

STRATEGY (DEVELOPMENT)

- i. key objectives, processes & targets
- ii. contamination & (unacceptable) risks

IDENTIFICATION

Preliminary investigation

- systematic or site-approaches
- define & lineate project area
- desk study & site reconnaissance

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no

impacts evident

contamination /risks likely?

yes

Site Prioritisation (optional)

CHARACTERISATION

→ stepwise developing CSM & investigation

CONCEPTUAL SITE MODEL

- Relevant contaminants
- primary & secondary sources
- contaminated media
- migration pathways
- human & environmental receptors
- exposure conditions

SITE INVESTIGATION

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RISK ASSESSMENT

→ tiered (cyclical) approach

no

uncertain

site contaminated? risks?

yes

RESPONSE OPTIONS

- emergency measures
- land use restrictions

RISK MANAGEMENT

NO FURTHER MEASURES

- keep records (database)
- monitor land use
- control CSM and assessment before changes in land use

OPTIONS APPRAISAL

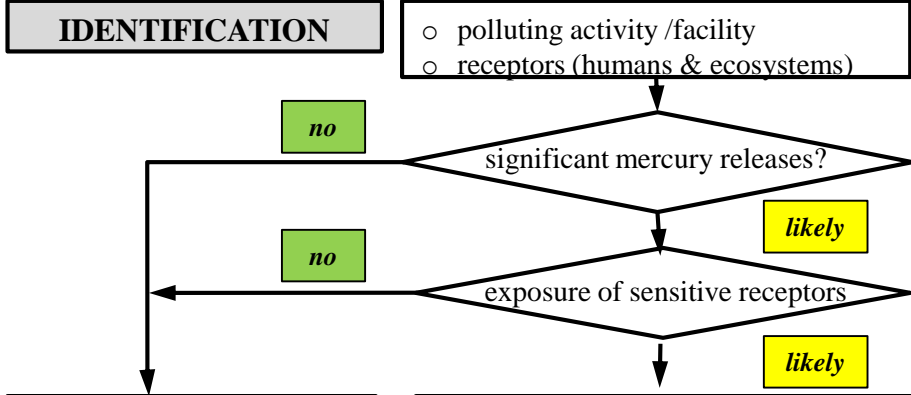
- define remediation objectives & develop concepts
- identify suitable & efficient technologies
- evaluate benefits & costs
- establish remediation targets

REMEDIATION ACTION

- implement measures & monitor
 - performance
 - relevant media
 - relevant pathways

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VALIDATION



potential magnitude Hg-releases	potential exposure of receptors			
	low	medium	high	very high
very high	yellow	orange	red	dark red
high	yellow	orange	red	red
medium	yellow	orange	orange	orange
low	yellow	yellow	yellow	yellow

no further measures

SITE INVENTORY

PRIORITISATION (simplified site assessment to qualify estimated impacts)

CHARACTERISATION
→ stepwise developing CSM & investigation

SITE INVESTIGATION

- relevant mercury compounds
- relevant exposure pathways (source – receptor linkages)

- DERIVE (SELECT) SUITABLE SCREENING VALUES**
- define pathway algorithms
 - select toxicity data and exposure parameters
 - consider local/regional background values

no

Screening Values exceeded?

- NO FURTHER MEASURES**
- ☑ keep records (database)
 - ☑ monitor land use

yes

DETAILED SITE INVESTIGATION

RISK ASSESSMENT
→ tiered (cyclical) approach

RISK MANAGEMENT

OPTIONS APPRAISAL

REMEDIATION ACTION