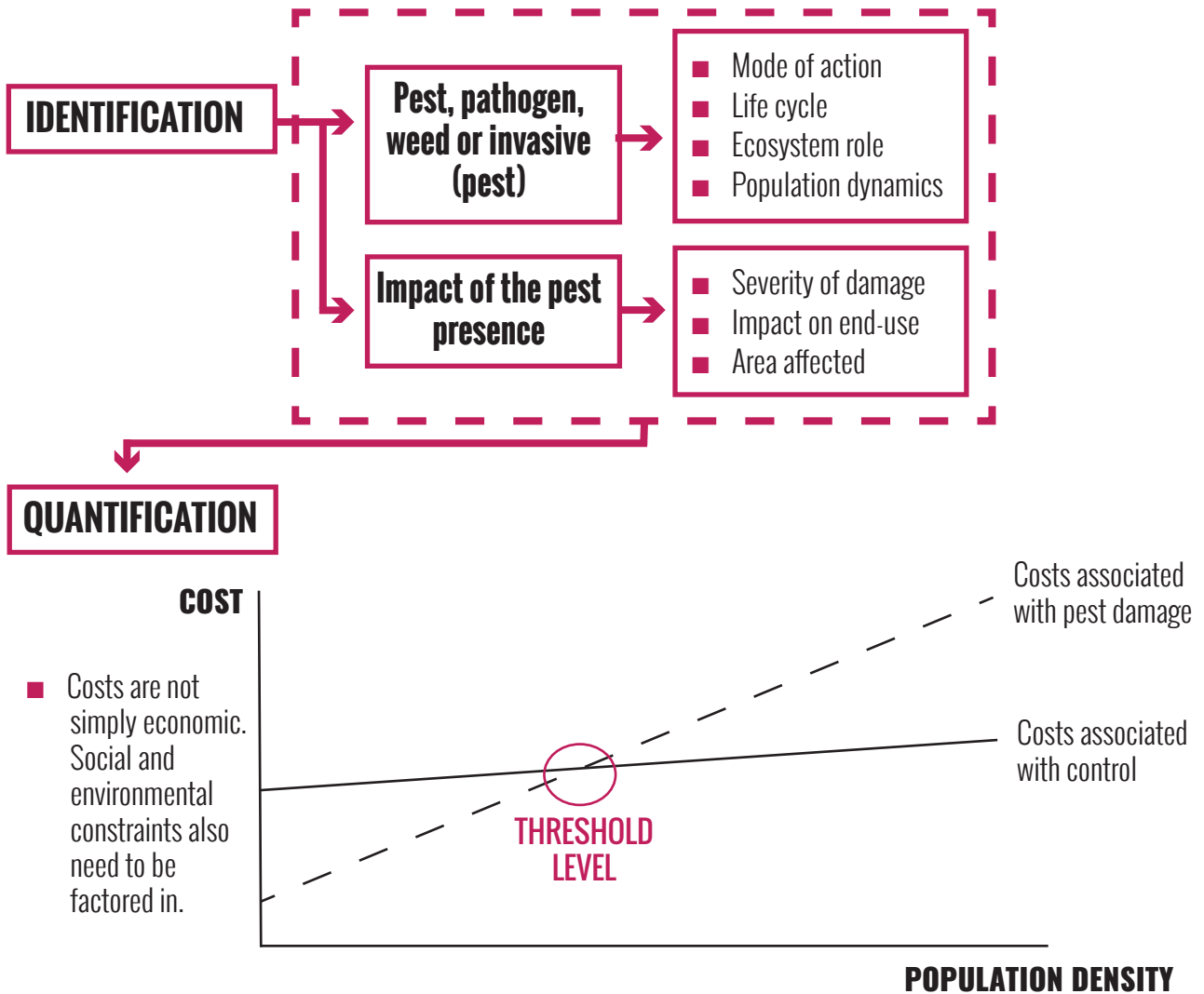


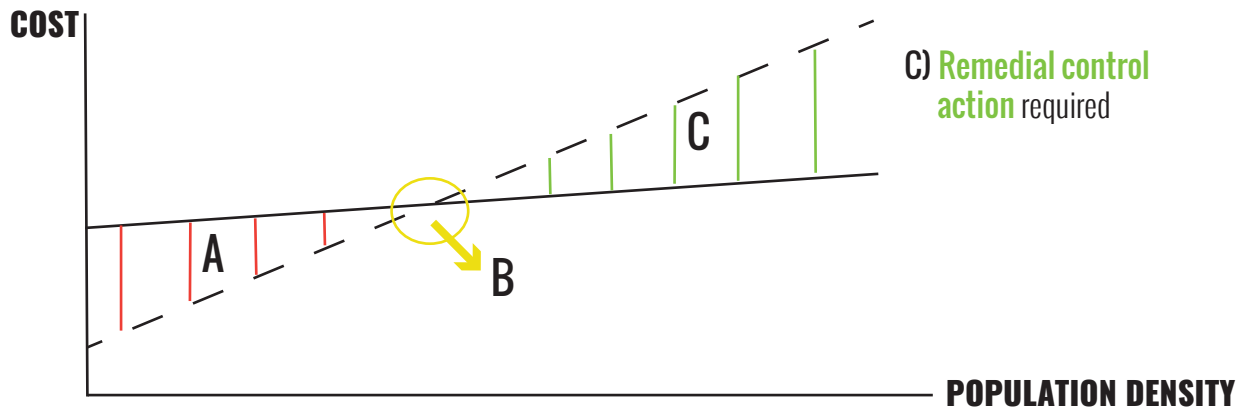
INTEGRATED PEST MANAGEMENT: THREE-STEP FRAMEWORK

1: IDENTIFYING AND QUANTIFYING THE PROBLEM



	PEST ASSOCIATED	CONTROL MEASURE ASSOCIATED
ECONOMIC <ul style="list-style-type: none"> Direct Indirect 	<ul style="list-style-type: none"> Production loss Impact on sector's and country's GDP Associated employment implications 	<ul style="list-style-type: none"> Cost of control measure, application etc. Remediation costs associated with potential risk
ENVIRONMENTAL <ul style="list-style-type: none"> Abiotic Biotic 	<ul style="list-style-type: none"> Impact of pest on neighbouring land users Impact of pest on indigenous species 	<ul style="list-style-type: none"> Impact of pest on neighbouring land users Impact of pest on indigenous species
SOCIAL	<ul style="list-style-type: none"> Impact of lower forest productivity - employees and product end users Impact of pest on forest users 	<ul style="list-style-type: none"> Human health implication of control measures on operators, neighbours and other forest users

2: DECIDING TO TAKE ACTION



A) Take no control action - monitoring is still critical

B) Avoidance measures - proactively looking for solutions to prevent threshold levels being reached:

- Cheaper in long-term
- Fewer potentially damaging impacts

Includes:

- Altering silviculture practices
- Selective breeding for resistance
- Site-specific matching
- Optimising tree health and quality

C) Remedial control action required

3: REMEDIAL ACTION REQUIRED

TWO STEP PROCESS

In order to proceed to chemical control, there must be good evidence that non-chemical methods are impractical, ineffective, excessively costly or would cause more harm.

1) Non-chemical control

- Species selection:
 - Varieties with increased resistance
 - Site-specific matching
- Cultural controls - making the environment less attractive:
 - Mulching
 - Cultivating
 - Sanitary measures
 - Removal of alternative host species
- Biocontrol - the three P's
 - Predators
 - Parasitoids
 - Pathogens

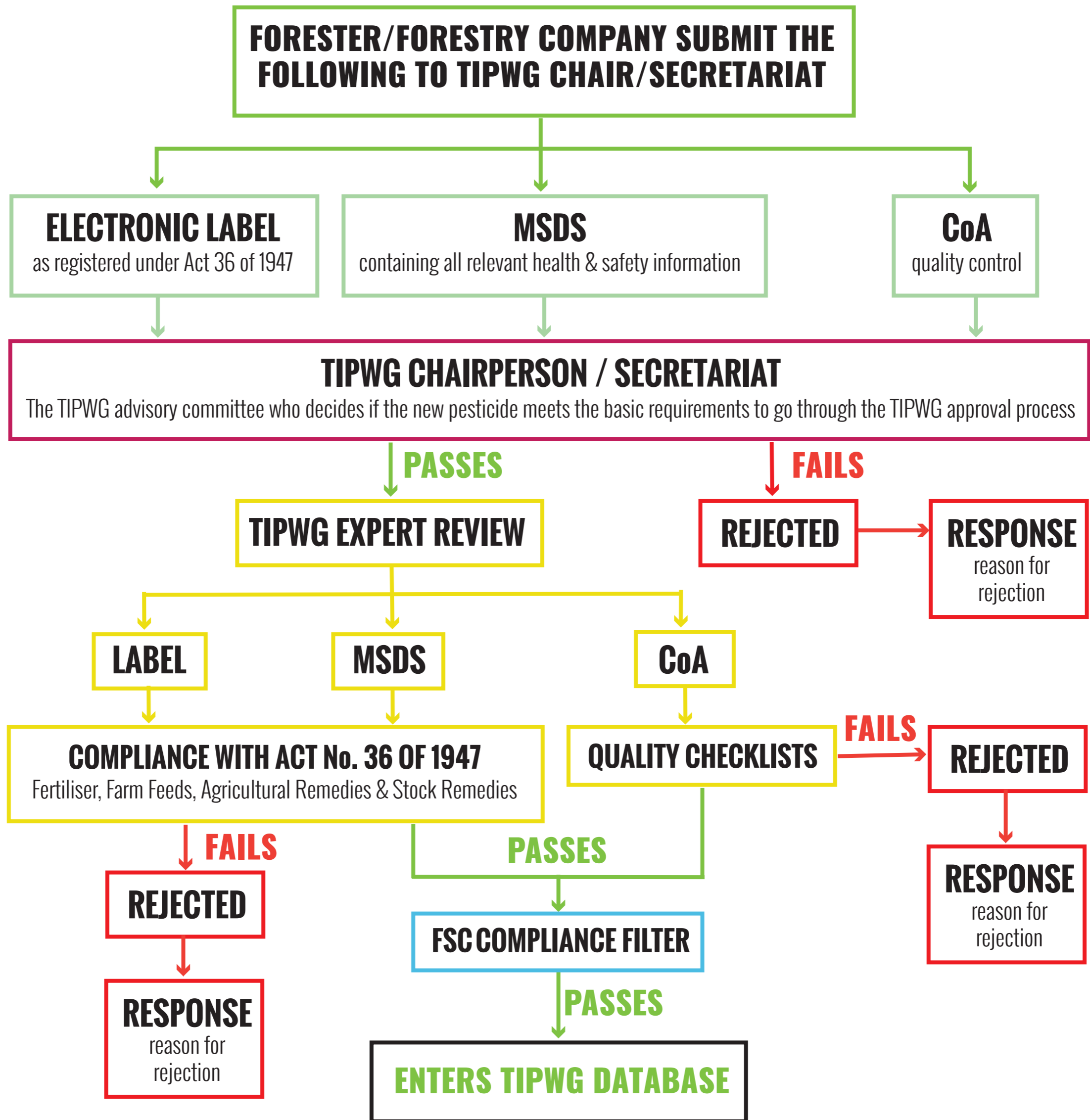
2) Chemical control

Chemical control should be used in combination with all of the above to minimise the amount of chemicals required.

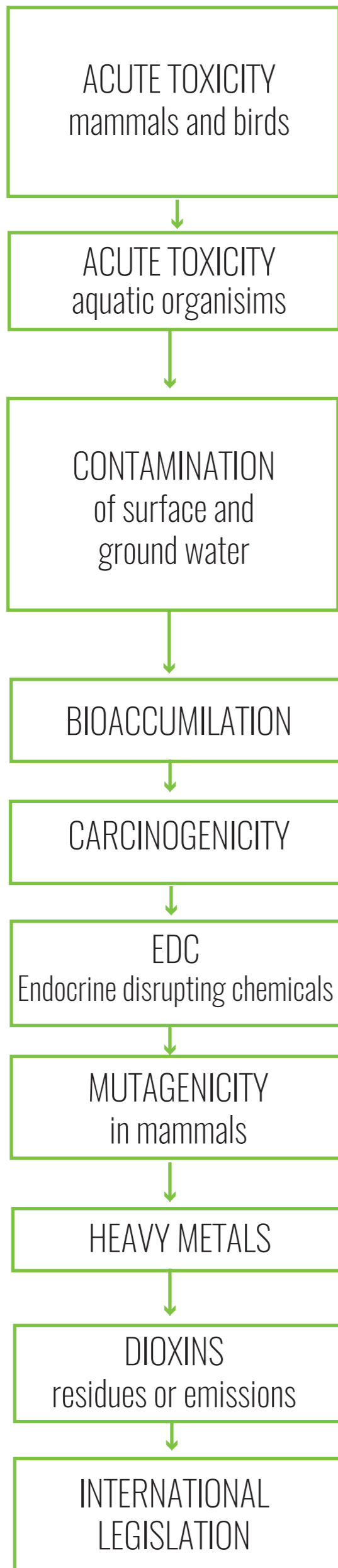
Refer to IPM: Chemical control

STANDARD OPERATING PROCEDURES: APPROVED PESTICIDE LIST

When a forester, or forestry company, see potential in a new pesticide that has been legally approved for use in South Africa they must submit a request to the manufacturers (possibly via their environment/safety department) for the electronic label, material safety data sheet (MSDS) and certificate of analysis (CoA). These documents must then be submitted to the TIPWG chairperson or secretariat, (contact details on www.tipwg.co.za), who will then initiate the TIPWG approval process required before any pesticide is added on the TIPWG approved pesticide list.

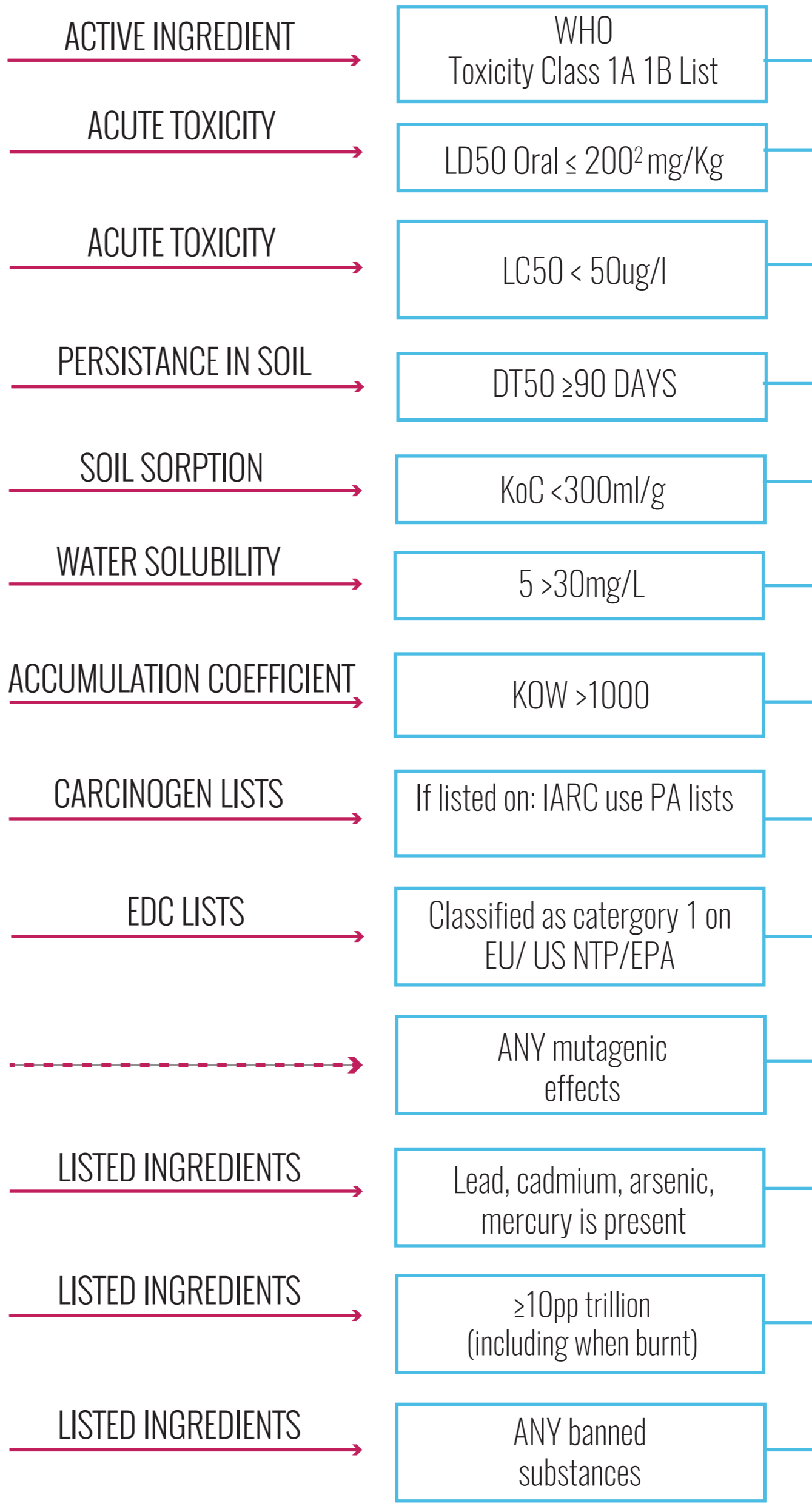


FSC FILTER



PASS

REJECTION CRITERIA



REJECT

