

Sustainable Management Practices (SMP)

Report and Spreadsheet

Nicola Harries

Technical Director CL:AIRE
SuRF-UK Project Secretariat

CL:AIRE

- CL:AIRE is a widely respected UK charity and not-for-profit organisation working in the land contamination and brownfield sector, based in UK but shares knowledge freely across the world
- CL:AIRE has cross-sectoral support and interest in SuRF-UK as a project in the UK and globally
- Co-ordinate International Sustainable Remediation Alliance (ISRA) a forum where country networks share progress

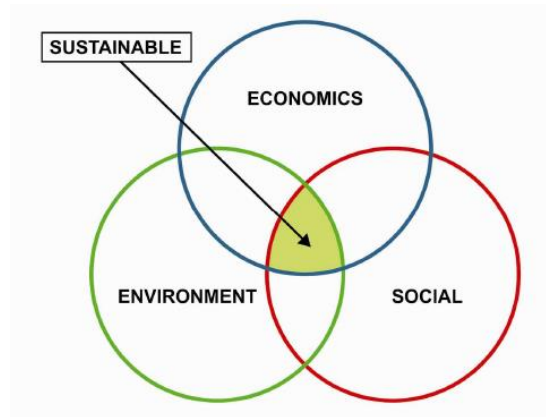
SuRF-UK

- The UK Sustainable Remediation Forum (SuRF-UK) was established in 2007 as a collaborative CL:AIRE initiative
- It has developed a sustainable remediation framework that allows assessors to identify remediation strategies, techniques and technologies that are more explicitly linked to the goals of sustainable development.
- The SuRF-UK 'Framework for Assessing the Sustainability of Soil and Groundwater Remediation' was published by CL:AIRE in 2010 with widespread regulatory and cross-sectoral support across the UK and cited across the world.
- ISO 18504:2017 Sustainable Remediation was strongly influenced by SuRF-UK framework
- Focus on holistic sustainability assessment of
 - remediation input to high-level land-use planning
 - remediation input to overall site / project design ('Better by design')
 - remedial strategy selection and remediation technology selection
 - remediation implementation and verification
- Goal to provide usable outputs that have widespread regulatory support, are practicable and effective, that meet business needs and are globally relevant.

What is a SMP?

SMPs are simple, common sense **actions**.

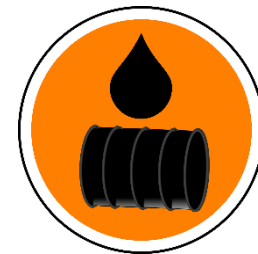
They have been mapped against **sustainability indicators**.



SMPs can be used to **improve the benefits** of a project.
e.g. increased community satisfaction.



SMPs can also **reduce the negative impacts** of a project e.g. reduce chemical spills by using secure storage.



What is a SMP?

The actions can be applied to **different stages** of a project as well as **different project types**.

Planning



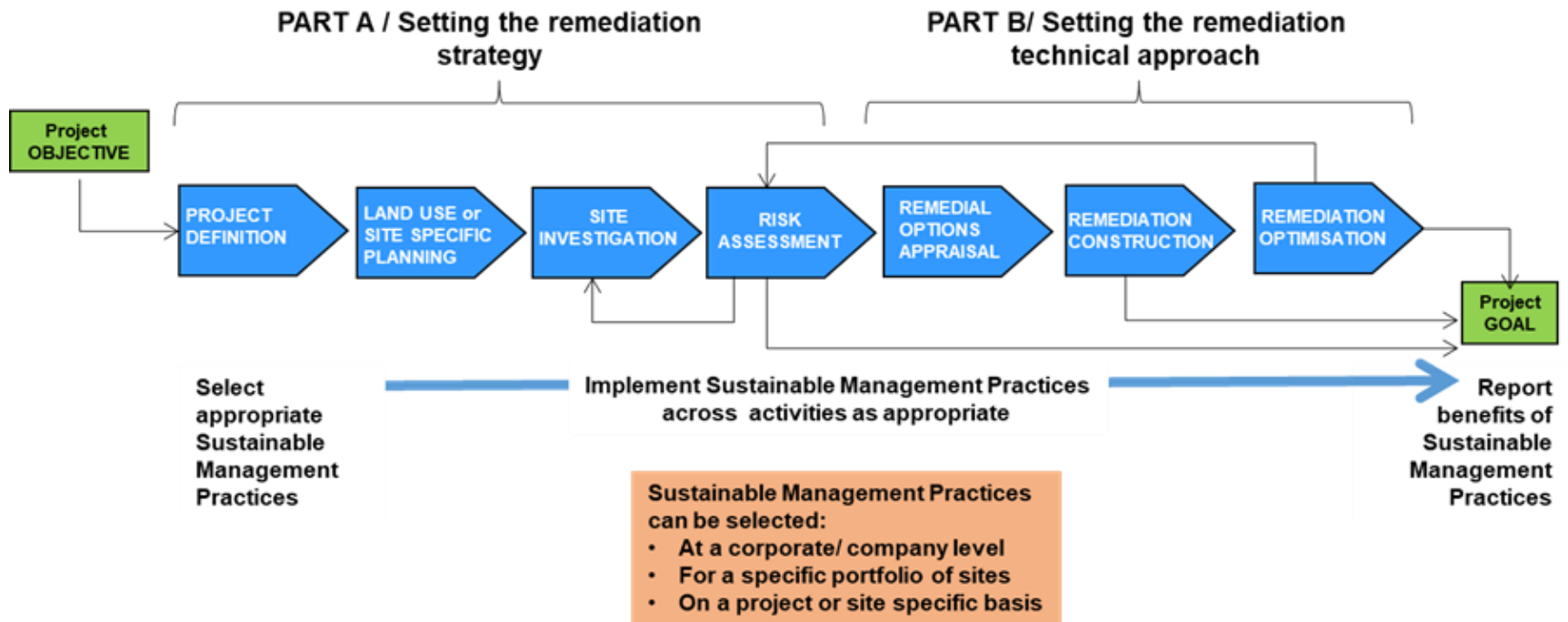
Investigation

Construction



Remediation

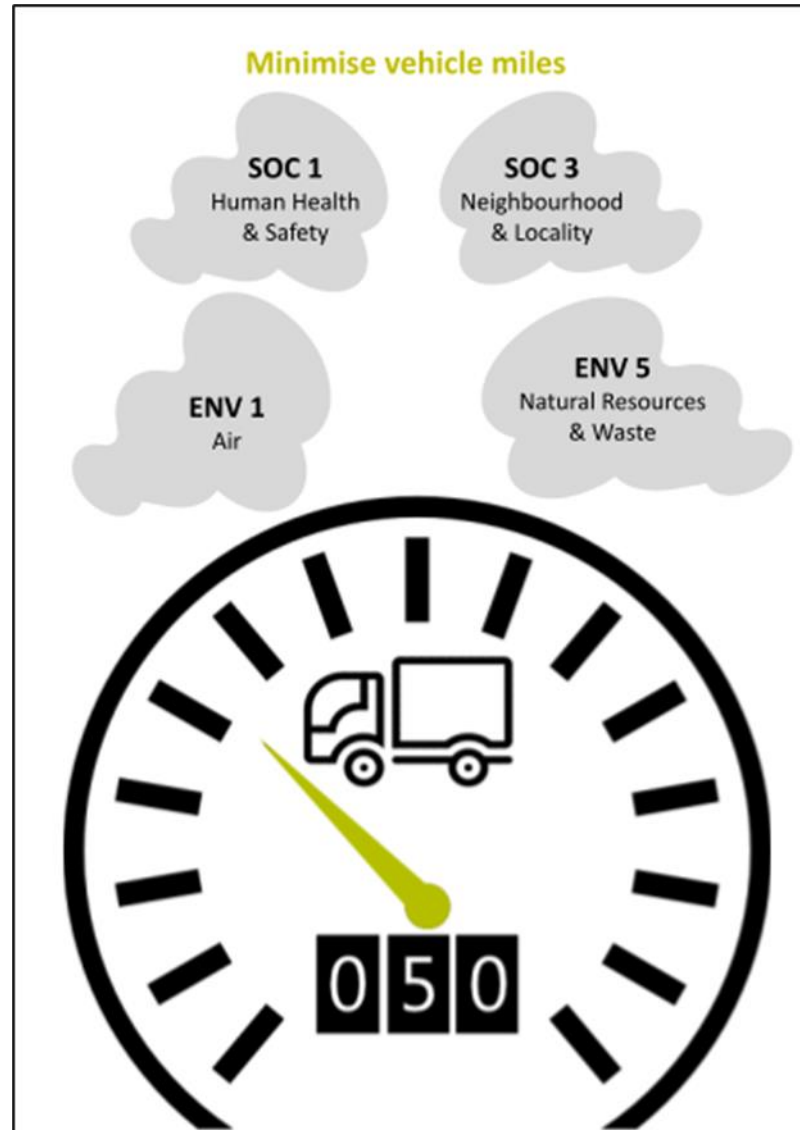
SMPs can be implemented at any stage in a land contamination management project to improve its environmental, social and/or economic performance.



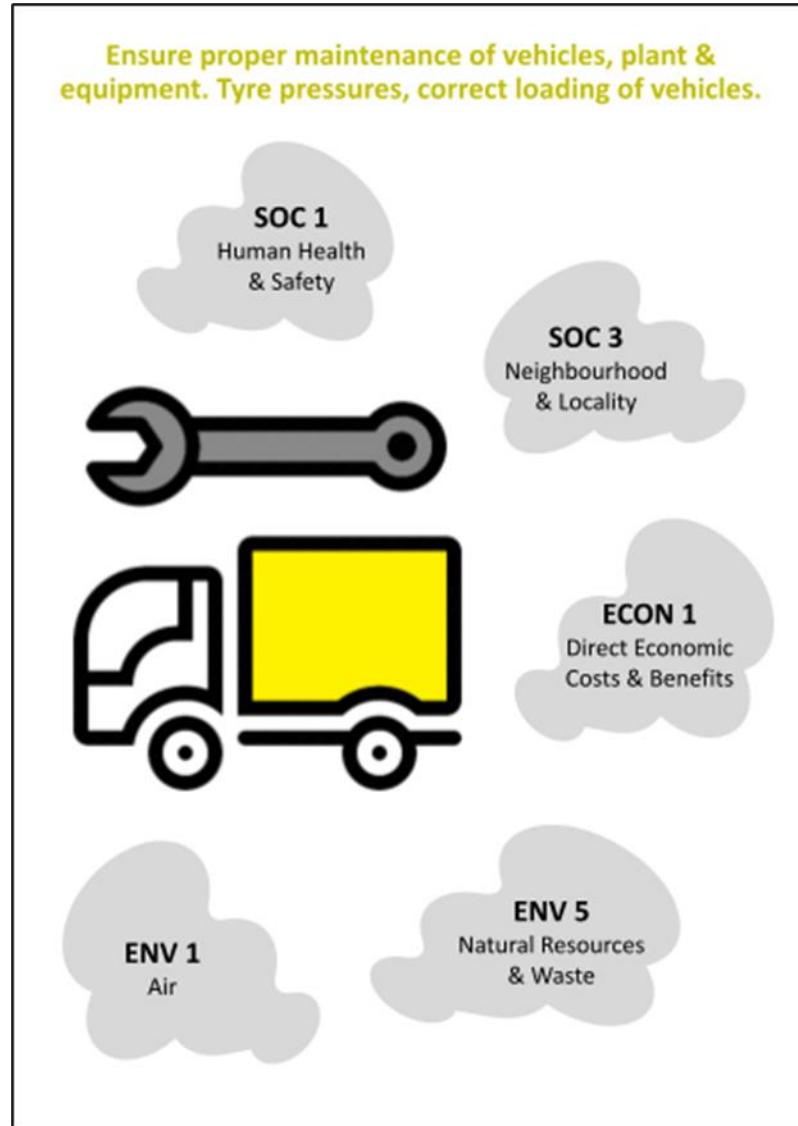
Benefits of SMPs

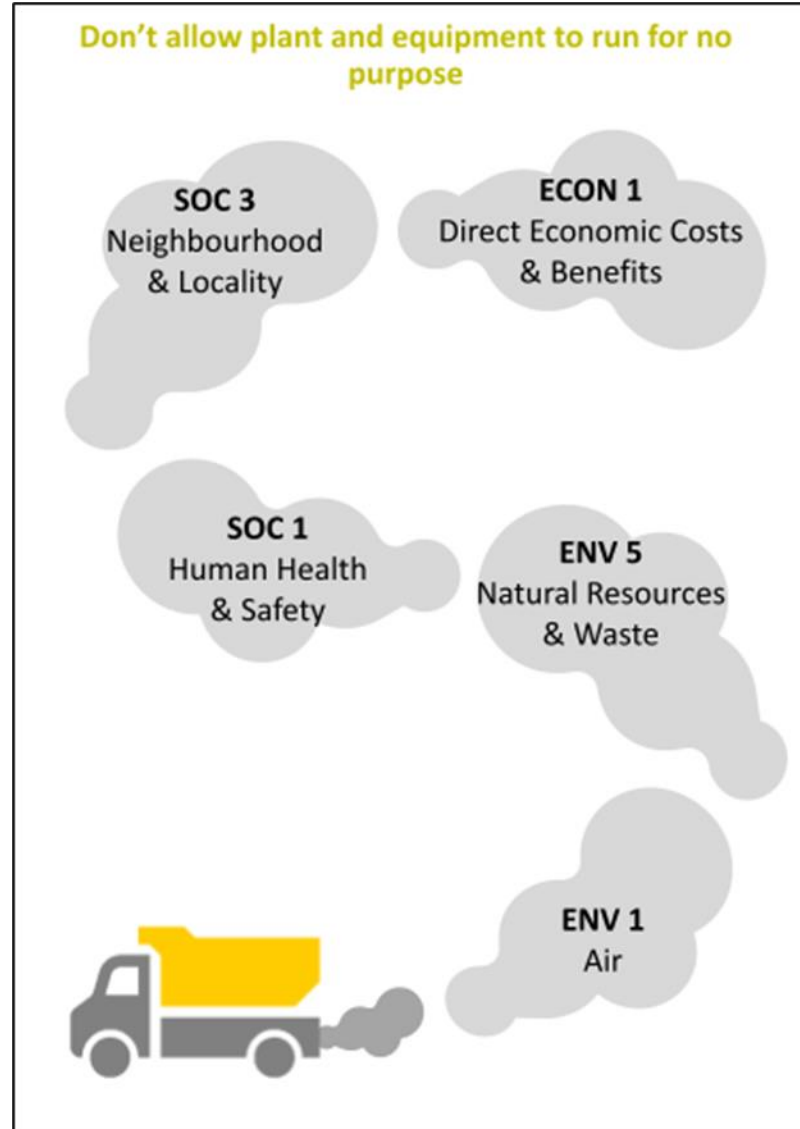
Indicator	Description	Potential benefit examples
ENV 1	Air	Reduce emissions
ENV 2	Soil & Ground Conditions	Minimise emissions to soil and improve soil function
ENV 3	Groundwater & Surface Water	Prevent leaks and spills
ENV 4	Ecology	Maintain or improve biodiversity
ENV 5	Natural Resources & Waste	Reduce natural resource use, fossil fuel use and waste production.
SOC 1	Human Health & Safety	Safe working practices
SOC 2	Ethics & Equity	Regulatory compliance
SOC 3	Neighbourhood & Locality	Minimise impacts (e.g. traffic, dust, odour, noise)
SOC 4	Communities & Community Involvement	Effective communication with local community
SOC 5	Uncertainty & Evidence	Optimised data collection
ECON 1	Direct Economic Costs & Benefits	Reduce cost, avoid wastage
ECON 2	Indirect Economic Costs & Benefits	Regulatory compliance and safe working practice
ECON 3	Employment & Employment Capital	Skills & training; Local employment
ECON 4	Induced Economic Costs & Benefits	External economic benefits
ECON 5	Project Lifespan & Flexibility	Climate change mitigation

Examples of SMPs

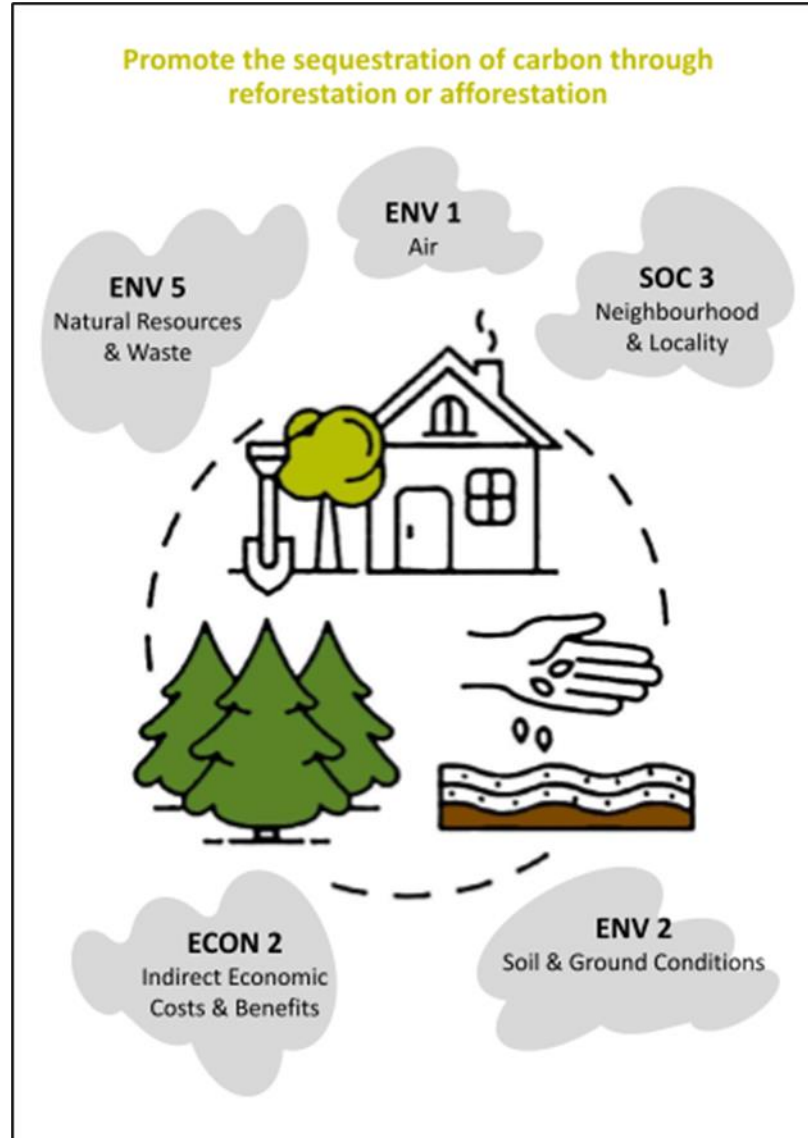


Examples of SMPs

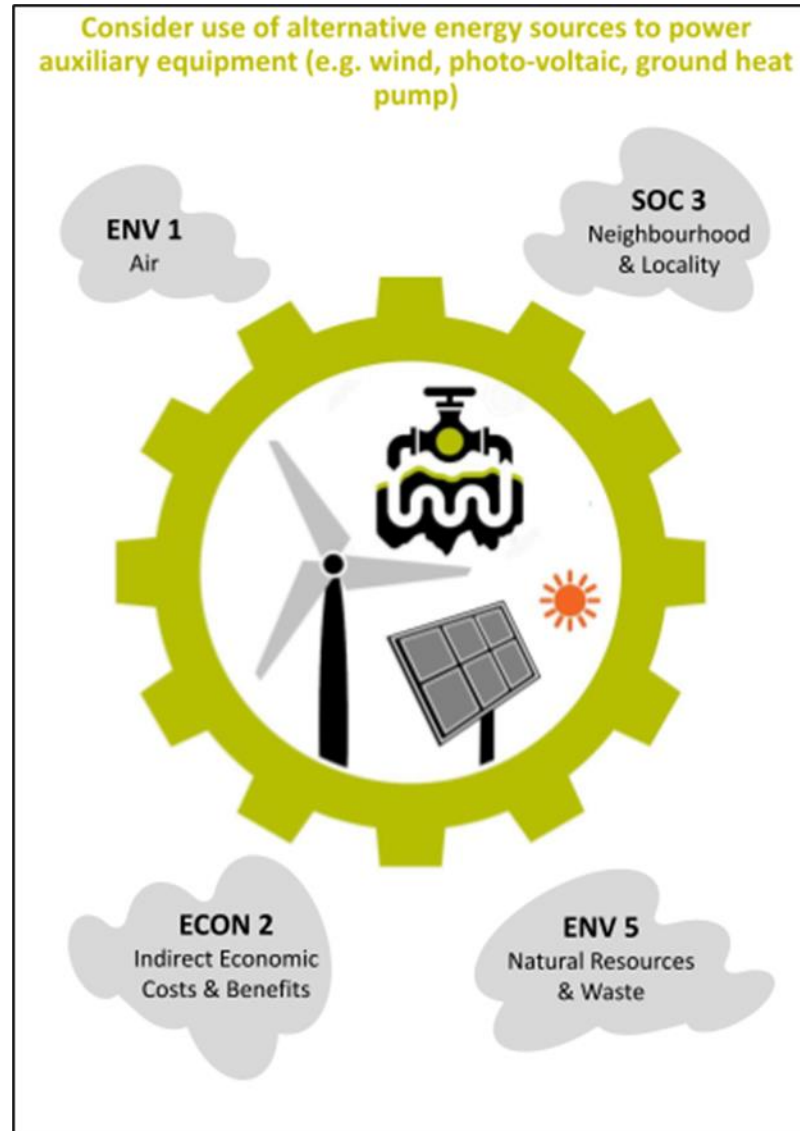
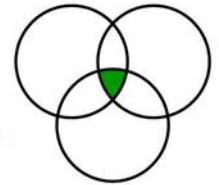




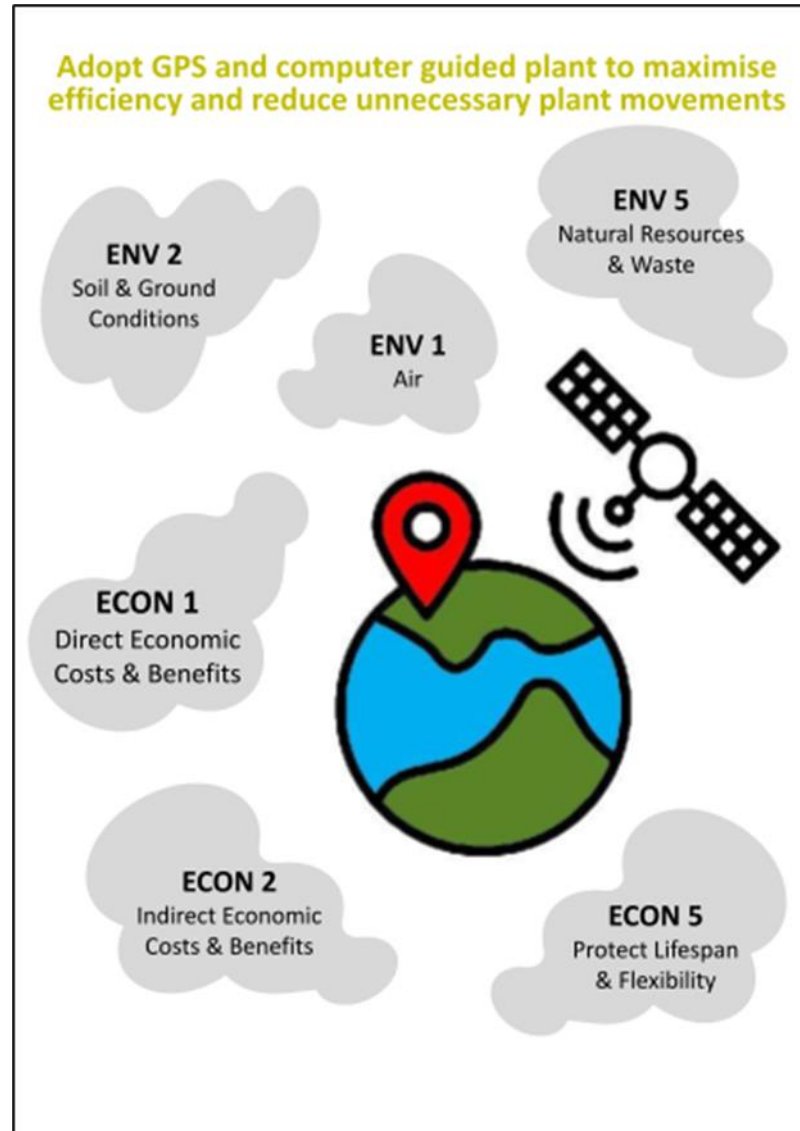
Examples of SMPs

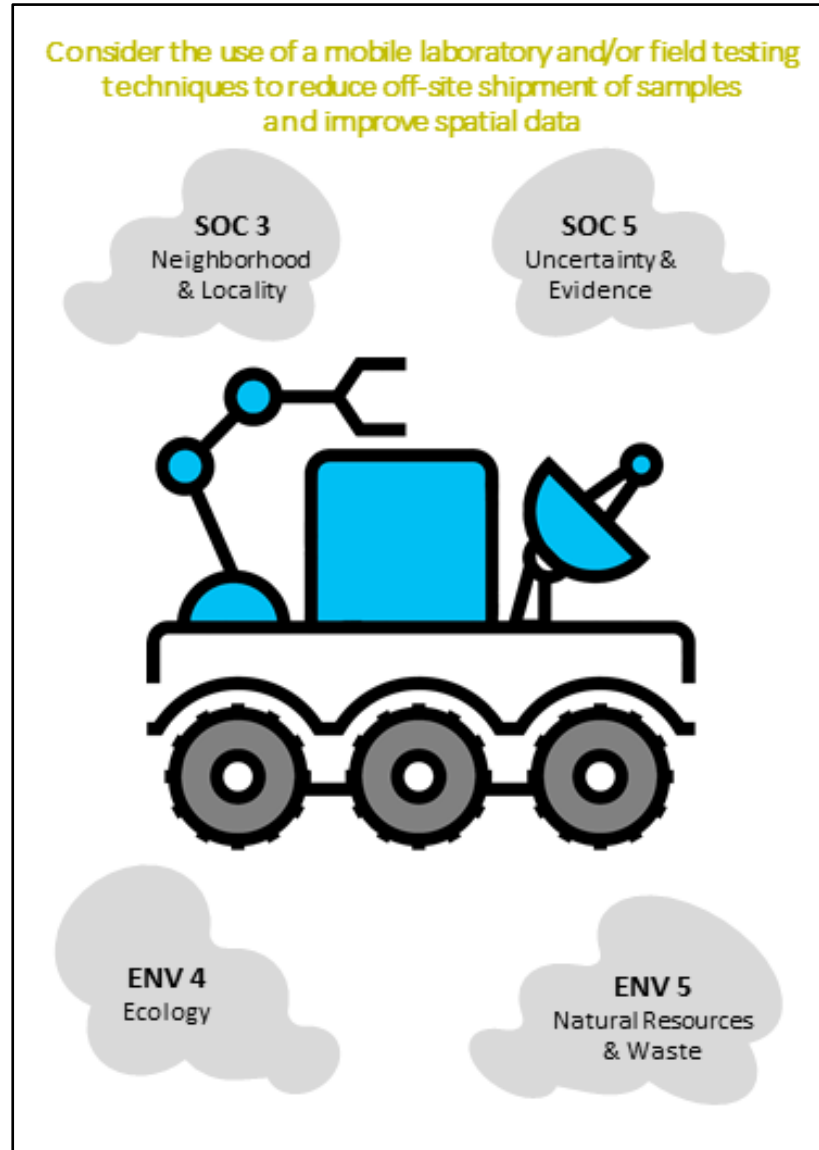


Examples of SMPs



Examples of SMPs





The SMP Spreadsheet

SuRF-UK have produced a spreadsheet template which can be used to **identify**, **record** and **evaluate** the SMPs for a specific project or portfolio of projects.

It contains 183 SMPs for you to chose from for your project.

You can make changes to suit your needs.

It is free to download from www.claire.co.uk/surfuk

The SMP Spreadsheet

SMPs

Project activities

Sustainability indicators

SUSTAINABLE MANAGEMENT PRACTICE	LCRM Project Activity							Sustainability Indicators															
	Procurement of goods & services	Land use planning	RA: site investigation	Options Appraisal	Remediation Strategy	Remediation Constructive and Operati	Verification and monitori	ECO ^{M1}	ECO ^{M2}	ECO ^{M3}	ECO ^{M4}	ECO ^{M5}	ENV ¹	ENV ²	ENV ³	ENV ⁴	ENV ⁵	SOC ¹	SOC ²	SOC ³	SOC ⁴	SOC ⁵	
Avoid contaminating soil - safe secure storage and use of materials, fuel and waste	-	-	√	-	√	√	-	x	x					x			x						
Demonstrate that the people used to undertake the job are competent to do so	√	√	√	√	√	√	√	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Establish key roles and responsibilities for sustainability performance and evaluation	-	-	√	√	√	√	√	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Hold project meetings by telephone or video conferencing	√	√	√	√	√	√	√	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Implement measures to prevent flytipping and to remove flytipped wastes	-	-	√	-	-	√	√	x	x					x				x		x			
Set project milestones to ensure periodic review and optimisation of activities	-	-	√	-	√	√	√	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Avoid mixing soil types (e.g. top soil with sub-soil)	-	√	√	-	-	√	-	x						x			x						
Consider self-inspection/audit procedures to ensure that permit/consent conditions are being complied with	-	-	√	-	√	√	√		x				x	x	x	x			x				
Ensure fuels and other chemicals are stored in secure, suitably bunded facilities away from watercourses, drains, flood risk areas and areas with high collision risk	-	-	√	-	√	√	√		x					x	x			x					
Ensure that all necessary permits/consents and exemptions are in place before works commence. I.e abstraction licenses, discharge consents.	-	√	√	-	√	√	√		x				x	x	x	x			x				
Implement an inspection schedule for containers, valves, pipe joints and secondary bunding	-	-	√	-	√	√	√		x					x	x			x					
Keep a spill kit close to the fuel or other fluids/chemicals storage area	-	-	√	-	-	√	√		x					x	x			x					
Stockpile contaminated materials in a sealed & bunded area	-	-	√	-	√	√	-		x					x	x								

You can filter/sort by activity and indicator, select your SMPs and save them for your project.

The SMP Spreadsheet

The spreadsheet also has columns for:

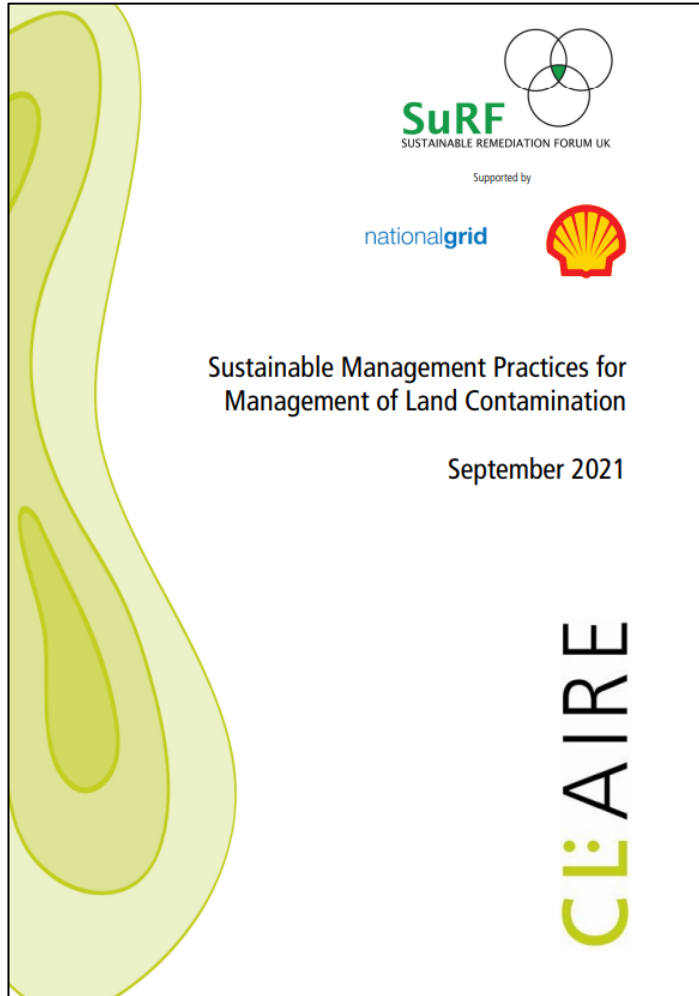
- Comments for why a SMP was selected.
- Post project performance review.
- Evidence of how the SMP was implemented.

SUSTAINABLE MANAGEMENT PRACTICE	Comment / Justification for SMP Selection	Post Project Performance Review: Was the SMP Implemented? (Y/N)	Post-Project Performance Review Evidence/ Reason
Avoid mixing soil with waste	Reduces waste going to landfill. Reduces volume of soil to import.	Yes	Soil and waste were separated as per the Materials Management Plan and 3000 tons of soil was reused on site

The SMP Spreadsheet

Recent updates to the SMPs


- Originally published in 2014, update published end September 2021.
- Case studies have been added (National Grid Property and Shell).
- The spreadsheet format has been changed to allow for sorting by activity and indicator, with performance review added.



[Sustainable Management Practices \(claire.co.uk\)](http://claire.co.uk)

Sustainable Management Practices

Sustainable Management Practices (SMPs) are aligned to the SuRF-UK sustainability indicator categories so that the same of land contamination management and can be applied across a full range of activities, including those that would not ne

 [Download the SuRF UK SMP Report 2021](#)

The supporting SMP excel spread sheet can be downloaded by following the link :

 [Download the SuRF UK SMP 2021 supporting spreadsheet](#)

Appendix 1: Sustainable Management Practices Posters

-  Demonstrate that the people used to undertake the job are competent to do so
-  Minimise vehicle miles
-  Consider use of cleaner fuels & additives
-  Consider opportunities for supporting STEM
-  Ensure proper maintenance of vehicles, plant & equipment.
-  Consider the use of a mobile laboratory and/or field testing techniques
-  Set project milestones to ensure periodic review and optimisation of activities
-  Establish key roles and responsibilities for sustainability performance and evaluation
-  Promote the sequestration of carbon through reforestation or afforestation
-  Consider self-inspection/audit procedures to ensure that permit/consent conditions are being complied with
-  Hold project meetings by telephone or video conferencing
-  Consider use of alternative energy sources to power auxiliary equipment
-  Don't allow plant and equipment to run for no purpose
-  Implement measures to prevent flytipping and to remove flytipped wastes
-  Adopt GPS and computer guided plant to maximise efficiency and reduce unnecessary plant movements

Thank you

Acknowledgement to SuRF-UK Steering Group Members:

Paul Bardos (r³ Environmental Technology Ltd), Alan Thomas (ERM), Richard Gill & Jonathan Smith (Shell), Frank Evans & Chris Taylor (National Grid), Richard Boyle (Homes England), Trevor Howard & Angela Haslam (Environment Agency), Richard Lewis (Amazon) and Vivien Dent (RSK).

Any questions?