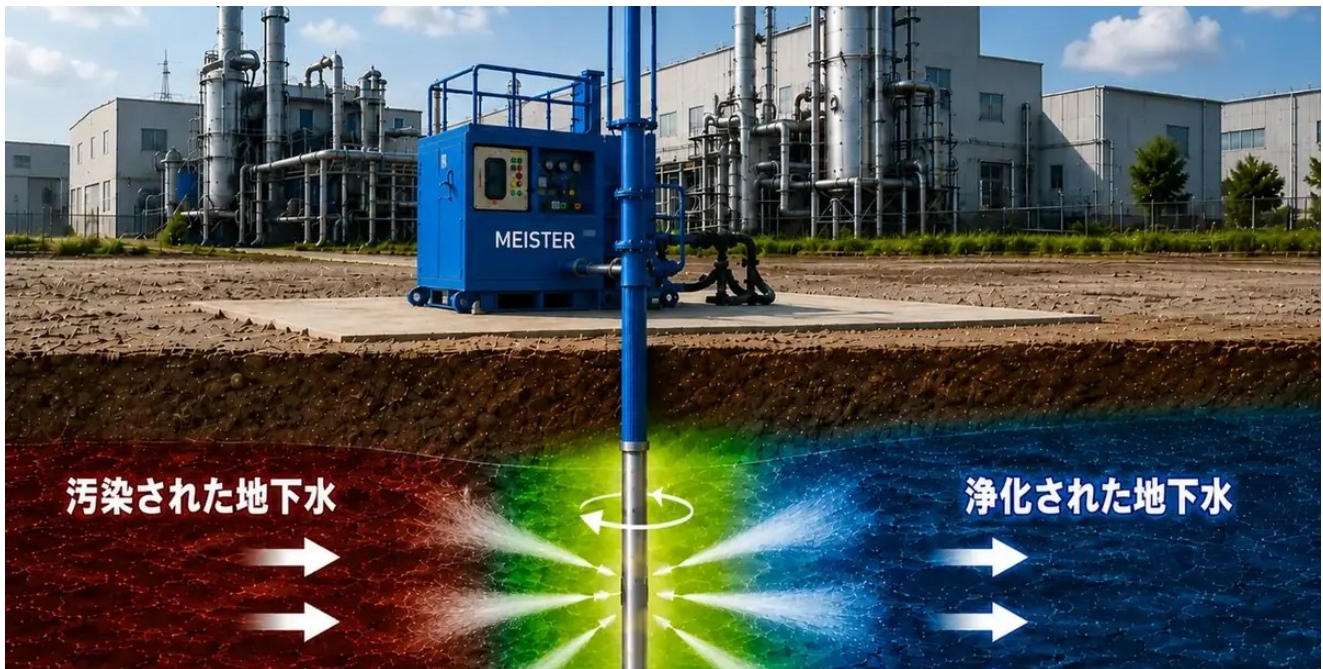




SOIL AND GROUNDWATER REMEDIATION

Dioxin and PCB Treatability Solutions

A verification-led approach from contaminant review and laboratory testing to site-specific treatment design.

Patent-publication example: dioxin TEQ reduced from 81,122 to 543 pg-TEQ/g after six weeks - a calculated reduction of 99.33% under the reported test conditions.

International publication: WO2011074120A1. This result is an individual example, not an average or performance guarantee.

01 VERIFIED PATENT-PUBLICATION EXAMPLE

Champion data with the conditions kept visible

BEFORE	AFTER 6 WEEKS
81,122	543
pg-TEQ/g	pg-TEQ/g

CALCULATED REDUCTION	99.33%
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Second reported example

A second sample decreased from 771.8 to 23.3 pg-TEQ/g after six weeks, corresponding to a calculated reduction of 96.98%.

Target	Dioxins
Metric	WHO-TEQ (1998)
Period	Six weeks
Source	International publication WO2011074120A1
Published title	Agent for purifying contaminated soil and method for purifying contaminated soil by using same

Evidence boundary: the figures above are taken from specific examples described in the patent publication. Actual applicability and performance depend on contaminant profile, soil matrix, concentration, moisture, groundwater, dosage, contact period and verification method.

From evidence review to full-scale implementation

1	Data review Review site history, target compounds, analytical reports and applicable regulatory criteria.
2	Sampling plan Confirm representative soil and groundwater samples, congeners, concentrations and matrix conditions.
3	Treatability test Perform a controlled laboratory test using agreed conditions, controls and analytical endpoints.
4	Independent verification Compare pre-treatment and post-treatment results through a qualified third-party laboratory.
5	Pilot and design Verify handling, emissions, water management and process performance at a pilot-relevant scale.
6	Site deployment Prepare the site-specific method, monitoring plan, safety controls and regulatory documentation.

Technology positioning

The technology disclosed in WO2011074120A1 addresses contaminated soil, including persistent organochlorine compounds such as dioxins and PCBs. Structural similarity alone does not prove equal treatment performance; each project must be verified using representative samples and agreed analytical methods.

This soil-remediation proposal is separate from Grease Trap Meister and from the A-MEISTER hydrothermal treatment plant.

What to send for an initial technical review

01	Project Country, site, responsible authority, land use and project stage
02	Contaminants Dioxin congeners, PCB data and any other target substances
03	Analysis Recent laboratory reports, units, detection limits and sampling dates
04	Scale Area, depth, estimated volume and expected concentration distribution
05	Site conditions Soil type, moisture, groundwater level, access and available utilities
06	Criteria Applicable cleanup criteria, verification rules and required completion schedule
07	Samples Availability, quantity, packaging and international shipment restrictions
08	Commercial Desired scope: review, laboratory test, pilot, design, supply or full implementation

Initial review outcome

After receiving the available information, MEISTER will identify missing data, propose a suitable treatability-testing scope and clarify whether a soil-agent approach, another treatment method or a combined process should be evaluated.

Discuss your dioxin or PCB-contaminated site

MEISTER coordinates technical review, representative testing, third-party analysis and site-specific project planning. Overseas inquiries are welcome from public authorities, engineering companies, environmental consultants, landowners and industrial operators.

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Important notice

No treatment rate, completion period, cost, regulatory acceptance or safety outcome is guaranteed before representative testing and review of the applicable legal and site conditions. Patent-publication examples are technical references and do not establish identical performance for every project. Rights ownership or licensing should be confirmed separately before any patent-right representation is made.

Reference

WO2011074120A1, Agent for purifying contaminated soil and method for purifying contaminated soil by using same, international publication dated 23 June 2011.