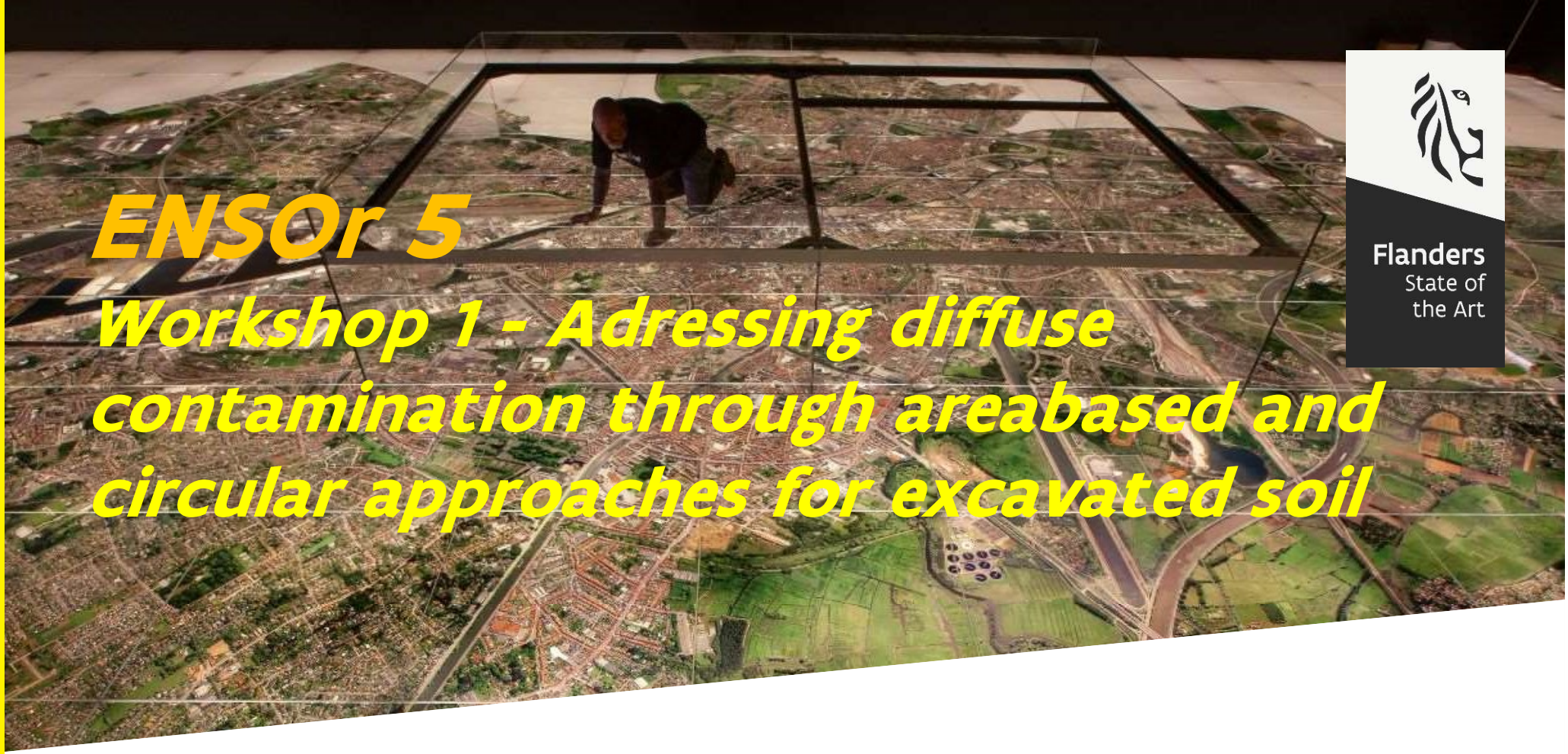

ENSOr 5

Workshop 1 - Adressing diffuse contamination through areabased and circular approaches for excavated soil

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Johan Ceenaeme – OVAM

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Overview

- **1/ Policy framework for the reuse of soil materials in Flanders**
  - → Main principles of the policy on reuse of soil materials
- **2/ More specifically for PFAS**
- **3/ Challenges for the framework**
- **4/ Discussion**
  - → Diffuse contamination
  - → Circular approach
  - → Areabased

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1. The Flemish policy framework for the reuse of soil materials

Policy on excavated soils

- Rules in the Soil Decree on the use and management of soil materials (e.g. excavated soil) applying the standstill principle but encourage reuse (circularity)
- Soil materials that are used in accordance with the conditions of the Soil Decree are not waste materials ('end of waste')
- Based on volume (above or below 250 m^3) and suspicion of contamination, an investigation by a certified soil expert of the soil material is required to determine the quality and the possibilities for reuse according to a standard procedure

Policy on excavated soils

- The contractor that excavates the soil has to respect and follow a traceability procedure of a certified soil management organization that defines the responsibilities of the different parties (builder, contractor, transporter, receiver)
- After the works have been executed as required and if the soil was reused correctly, the receiver of the soil receives a soil management report as a certification of compliance

Origin

Excavation site

Transport

Destination

Construction site

SOIL MATERIALS VERSUS WASTE

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Origin

Destination

Excavation site

Soil survey

Transport
Temporary storage

Receiving terrain

Acceptation

Authorisation

> 250m³ <

3.5 t

Notification

Soil management-organisation

CERTIFICATE

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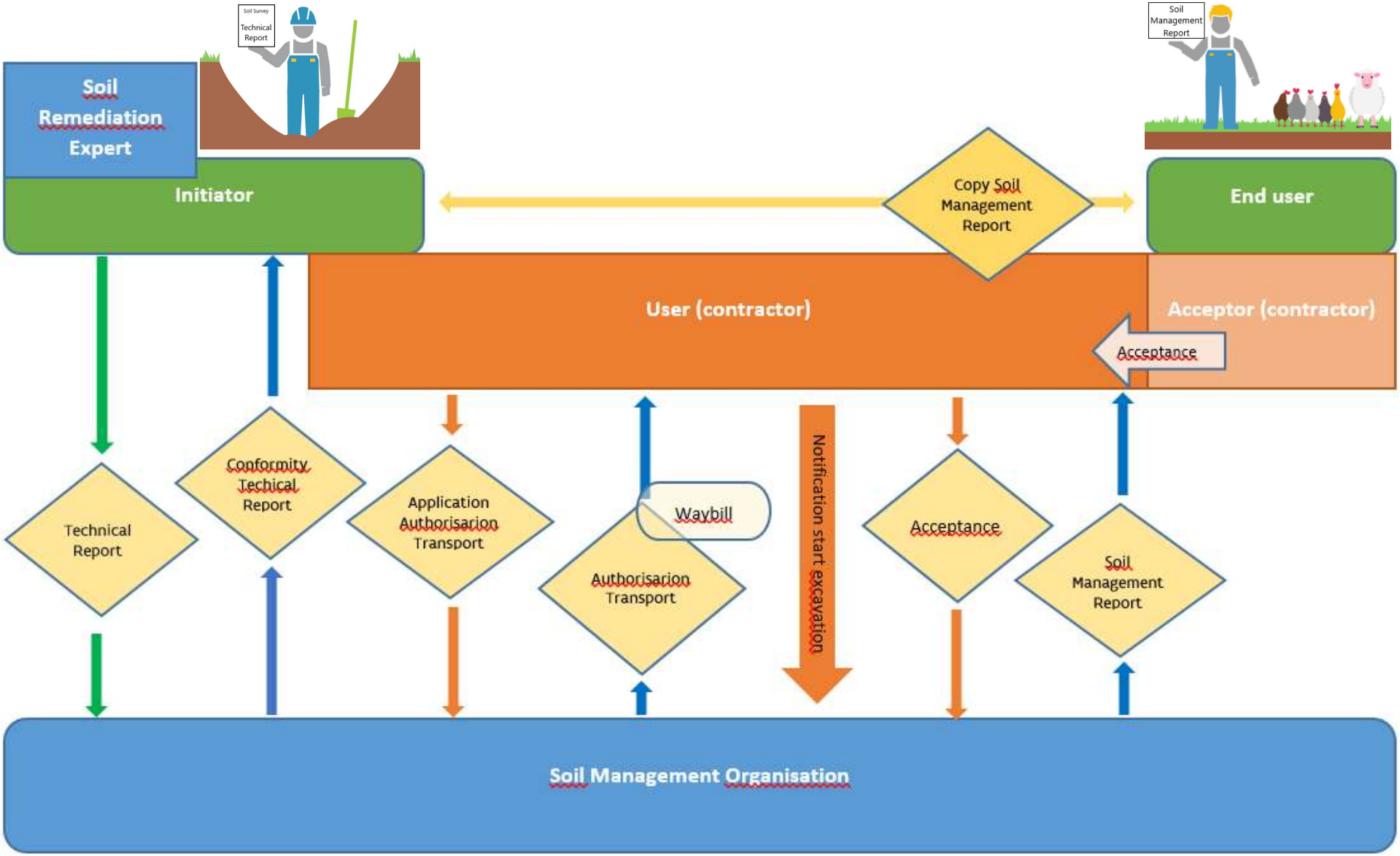
Soil Survey
Technical Report
Soil Management Report
Soil Remediation Expert
Initiator
End user
Copy Soil Management Report
User (contractor)
Acceptor (contractor)
Acceptance
Technical Report
Conformity Techical Report
Application Authorisarion Transport
Waybill
Authorisarion Transport
Notification start excavation
Acceptance
Soil Management Report
Soil Management Organisation

2. More specifically for PFAS

Existing framework PFAS

- The current framework for reuse of soil materials is based on guidelines issued by OVAM
- For soil materials – free use of excavated soil

	Free use (µg/kg dm)
PFOS	3
PFOA	3
Sum PFAS (quantitative measurable PFAS)	8

Expectations from the sector (soil remediation experts, contractors, owners, builders, initiators of infrastructure works, …) for a more legally secure framework

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Temporary legal framework (future)

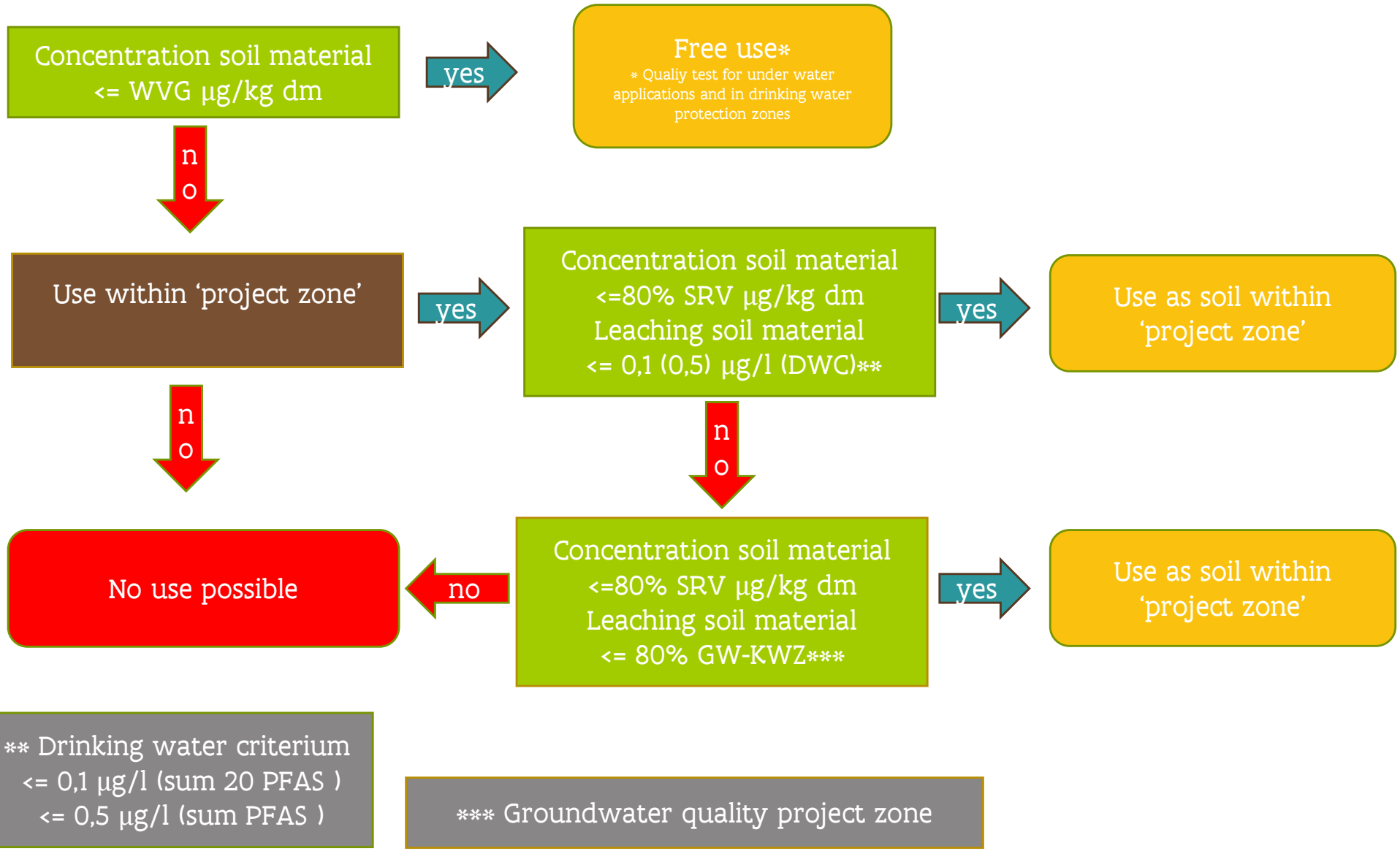
- For soil materials – free use of excavated soil

	Free use (µg/kg dm)
PFOS	3
PFOA	2
Sum PFAS (quantitative measurable PFAS)	8

- Restriction: + Quality test for underwater applications & for use of soil materials in drinking water protection zones

- For use in construction purposes & use within project zone: max. concentrations & decision based on leaching concentrations (max. 80% of mean concentration in groundwater in project zone)

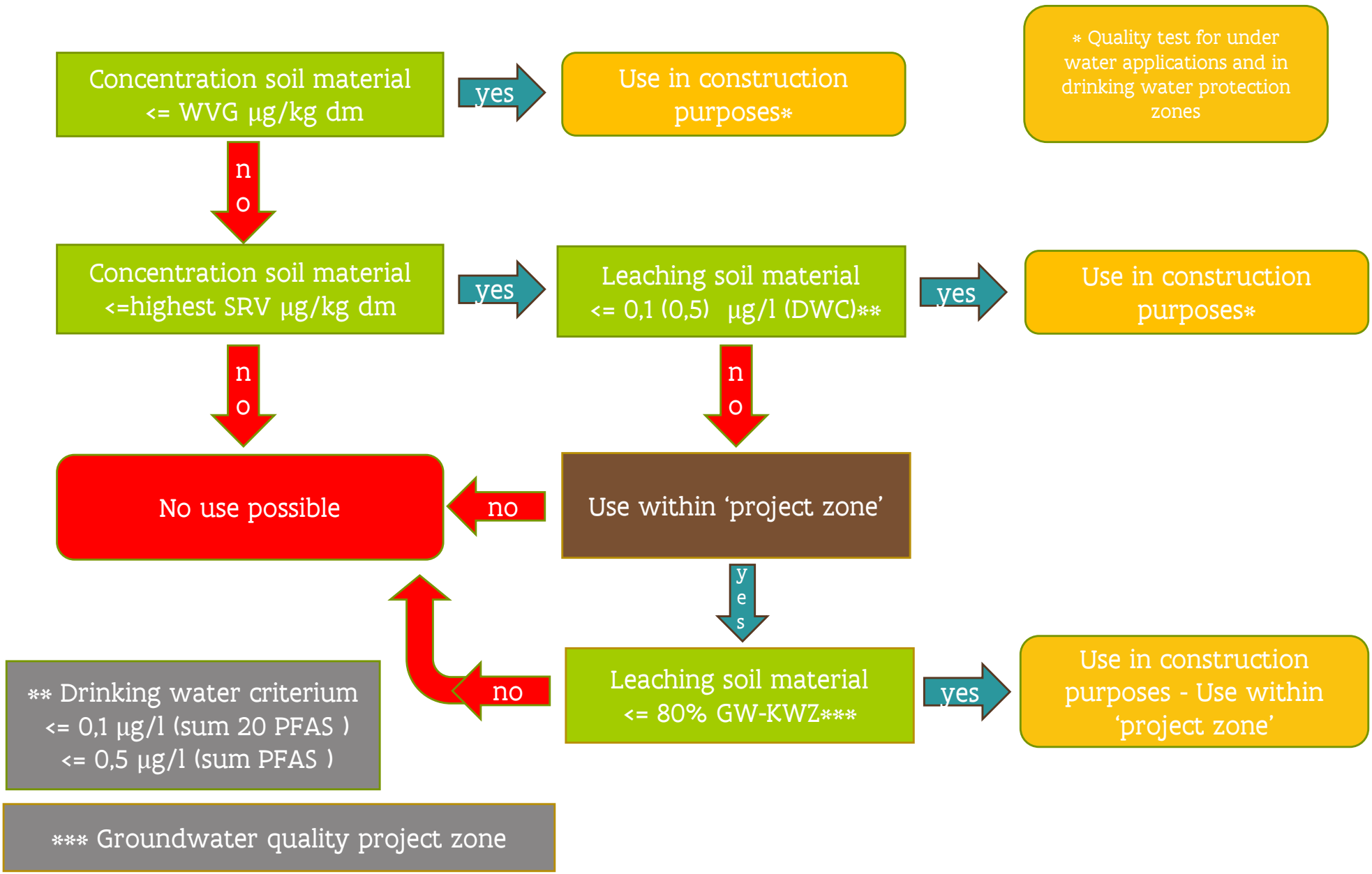
Use as soil



** Drinking water criterium
<= 0,1 µg/l (sum 20 PFAS)
<= 0,5 µg/l (sum PFAS)

*** Groundwater quality project zone

Use in construction purposes



3. Challenges

Challenges for reuse of soil materials (with PFAS)

- There is a need from the sector for legal certainty
- As a result of strict toxicological values, the standards for soil and groundwater reach the established anthropogenic background values
- Diffuse soil contamination can therefore be a reason why soil materials cannot be reused
- The investigations show that PFAS is widespread in soil and groundwater
- For PFAS, the leaching properties are determining factors for the possibilities for reuse of soil materials
- For PFAS as an emerging contaminant, both the standstill provisions for the quality of soil and groundwater are important – relevance of Water Framework Directive

4. Workshop discussion

Discussion

→ Diffuse contamination

- Is this an obstacle to the circular use of soil materials?

→ Areabased

- Do we allow reuse of soil materials when concentrations in an area are already increased?

Thank you for your cooperation!

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