

SOILSTEAM

The Soil We Throw Away

Recycling and reuse of biological contaminated soil



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“95% of our food is directly produced on soils” - United Nations

*In Europe ~38% of total waste is Construction & Demolition,
1% of the 38% is ~8,5 million tons*

*No European Waste Code (EWC) for biological contaminated soil
New Norwegian Standard (NS9431:2025 ‘classification of waste’) include
‘soil with invasive plants’ and similar.*

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Japanese knotweed
Foto: SoilSteam



Lupine
Foto Leif Dalen / NRK



Himalayan balsam
Foto: Paul Harald Pedersen, CC BY 4.0

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Plant pests or weeds: potato cyst nematodes (PCN), barnyard grass, Red stele

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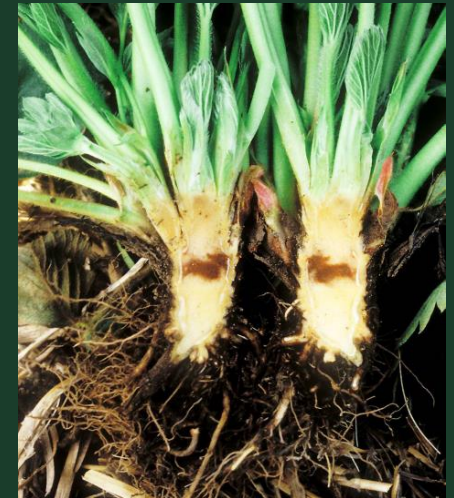
PCN

Foto: Bonsak Hammeraas / Bioforsk



Barnyard grass, in barley

Foto: H.Sjursen, NIBIO



Red stele

Foto: Bonsak Hammeraas / Bioforsk

How many of you know of projects in the last years where biological contaminated soil created a problem?

What happened to the biological contaminated soil?

The dominant remediation response:

Treatment of soil with biological contamination

Landfill & replace

- Often costly.
- Diminishing landfill capacity.
- Permanent loss of soil as a resource.
- The new soil brings its own seed bank.

✗ Transfers the problem

Chemical treatment

- 2-4 years minimum.
- Regulatory exposure.
- Not viable for active projects.

✗ Defers the problem

Bury on site

- Long-term liability?
- Monitoring obligations?
- Uncertain regulatory future?

✗ Hides the problem

Have anyone experienced that soil brought into a project was contaminated?

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Foto: Benedicte Watne / Statens Vegvesen



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*What if you didn't have to
throw the soil away at all?*

*What if you didn't have to
throw the soil away at all?*

*Maybe an old technique
exist?*



SoilSteam treats the soil. It doesn't remove it.

1

Mobile machine arrives on site

No complex infrastructure. Brought to the project, not the other way around.

2

Steam destroys the seedbank

High heat kills seeds, roots, and rhizomes, including Japanese knotweed. No chemicals.

3

Soil is clean and reusable

Structure and organic value preserved. Stays in the project. Problem resolved!



Three wins. All at once.

Economics

- Cheaper than disposal.
- Transport heavily reduced.
- No replacement soil purchased.
- The project budget looks different.

Practicality

- Works within your construction timeline.
- No multi-year chemical program.
- No seasonal windows.
- No special permits.

Environment and sustainability

- Good soil preserved.
- Landfill volume reduced.
- No chemicals.
- A true sustainable practice.

Real projects. Real results.



Imagine a project meeting

*We have about 10.000m³ of soil infested with
invasives*

Let's treat it

We steam the soil.

We reuse the soil.

If you want to help us save soil:

Request new European Waste Codes (EWC) for soil with invasives and/or biological contamination.

Talk about us or steaming as a remediation technique for biological contamination.

Grab me after this session.

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