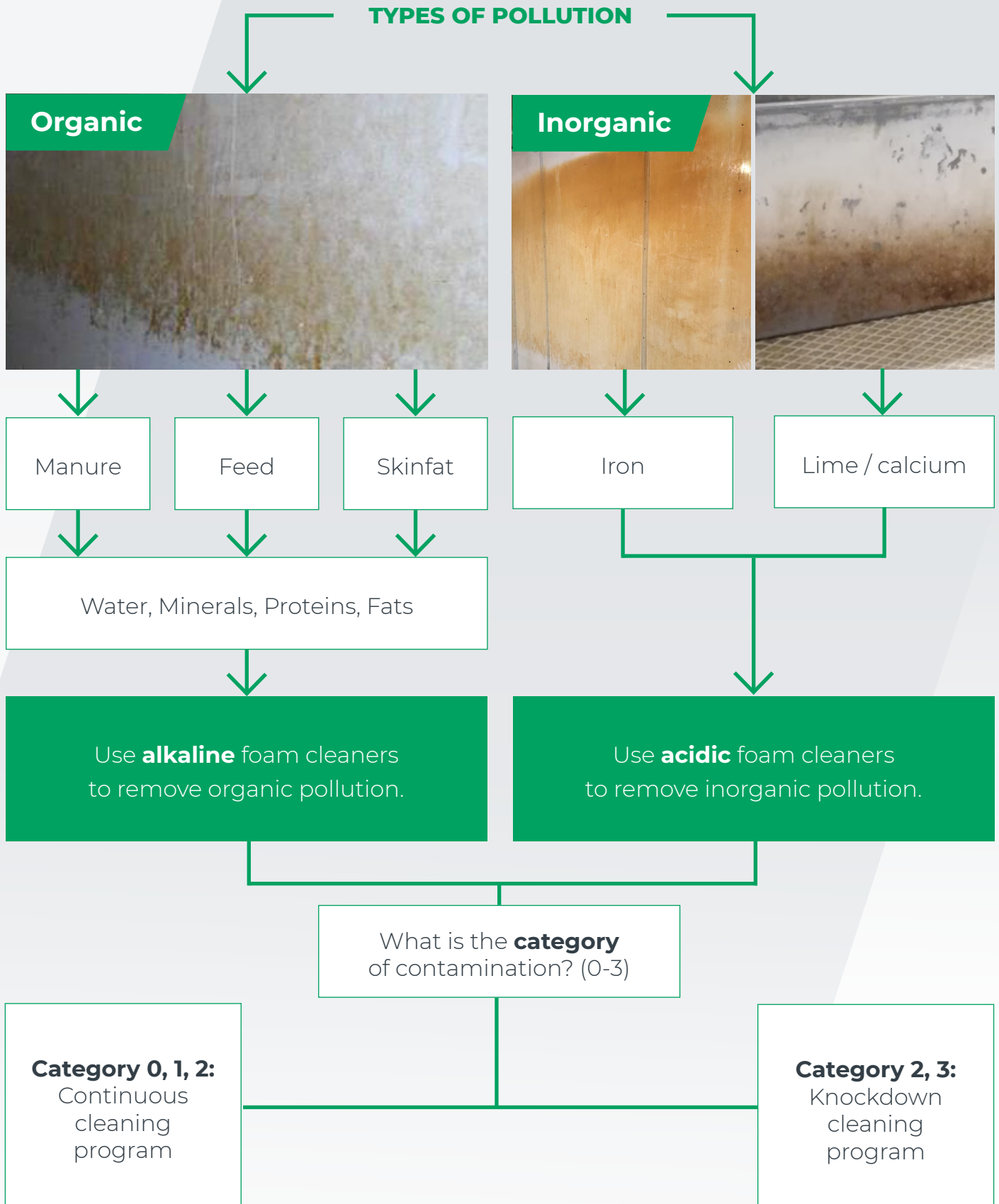
What is Historical Pollution?

And how do you
get rid of it?

After each round the housing needs to be cleaned and disinfected to remove organic and inorganic pollution. Static pollution is what remains after neglected washing or after using a poor or low quality detergent. For example, if during cleaning only 99% of the pollution is removed, the remaining 1% is what we call static pollution. When static pollution is allowed to build-up round after round, multiple layers of pollution will form on top of each other. This build-up is what we call historical pollution.

Historical pollution becomes increasingly problematic and difficult to remove if no measures are taken. The layers of pollution form a breeding ground for pathogens and can negatively impact animal health and performance.

Recognizing pollution



Cleaning before disinfection

		Most important step	
Immediately after emptying	After pressure washing	After cleaning with detergent	After disinfection
50,000,000 pathogens/cm ²	20,000,000 pathogens/cm ²	100,000 pathogens/cm ²	<500 pathogens/cm ²

Static pollution not only contains pathogens but is also a food source for microorganisms and a barrier for disinfectants!

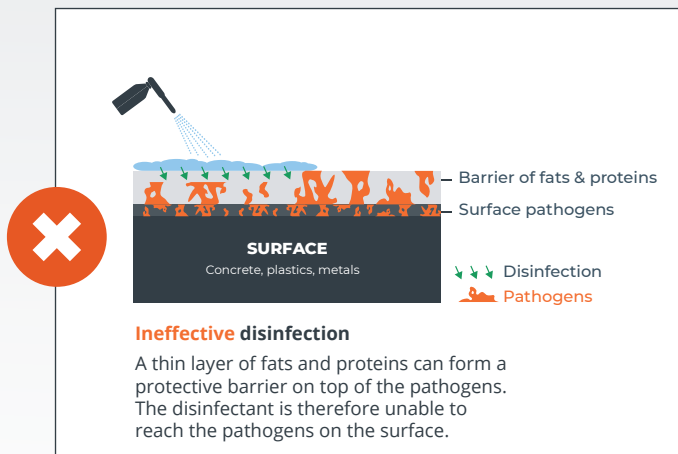
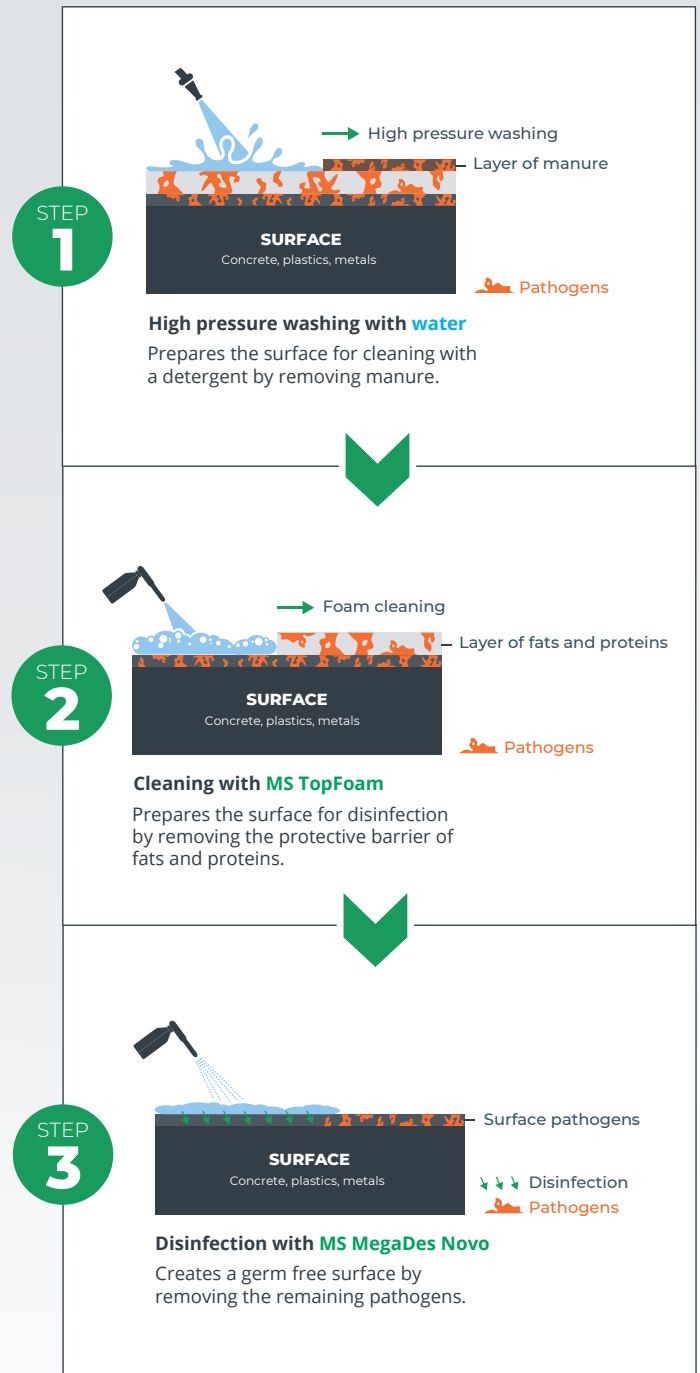
Cleaning exposes pathogens.

Using a detergent in step 2 is necessary to effectively apply a disinfectant.

When no detergent is used, a layer of fats and proteins will remain on the surface. This layer functions as a barrier that stops disinfectants from reaching all the pathogens.

To ensure a germ-free surface follow step 1 to 3 and use the right products.

Follow the steps below to effectively remove pollution.

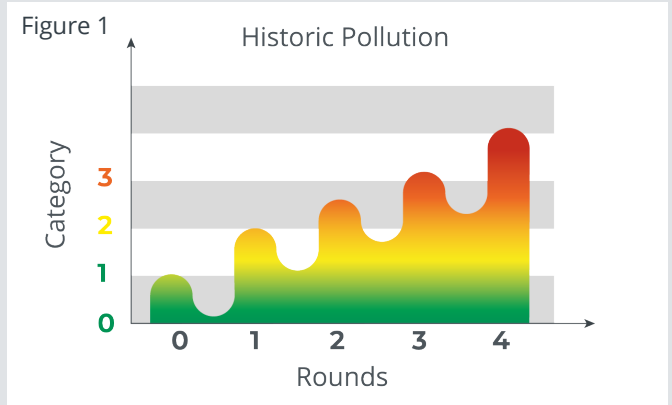


Do you have historical pollution?

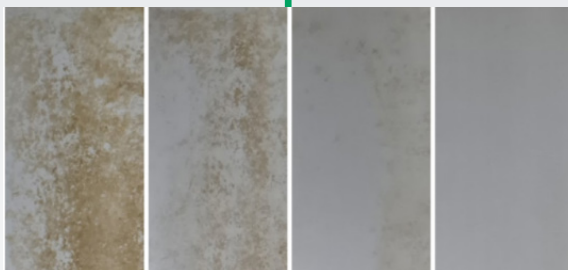
How do you know whether you are dealing with historical pollution?

Historical pollution is most easily spotted directly after the washing procedure. If there is a clearly visible layer of contamination remaining after cleaning, you are dealing with historical pollution.

Figure 1 shows how neglected washing or using the wrong products can lead to a build-up of historical pollution. Without a proper protocol, farms can quickly go from category 0 to category 4 quickly.



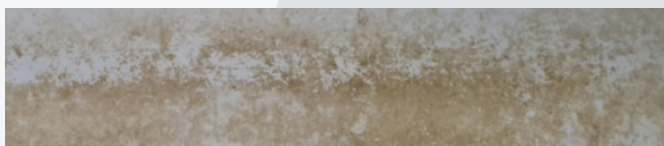
POLLUTION IN PIG FARMS



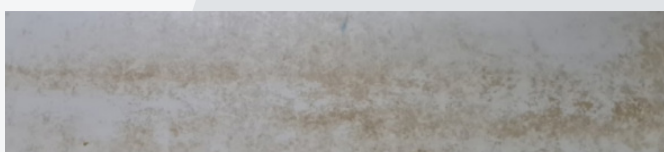
Historic pollution is the result of multiple insufficient washing rounds

Differentiating between different types of Historical pollution.

ORGANIC (Alkaline cleaners)



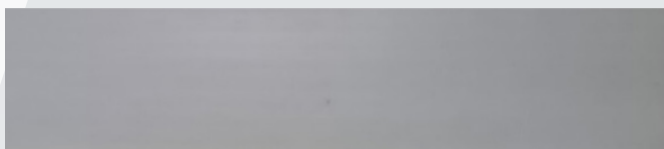
Category 3 - Heavy organic pollution



Category 2 - Medium organic pollution

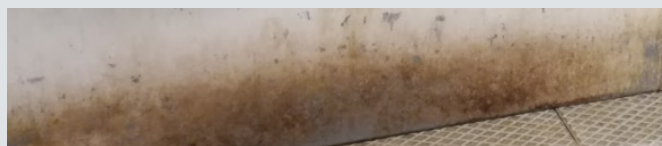


Category 1 - Light organic pollution

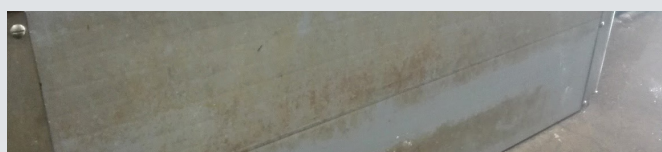


Category 0 - Zero historical pollution

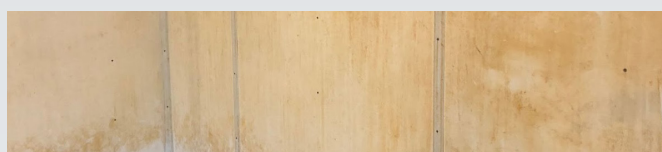
INORGANIC (Acidic cleaners)



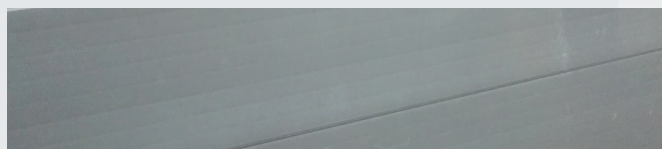
Category 3 - Hydrate lime pollution



Category 2 - Mixed pollution



Category 1 - Iron pollution



Category 0 - No historical pollution

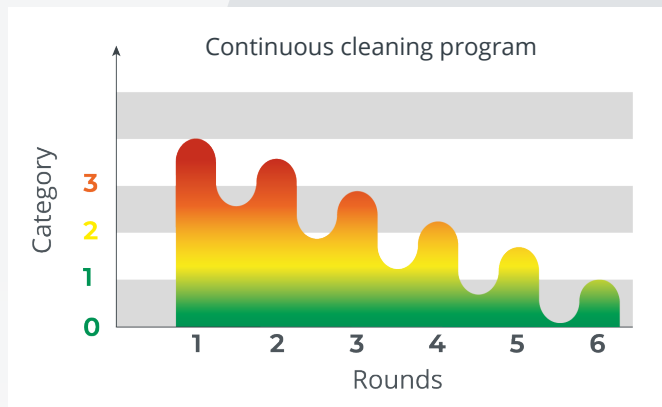
How to remove organic pollution?

OPTION 1

Continuous cleaning program

Every round a step closer

MS TopFoam (LC Fresh, LC Alk or Power)



Application Instructions

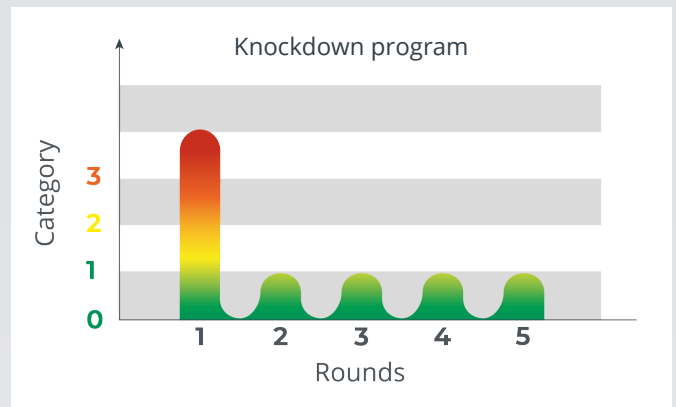
- First remove heavy soiling
- Use a 100% concentration, no pre-dilution required (preferably through a MS Greenline)
- Use a 1-3% product
- Apply product with cold water, aiming for the consistency of shaving cream
- Soaking time: min. 30 - max. 120 minutes
- Wash with hot or cold water

OPTION 2

Knockdown program

Reset to category zero

MS TopFoam Reset (Alk or Acid)



Application Instructions

- Apply the product through a hand or backpack sprayer
- Let it soak for 5 minutes and then pressure wash clean
- A thick layer of historical pollution might take multiple applications of foam to get through the entire layer

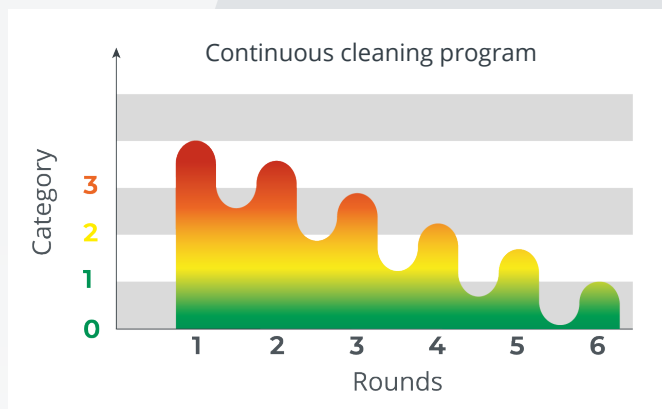
How to remove inorganic pollution?

OPTION 1

Continuous cleaning program (only for Iron)

Every round a step closer

(MS TopFoam LC Acid)



MS TopFoam Acid is a low pH cleaner to help you get rid of inorganic materials such as Iron, Calcium etc. In areas where you have lots of iron or by the use of Lime wash you can consider putting MS TopFoam Acid in your SOP multiple times per year. This should always be after your Alkaline cleaning step, so that the pollution of the previous round is gone.

Benefits

- Used through foamer applicator
- Fast extra step

Application instructions

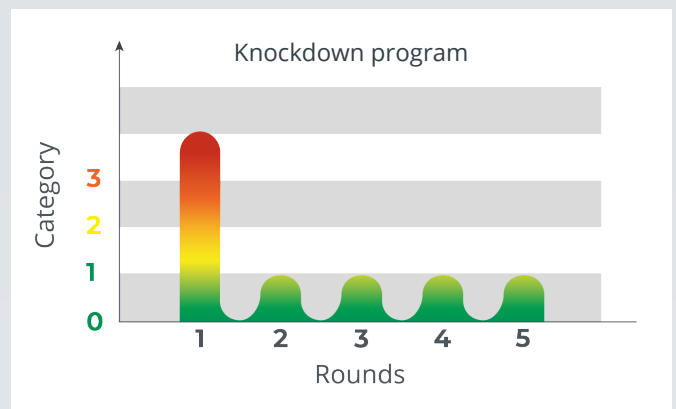
- MS TopFoam Acid will be used after your SOP (also after the use of MS TopFoam Alkaline)
- Depending on the layer left, choose your rate accordingly: usually between 2-4%
- Let it soak for at least 15 minutes

OPTION 2

Knockdown program

Reset to category zero

(MS TopFoam Reset Acid)



MS Reset Acid will be used after your standard operating procedure for cleaning. When there is a layer of organic or inorganic material left you can choose to perform a Knockdown.

Benefits





- Highly concentrated
- Low pH for inorganic materials

Application instructions

- Apply the product through a hand or backpack sprayer
- Leave it sitting for 5 minutes and then pressure wash clean
- Thick layer might take 2-3 times to get through the entire layer



ALKALINE FOAM CLEANERS

For organic pollution

	Products	Description	Cleaning program
	MS TopFoam Power	MS TopFoam Power is a very strong foam cleaner with >60 min contact time and the most powerful cleaning capabilities of the TopFoam range. This foam will effectively remove even the most tenacious dirt.	Continuous
	MS TopFoam LC Fresh	MS TopFoam LC Fresh is a scented foam cleaner with powerful binding properties and a long contact time (>60min). For a clean stable with a pleasant and refreshing smell.	Continuous
	MS TopFoam LC Alk	MS TopFoam LC ALK is a powerful foam cleaner with strong binding properties and a long contact time (>60min). Especially effective against contamination containing fat and proteins.	Continuous
	MS TopFoam Reset Alk	MS TopFoam Reset Alk is a extremely concentrated detergent that is used to reset a category 3 organic contamination back to category zero during a knockdown program. Does not foam.	Knockdown

ACIDIC FOAM CLEANERS

For inorganic pollution

	Products	Description	Cleaning program
	MS TopFoam LC Acid	MS TopFoam LC Acid is a powerful acid foam cleaner with strong binding properties. It can remove heavy soiling containing iron, manganese and limescale deposits.	Continuous
	MS TopFoam Reset Acid	MS TopFoam Reset Acid is an extremely concentrated detergent that is used to reset a category 3 inorganic contamination back to category 0 during a knockdown program. Does not foam.	Knockdown