

Soil Remediation Market Forecasts to 2032 – Global Analysis By Contaminant Type (Organic, Inorganic and Emerging Contaminants), Service Type (Site Investigation & Risk Assessment, Remediation Design & Engineering and Other Service Types), Remediation Approach (Ex-situ and In-situ), Technology, End User, and By Geography

<https://marketpublishers.com/r/S8DB33D3D0C4EN.html>

Date: August 2025

Pages: 200

Price: US\$ 4,150.00 (Single User License)

ID: S8DB33D3D0C4EN

Abstracts

According to Statistics MRC, the Global Soil Remediation Market is accounted for \$48.2 billion in 2025 and is expected to reach \$79.4 billion by 2032 growing at a CAGR of 7.4% during the forecast period. Soil remediation is the process of removing, reducing, or neutralizing contaminants from polluted soil to restore its environmental and agricultural functionality. This engineering practice employs various techniques, including bioremediation, chemical treatment, thermal desorption, and soil washing to address heavy metals, petroleum products, pesticides, and industrial chemicals. The goal is achieving regulatory compliance while protecting groundwater, ecosystems, and human health from hazardous substances.

According to EPA records, the U.S. has invested US \$1 billion via Superfund in cleaning up 22 major toxic waste sites, part of the infrastructure law funding, while another US \$300 million specifically targets 200 contaminated industrial brownfield sites.

Market Dynamics:

Driver:

Increasing industrialization and urbanization

Rapid industrialization and urbanization drive soil contamination through industrial discharge, improper waste disposal, and construction activities, creating substantial demand for remediation services. Expanding urban development necessitates brownfield redevelopment projects where contaminated sites require remediation before repurposing for residential or commercial use. Industrial growth in developing economies, particularly in Asia Pacific regions like China and India, generates significant soil pollution from manufacturing processes, chemical plants, and petrochemical operations. This industrial growth pattern establishes a continuous cycle of contamination and mandatory remediation requirements.

Restraint:

Lack of awareness and resistance to change

Many industries and property developers view soil remediation as an unnecessary expense rather than essential environmental protection, particularly when contamination levels appear manageable through conventional methods. Traditional remediation approaches face resistance due to perceived high costs and extended project timelines, causing delays in implementation. Additionally, regulatory complexities and varying environmental standards across different geographical locations create confusion and hesitation in decision-making processes.

Opportunity:

Government funding and incentives

Government initiatives worldwide provide substantial financial support through grants, tax incentives, and public-private partnerships to accelerate soil remediation projects. The U.S. Environmental Protection Agency's CERCLA mandates cleanup of contaminated sites, while the USDA invested \$32.5 million in soil health initiatives, demonstrating strong regulatory and financial backing. The European Union's Soil Thematic Strategy underscores regional commitment to soil preservation through comprehensive funding mechanisms and environmental protection policies. Additionally, green finance models and large-scale cleanup project investments are emerging to support sustainable remediation technologies. Moreover, government regulations in developing nations increasingly mandate environmental compliance, creating favorable conditions for market expansion.

Threat:

Complex contaminant mixtures

Modern industrial activities create complex contamination scenarios involving multiple pollutants, including chlorinated solvents, heavy metals, petroleum hydrocarbons, and emerging contaminants like PFAS substances, requiring sophisticated and expensive treatment approaches. Mixed contamination sites demand integrated remediation strategies combining various technologies, significantly increasing project costs and technical complexity. Furthermore, the presence of unknown or undiscovered contaminants can render initial remediation efforts ineffective, necessitating additional treatment phases and budget overruns. Additionally, contamination plumes can migrate across property boundaries, complicating remediation responsibility and increasing legal liabilities.

Covid-19 Impact:

The COVID-19 pandemic created mixed impacts on soil remediation markets, initially disrupting project timelines and supply chains while reducing immediate demand due to economic uncertainty. Construction and industrial activities slowed significantly during lockdowns, temporarily reducing new contamination sources but delaying ongoing remediation projects. However, the pandemic increased awareness about environmental health connections and disinfection practices, ultimately driving long-term demand for comprehensive soil remediation services. Supply chain disruptions affected equipment availability and specialized material procurement, extending project completion times. Travel restrictions limited on-site assessment capabilities and technical expertise deployment, yet the market demonstrated resilience with expected recovery and continued growth.

The remediation implementation & project management segment is expected to be the largest during the forecast period

The remediation implementation & project management segment is expected to account for the largest market share during the forecast period due to comprehensive service offerings encompassing site assessment, technology selection, execution oversight, and regulatory compliance management. This segment benefits from increasing demand for turnkey solutions where clients prefer single-point responsibility for complex remediation projects rather than managing multiple specialized contractors. The complexity of modern contamination scenarios requires specialized expertise in

coordinating multiple remediation technologies, making integrated project management essential for successful outcomes. Moreover, liability concerns drive clients toward established firms with proven track records in managing large-scale remediation projects, particularly in brownfield initiatives.

The real estate & urban development segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the real estate & urban development segment is predicted to witness the highest growth rate, driven by accelerating brownfield redevelopment projects and urban land scarcity pressures. Rapid urbanization creates intense demand for developable land, making contaminated sites valuable assets once remediated for residential and commercial purposes. Real estate developers increasingly recognize soil remediation as a value-addition strategy that transforms liability-prone properties into profitable development opportunities. Furthermore, municipal governments actively promote brownfield redevelopment through tax incentives and streamlined permitting processes to revitalize urban areas and prevent suburban sprawl. Green building certifications and sustainable development trends also drive demand for thoroughly remediated sites.

Region with largest share:

During the forecast period, the North America region is expected to hold the largest market share due to stringent environmental regulations, including the U.S. EPA's CERCLA mandating contaminated site cleanup and robust regulatory enforcement mechanisms. The region's growth is supported by extensive industrial infrastructure from past manufacturing activities requiring remediation. Additionally, well-established environmental consulting firms and advanced remediation technology providers create a mature service ecosystem capable of handling complex projects. The presence of major oil and chemical companies with legacy contamination liabilities ensures consistent demand for remediation services across multiple industrial sectors in the region.

Region with highest CAGR:

Over the forecast period, the Asia Pacific region is anticipated to exhibit the highest CAGR, driven by rapid industrialization in China, India, and Southeast Asian nations, creating substantial soil contamination challenges requiring immediate attention. Expanding manufacturing sectors, including chemicals, pharmaceuticals, and electronics, generate diverse contamination types, necessitating sophisticated

remediation approaches. Furthermore, increasing environmental awareness and government regulatory pressure in developing economies mandate industrial compliance with soil protection standards. Additionally, growing middle-class populations in these countries also demand cleaner living environments, driving political support for environmental protection initiatives.

Key players in the market

Some of the key players in Soil Remediation Market include Clean Harbors, Inc., Golder Associates, AECOM, Jacobs Solutions Inc., Veolia Environnement S.A., Tetra Tech, DEME NV, TRS Group, US Ecology, Envirotreat, EVOQUA, TerraTherm (Cascade Environmental), Montrose Environmental Group, ENTACT, SUEZ Group, Stantec Inc., Arcadis N.V., DOWA Group, In-Situ Oxidative Technologies, Inc., and Antea Group.

Key Developments:

In May 2025, AECOM the trusted global infrastructure leader announced that it has been awarded an Optimized Remediation Contract (ORC) by the U.S. Army Corps of Engineers (USACE) Los Angeles District to provide environmental remediation services at Vandenberg Space Force Base on California's Central Coast. The 10-year, \$81.3-million single award is one of the largest optimized remediation contracts awarded by the USACE Los Angeles District, reinforcing AECOM's position as a trusted partner in delivering mission-critical solutions.

In July 2024, Tetra Tech, Inc. a leading provider of high-end consulting and engineering services in water, environment and sustainable infrastructure, announced today that the U.S. Department of Defense (DoD) Environmental Security Technology Certification Program selected the Company and its partner Texas A&M University (TAMU) to design, fabricate, and demonstrate a prototype mobile electron beam (eBeam) system for on-site treatment of soils and sediments impacted by per%-%-and polyfluoroalkyl substances (PFAS).

In April 2024, Clean Harbors, Inc. the leading provider of environmental and industrial services throughout North America introduced its "Total PFAS Solution" to address all the needs of customers related to PFAS (per%-%-and poly-fluorinated alkyl substances), which are commonly referred to as forever chemicals. Clean Harbors' Total PFAS Solution is the industry's first and only one-stop-shop consisting of eight core elements and providing customers with a range of services from analysis to remediation to disposal.

Contaminant Types Covered:

Organic Contaminants

Inorganic Contaminants

Emerging Contaminants (CECs)

Service Types:

Site Investigation & Risk Assessment

Remediation Design & Engineering

Remediation Implementation & Project Management

Post-Remediation Monitoring, Validation & Closure

Regulatory Compliance & Permitting Support

Remediation Approaches Covered:

Ex-situ

In-situ

Technologies Covered:

Biological Remediation

Chemical Remediation

Physical & Thermal Remediation

End Users Covered:

Oil & Gas

Manufacturing & Heavy Industry

Mining & Metallurgy

Real Estate & Urban Development

Agriculture & Rural Development

Waste Management & Landfills

Utilities & Infrastructure

Government & Defense

Other End Users

Regions Covered:

North America

US

Canada

Mexico

Europe

Germany

UK

Italy

France

Spain

Rest of Europe

Asia Pacific

Japan

China

India

Australia

New Zealand

South Korea

Rest of Asia Pacific

South America

Argentina

Brazil

Chile

Rest of South America

Middle East & Africa

Saudi Arabia

UAE

Qatar

South Africa

Rest of Middle East & Africa

What our report offers:

- Market share assessments for the regional and country-level segments
- Strategic recommendations for the new entrants
- Covers Market data for the years 2024, 2025, 2026, 2028, and 2032
- Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)
- Strategic recommendations in key business segments based on the market estimations
- Competitive landscaping mapping the key common trends
- Company profiling with detailed strategies, financials, and recent developments
- Supply chain trends mapping the latest technological advancements

Free Customization Offerings:

All the customers of this report will be entitled to receive one of the following free customization options:

Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

Contents

1 EXECUTIVE SUMMARY

2 PREFACE

- 2.1 Abstract
- 2.2 Stake Holders
- 2.3 Research Scope
- 2.4 Research Methodology
 - 2.4.1 Data Mining
 - 2.4.2 Data Analysis
 - 2.4.3 Data Validation
 - 2.4.4 Research Approach
- 2.5 Research Sources
 - 2.5.1 Primary Research Sources
 - 2.5.2 Secondary Research Sources
 - 2.5.3 Assumptions

3 MARKET TREND ANALYSIS

- 3.1 Introduction
- 3.2 Drivers
- 3.3 Restraints
- 3.4 Opportunities
- 3.5 Threats
- 3.6 Technology Analysis
- 3.7 End User Analysis
- 3.8 Emerging Markets
- 3.9 Impact of Covid-19

4 PORTERS FIVE FORCE ANALYSIS

- 4.1 Bargaining power of suppliers
- 4.2 Bargaining power of buyers
- 4.3 Threat of substitutes
- 4.4 Threat of new entrants
- 4.5 Competitive rivalry

5 GLOBAL SOIL REMEDIATION MARKET, BY CONTAMINANT TYPE

- 5.1 Introduction
- 5.2 Organic Contaminants
 - 5.2.1 Petroleum Hydrocarbons
 - 5.2.2 Pesticides
 - 5.2.3 Volatile & Semi-Volatile Organic Compounds (SVOCs)
 - 5.2.4 Polycyclic Aromatic Hydrocarbons (PAHs)
 - 5.2.5 Other Organic Contaminants
- 5.3 Inorganic Contaminants
 - 5.3.1 Heavy Metals
 - 5.3.2 Salts & Acidity/Alkalinity Contaminants
 - 5.3.3 Radionuclides
 - 5.3.4 Other Inorganic Contaminants
- 5.4 Emerging Contaminants (CECs)
 - 5.4.1 Per- and Polyfluoroalkyl Substances (PFAS)
 - 5.4.2 Pharmaceuticals & Personal Care Products (PPCPs)
 - 5.4.3 Microplastics

6 GLOBAL SOIL REMEDIATION MARKET, BY SERVICE TYPE

- 6.1 Introduction
- 6.2 Site Investigation & Risk Assessment
- 6.3 Remediation Design & Engineering
- 6.4 Remediation Implementation & Project Management
- 6.5 Post-Remediation Monitoring, Validation & Closure
- 6.6 Regulatory Compliance & Permitting Support

7 GLOBAL SOIL REMEDIATION MARKET, BY REMEDIATION APPROACH

- 7.1 Introduction
- 7.2 Ex-situ
- 7.3 In-situ

8 GLOBAL SOIL REMEDIATION MARKET, BY TECHNOLOGY

- 8.1 Introduction
- 8.2 Biological Remediation
 - 8.2.1 Biostimulation & Bioaugmentation

- 8.2.2 Phytoremediation
- 8.2.3 Composting & Landfarming
- 8.2.4 Other Biological Technologies
- 8.3 Chemical Remediation
 - 8.3.1 Chemical Oxidation
 - 8.3.2 Chemical Reduction
 - 8.3.3 Solidification/Stabilization (S/S)
 - 8.3.4 Soil Flushing / Chemical Extraction
 - 8.3.5 Other Chemical Technologies
- 8.4 Physical & Thermal Remediation
 - 8.4.1 Soil Vapor Extraction (SVE) & Air Sparging
 - 8.4.2 Thermal Desorption
 - 8.4.3 Excavation & Off-site Treatment/Disposal
 - 8.4.4 Soil Washing & Screening
 - 8.4.5 Electrokinetic Remediation
 - 8.4.6 Permeable Reactive Barriers (PRBs)
 - 8.4.7 Other Physical & Thermal Technologies

9 GLOBAL SOIL REMEDIATION MARKET, BY END USER

- 9.1 Introduction
- 9.2 Oil & Gas
- 9.3 Manufacturing & Heavy Industry
- 9.4 Mining & Metallurgy
- 9.5 Real Estate & Urban Development
- 9.6 Agriculture & Rural Development
- 9.7 Waste Management & Landfills
- 9.8 Utilities & Infrastructure
- 9.9 Government & Defense
- 9.10 Other End Users

10 GLOBAL SOIL REMEDIATION MARKET, BY GEOGRAPHY

- 10.1 Introduction
- 10.2 North America
 - 10.2.1 US
 - 10.2.2 Canada
 - 10.2.3 Mexico
- 10.3 Europe

- 10.3.1 Germany
- 10.3.2 UK
- 10.3.3 Italy
- 10.3.4 France
- 10.3.5 Spain
- 10.3.6 Rest of Europe
- 10.4 Asia Pacific
 - 10.4.1 Japan
 - 10.4.2 China
 - 10.4.3 India
 - 10.4.4 Australia
 - 10.4.5 New Zealand
 - 10.4.6 South Korea
 - 10.4.7 Rest of Asia Pacific
- 10.5 South America
 - 10.5.1 Argentina
 - 10.5.2 Brazil
 - 10.5.3 Chile
 - 10.5.4 Rest of South America
- 10.6 Middle East & Africa
 - 10.6.1 Saudi Arabia
 - 10.6.2 UAE
 - 10.6.3 Qatar
 - 10.6.4 South Africa
 - 10.6.5 Rest of Middle East & Africa

11 KEY DEVELOPMENTS

- 11.1 Agreements, Partnerships, Collaborations and Joint Ventures
- 11.2 Acquisitions & Mergers
- 11.3 New Product Launch
- 11.4 Expansions
- 11.5 Other Key Strategies

12 COMPANY PROFILING

- 12.1 Clean Harbors, Inc.
- 12.2 Golder Associates
- 12.3 AECOM

- 12.4 Jacobs Solutions Inc.
- 12.5 Veolia Environnement S.A.
- 12.6 Tetra Tech
- 12.7 DEME NV
- 12.8 TRS Group
- 12.9 US Ecology
- 12.10 Envirotreat
- 12.11 EVOQUA
- 12.12 TerraTherm (Cascade Environmental)
- 12.13 Montrose Environmental Group
- 12.14 ENTACT
- 12.15 SUEZ Group
- 12.16 Stantec Inc.
- 12.17 Arcadis N.V.
- 12.18 DOWA Group
- 12.19 In-Situ Oxidative Technologies, Inc.
- 12.20 Antea Group

List Of Tables

LIST OF TABLES

Table 1 Global Soil Remediation Market Outlook, By Region (2024-2032) (\$MN)

Table 2 Global Soil Remediation Market Outlook, By Contaminant Type (2024-2032) (\$MN)

Table 3 Global Soil Remediation Market Outlook, By Organic Contaminants (2024-2032) (\$MN)

Table 4 Global Soil Remediation Market Outlook, By Petroleum Hydrocarbons (2024-2032) (\$MN)

Table 5 Global Soil Remediation Market Outlook, By Pesticides (2024-2032) (\$MN)

Table 6 Global Soil Remediation Market Outlook, By Volatile & Semi-Volatile Organic Compounds (SVOCs) (2024-2032) (\$MN)

Table 7 Global Soil Remediation Market Outlook, By Polycyclic Aromatic Hydrocarbons (PAHs) (2024-2032) (\$MN)

Table 8 Global Soil Remediation Market Outlook, By Other Organic Contaminants (2024-2032) (\$MN)

Table 9 Global Soil Remediation Market Outlook, By Inorganic Contaminants (2024-2032) (\$MN)

Table 10 Global Soil Remediation Market Outlook, By Heavy Metals (2024-2032) (\$MN)

Table 11 Global Soil Remediation Market Outlook, By Salts & Acidity/Alkalinity Contaminants (2024-2032) (\$MN)

Table 12 Global Soil Remediation Market Outlook, By Radionuclides (2024-2032) (\$MN)

Table 13 Global Soil Remediation Market Outlook, By Other Inorganic Contaminants (2024-2032) (\$MN)

Table 14 Global Soil Remediation Market Outlook, By Emerging Contaminants (CECs) (2024-2032) (\$MN)

Table 15 Global Soil Remediation Market Outlook, By Per- and Polyfluoroalkyl Substances (PFAS) (2024-2032) (\$MN)

Table 16 Global Soil Remediation Market Outlook, By Pharmaceuticals & Personal Care Products (PPCPs) (2024-2032) (\$MN)

Table 17 Global Soil Remediation Market Outlook, By Microplastics (2024-2032) (\$MN)

Table 18 Global Soil Remediation Market Outlook, By Service Type (2024-2032) (\$MN)

Table 19 Global Soil Remediation Market Outlook, By Site Investigation & Risk Assessment (2024-2032) (\$MN)

Table 20 Global Soil Remediation Market Outlook, By Remediation Design & Engineering (2024-2032) (\$MN)

Table 21 Global Soil Remediation Market Outlook, By Remediation Implementation & Project Management (2024-2032) (\$MN)

Table 22 Global Soil Remediation Market Outlook, By Post-Remediation Monitoring, Validation & Closure (2024-2032) (\$MN)

Table 23 Global Soil Remediation Market Outlook, By Regulatory Compliance & Permitting Support (2024-2032) (\$MN)

Table 24 Global Soil Remediation Market Outlook, By Remediation Approach (2024-2032) (\$MN)

Table 25 Global Soil Remediation Market Outlook, By Ex-situ (2024-2032) (\$MN)

Table 26 Global Soil Remediation Market Outlook, By In-situ (2024-2032) (\$MN)

Table 27 Global Soil Remediation Market Outlook, By Technology (2024-2032) (\$MN)

Table 28 Global Soil Remediation Market Outlook, By Biological Remediation (2024-2032) (\$MN)

Table 29 Global Soil Remediation Market Outlook, By Biostimulation & Bioaugmentation (2024-2032) (\$MN)

Table 30 Global Soil Remediation Market Outlook, By Phytoremediation (2024-2032) (\$MN)

Table 31 Global Soil Remediation Market Outlook, By Composting & Landfarming (2024-2032) (\$MN)

Table 32 Global Soil Remediation Market Outlook, By Other Biological Technologies (2024-2032) (\$MN)

Table 33 Global Soil Remediation Market Outlook, By Chemical Remediation (2024-2032) (\$MN)

Table 34 Global Soil Remediation Market Outlook, By Chemical Oxidation (2024-2032) (\$MN)

Table 35 Global Soil Remediation Market Outlook, By Chemical Reduction (2024-2032) (\$MN)

Table 36 Global Soil Remediation Market Outlook, By Solidification/Stabilization (S/S) (2024-2032) (\$MN)

Table 37 Global Soil Remediation Market Outlook, By Soil Flushing / Chemical Extraction (2024-2032) (\$MN)

Table 38 Global Soil Remediation Market Outlook, By Other Chemical Technologies (2024-2032) (\$MN)

Table 39 Global Soil Remediation Market Outlook, By Physical & Thermal Remediation (2024-2032) (\$MN)

Table 40 Global Soil Remediation Market Outlook, By Soil Vapor Extraction (SVE) & Air Sparging (2024-2032) (\$MN)

Table 41 Global Soil Remediation Market Outlook, By Thermal Desorption (2024-2032) (\$MN)

Table 42 Global Soil Remediation Market Outlook, By Excavation & Off-site Treatment/Disposal (2024-2032) (\$MN)

Table 43 Global Soil Remediation Market Outlook, By Soil Washing & Screening (2024-2032) (\$MN)

Table 44 Global Soil Remediation Market Outlook, By Electrokinetic Remediation (2024-2032) (\$MN)

Table 45 Global Soil Remediation Market Outlook, By Permeable Reactive Barriers (PRBs) (2024-2032) (\$MN)

Table 46 Global Soil Remediation Market Outlook, By Other Physical & Thermal Technologies (2024-2032) (\$MN)

Table 47 Global Soil Remediation Market Outlook, By End User (2024-2032) (\$MN)

Table 48 Global Soil Remediation Market Outlook, By Oil & Gas (2024-2032) (\$MN)

Table 49 Global Soil Remediation Market Outlook, By Manufacturing & Heavy Industry (2024-2032) (\$MN)

Table 50 Global Soil Remediation Market Outlook, By Mining & Metallurgy (2024-2032) (\$MN)

Table 51 Global Soil Remediation Market Outlook, By Real Estate & Urban Development (2024-2032) (\$MN)

Table 52 Global Soil Remediation Market Outlook, By Agriculture & Rural Development (2024-2032) (\$MN)

Table 53 Global Soil Remediation Market Outlook, By Waste Management & Landfills (2024-2032) (\$MN)

Table 54 Global Soil Remediation Market Outlook, By Utilities & Infrastructure (2024-2032) (\$MN)

Table 55 Global Soil Remediation Market Outlook, By Government & Defense (2024-2032) (\$MN)

Table 56 Global Soil Remediation Market Outlook, By Other End Users (2024-2032) (\$MN)

Note: Tables for North America, Europe, APAC, South America, and Middle East & Africa Regions are also represented in the same manner as above.

I would like to order

Product name: Soil Remediation Market Forecasts to 2032 – Global Analysis By Contaminant Type (Organic, Inorganic and Emerging Contaminants), Service Type (Site Investigation & Risk Assessment, Remediation Design & Engineering and Other Service Types), Remediation Approach (Ex-situ and In-situ), Technology, End User, and By Geography

Product link: <https://marketpublishers.com/r/S8DB33D3D0C4EN.html>

Price: US\$ 4,150.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/S8DB33D3D0C4EN.html>