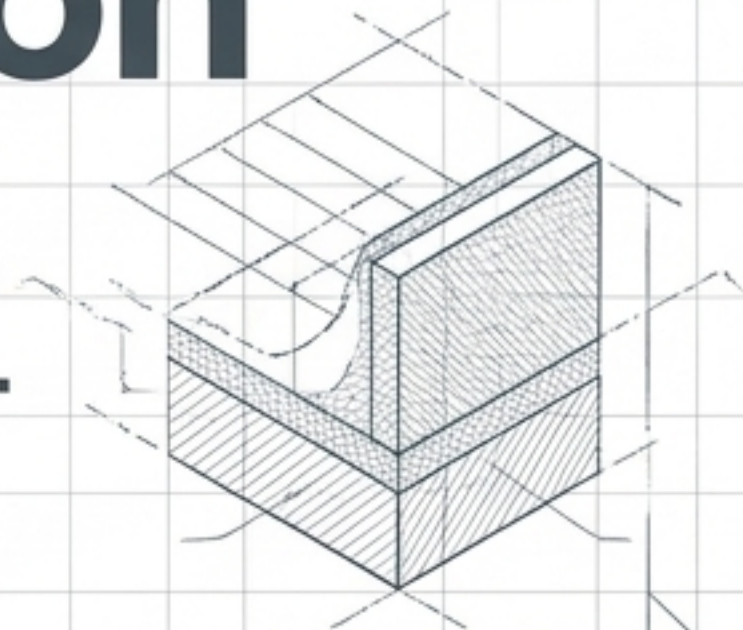
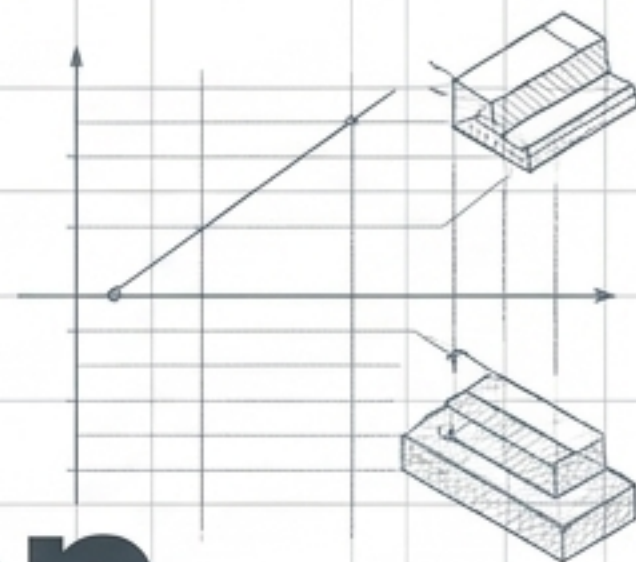
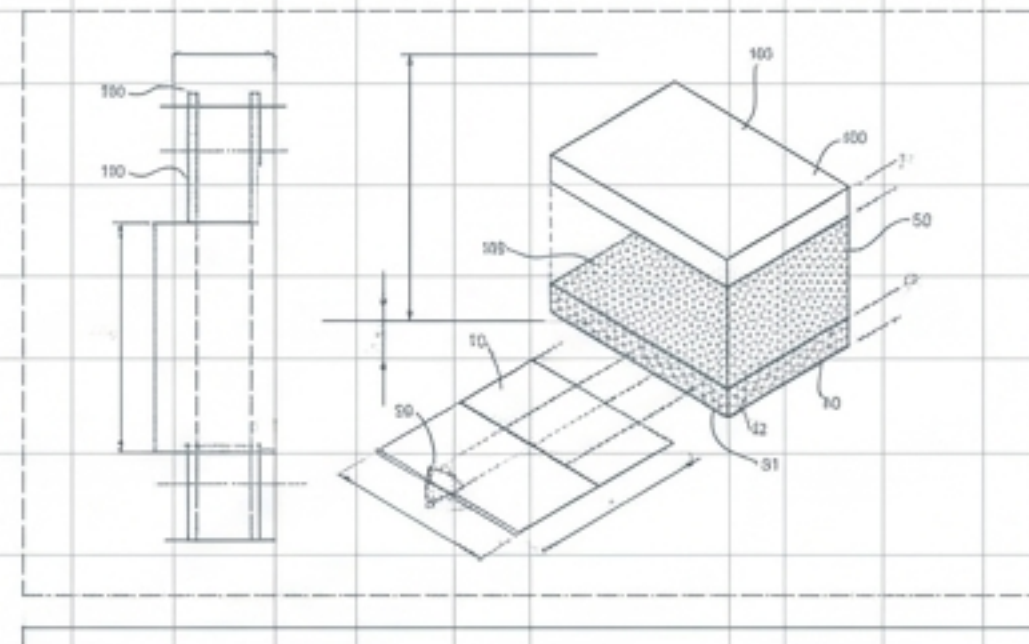




Engineered for Absolute Remediation

The singular standard in patented,
government-certified biochar technology.



The Liability of Toxic Re-Release

Current Methods: Toxic Relocation

Diagram illustrating current remediation methods, showing a cycle of toxic relocation. Labels include: Polonium plumes, Polonium, Contaminated sites, Pollutant plumes, Pollutant plumes, Transferred transfer, and Contaminated site. A graph shows a linear increase in 'Failed matrices' over time, with 'Acidic radius' on the y-axis.

Traditional cleanup methods merely relocate heavy metals, PFAS, and industrial chemicals. This exposes environmental engineering firms and municipal authorities to ongoing liability and relentless regulatory scrutiny. Toxins are moved, not neutralized.

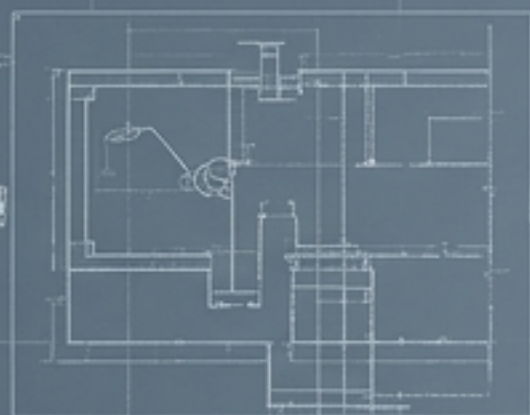
Comanche Biochar: Permanent Sequestration

Diagram illustrating Comanche Biochar, showing a permanent sequestration process. Labels include: Contam Binding, Chem substance, Comanche Biochar matrix, Contaminant trapping structure, Molecular contamination matrix, and Contaminant binding. A graph shows a linear increase in 'Sequestration' over time, with 'Zero release' on the x-axis.

True environmental remediation demands permanent extraction.

Our patented carbon matrix binds contaminants flawlessly, removing them entirely from the ecological cycle and eliminating ongoing liability.

The Singular Engineered Standard



The ONLY US-based producer of pure organic biochar meeting formal approvals of major North American regulatory bodies.

Backed by generational knowledge and an insurmountable intellectual property moat.

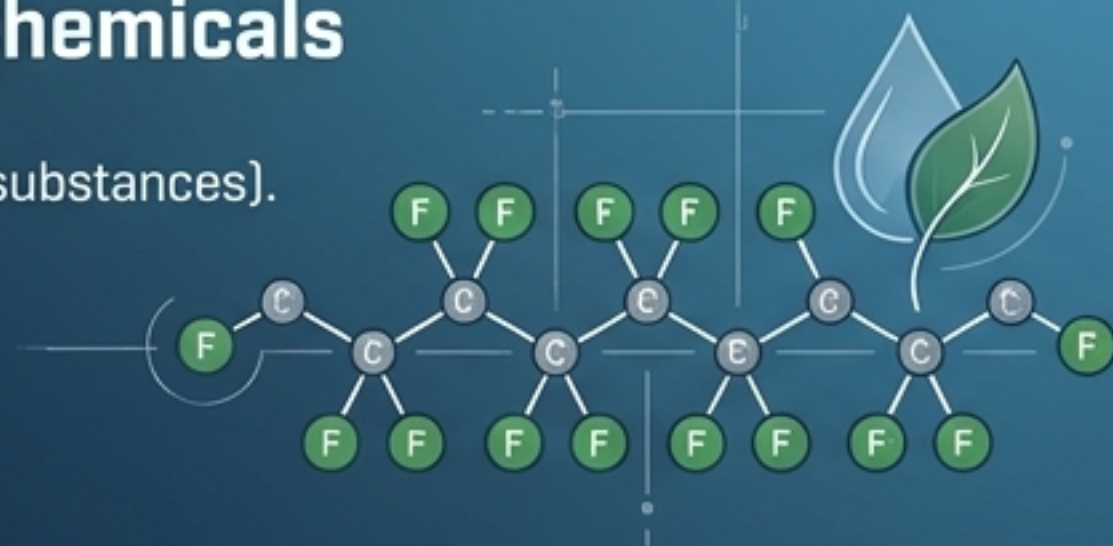
The ONLY biochar producer with products formally approved by the US EPA for both production and release into the environment.

Broad-Spectrum Environmental Extraction

ACTIVE BINDING CAPABILITY PROVEN ACROSS WATER, AIR, AND SOIL ENVIRONMENTS.

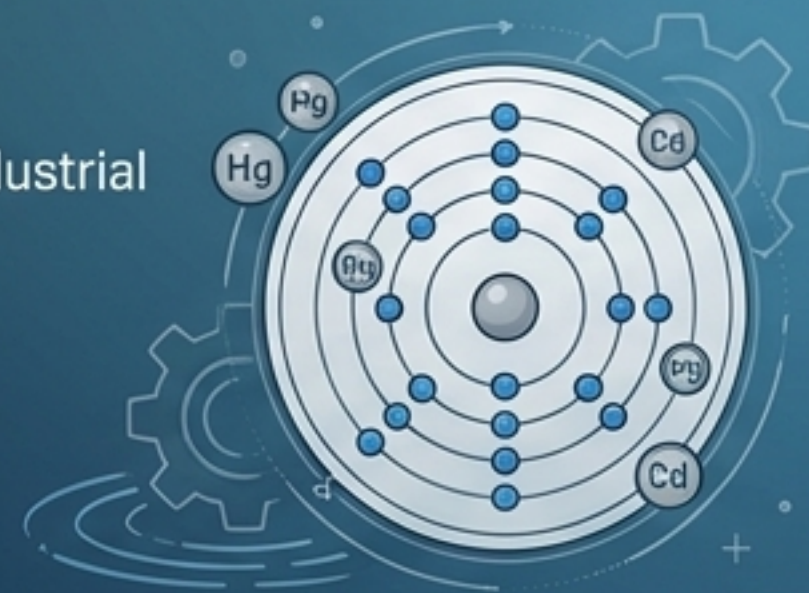
Forever Chemicals

PFAS (per- and polyfluoroalkyl substances).



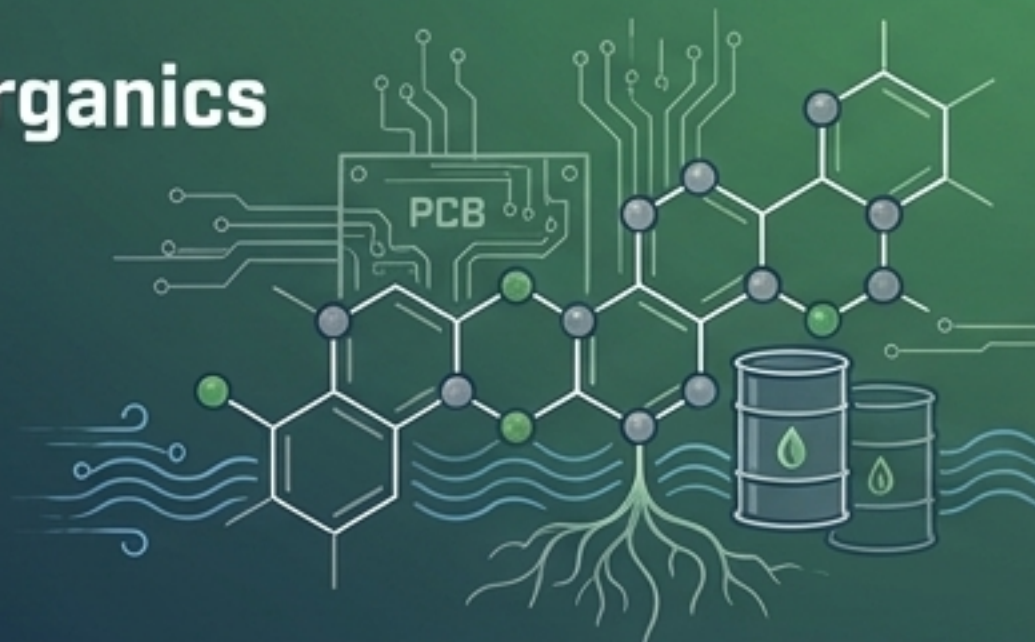
Heavy Metals

Mercury and highly toxic industrial heavy metal pollutants.



Industrial Organics

PCBs, Dioxins, and synthetic waste



Agricultural / Ecological

Herbicides, Pesticides, Harmful Salts, and Algae



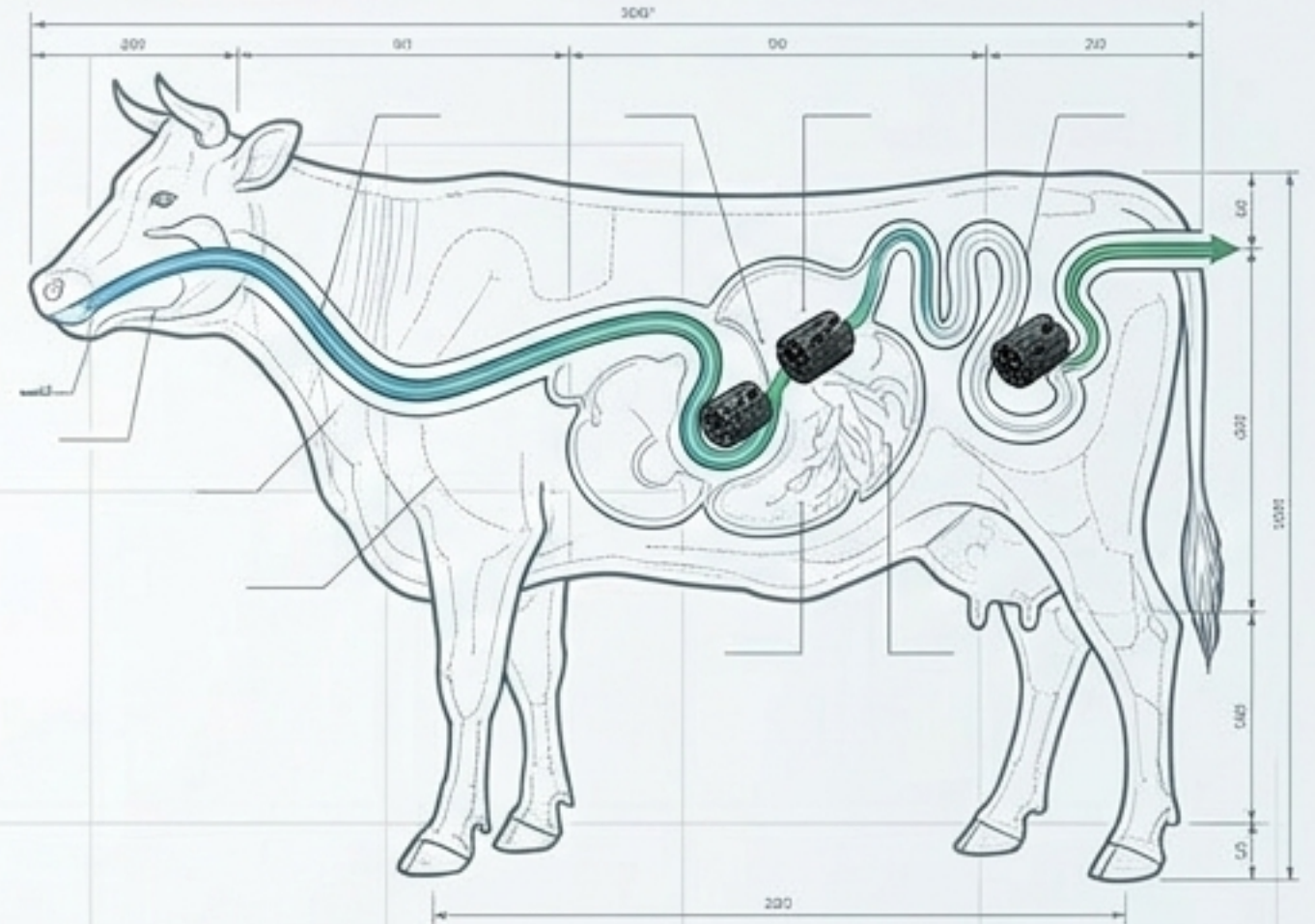
The Permanent Bind Mechanism

Molecular Lock-In



Comanche Biochar features a highly secure binding lock. Once hazardous toxins are sequestered within the carbon matrix, they are permanently neutralized.

Biological Bypass



If ingested by livestock or wildlife, the biochar absolutely does not release the bound toxins into the animal's flesh, ensuring total safety across the food chain.

Beyond Conventional Carbon

True environmental remediation cannot rely on standard, primitive "burnt wood." Consistent, medical-grade purity requires a highly engineered, rigorously controlled, and strictly protected manufacturing ecosystem.



16

**Granted US &
Canadian Patents**

Covering proprietary production
technology and scalable
market applications.

Anatomy of the Comanche Kiln Ecosystem

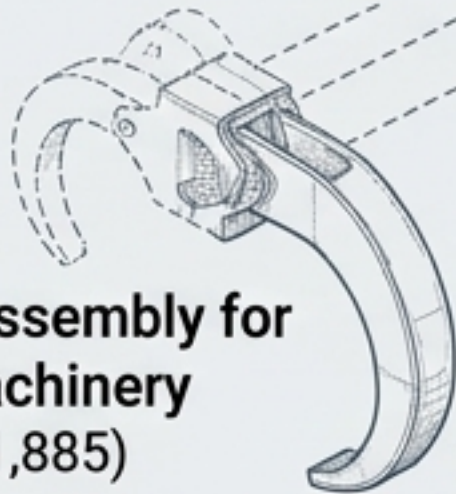
Airflow Control & Heat Recovery (US 10,323,845)

Independent air inlet ports, catalytic converter, and semi-independent combustion cells for precise emission management.



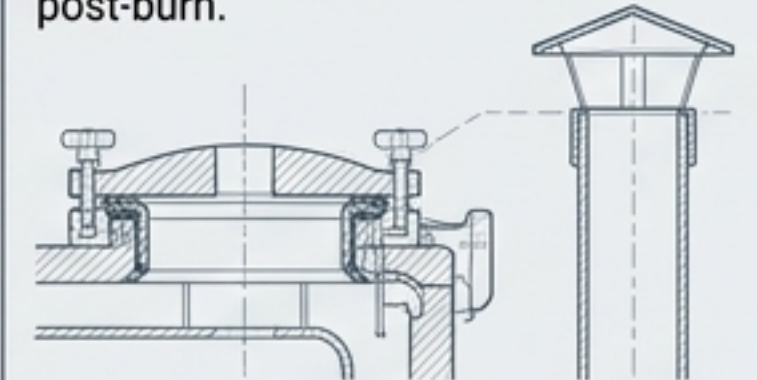
Gripper Assembly for Heavy Machinery (US 10,751,885)

Motorized C-shaped claw for pinch-and-release lifting, dumping, and transport.



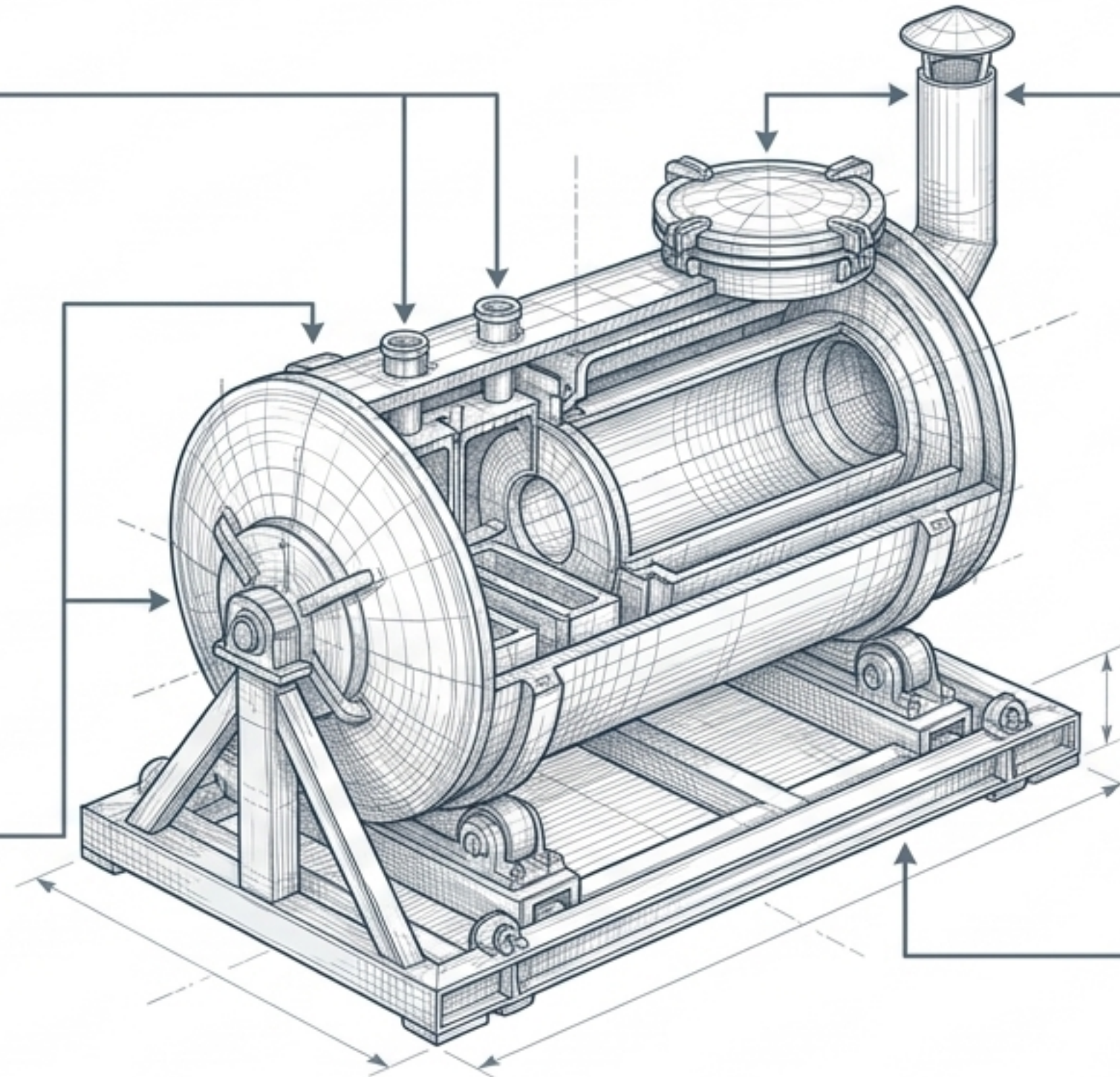
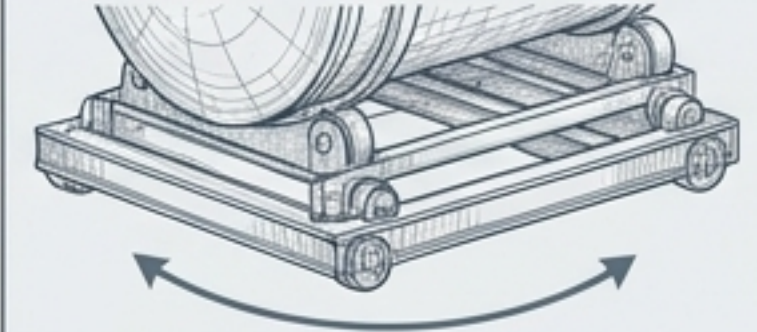
Removable Lid & Stack Assembly (US 11,135,728)

Specialized gasket covers for airtight sealing to self-extinguish embers post-burn.

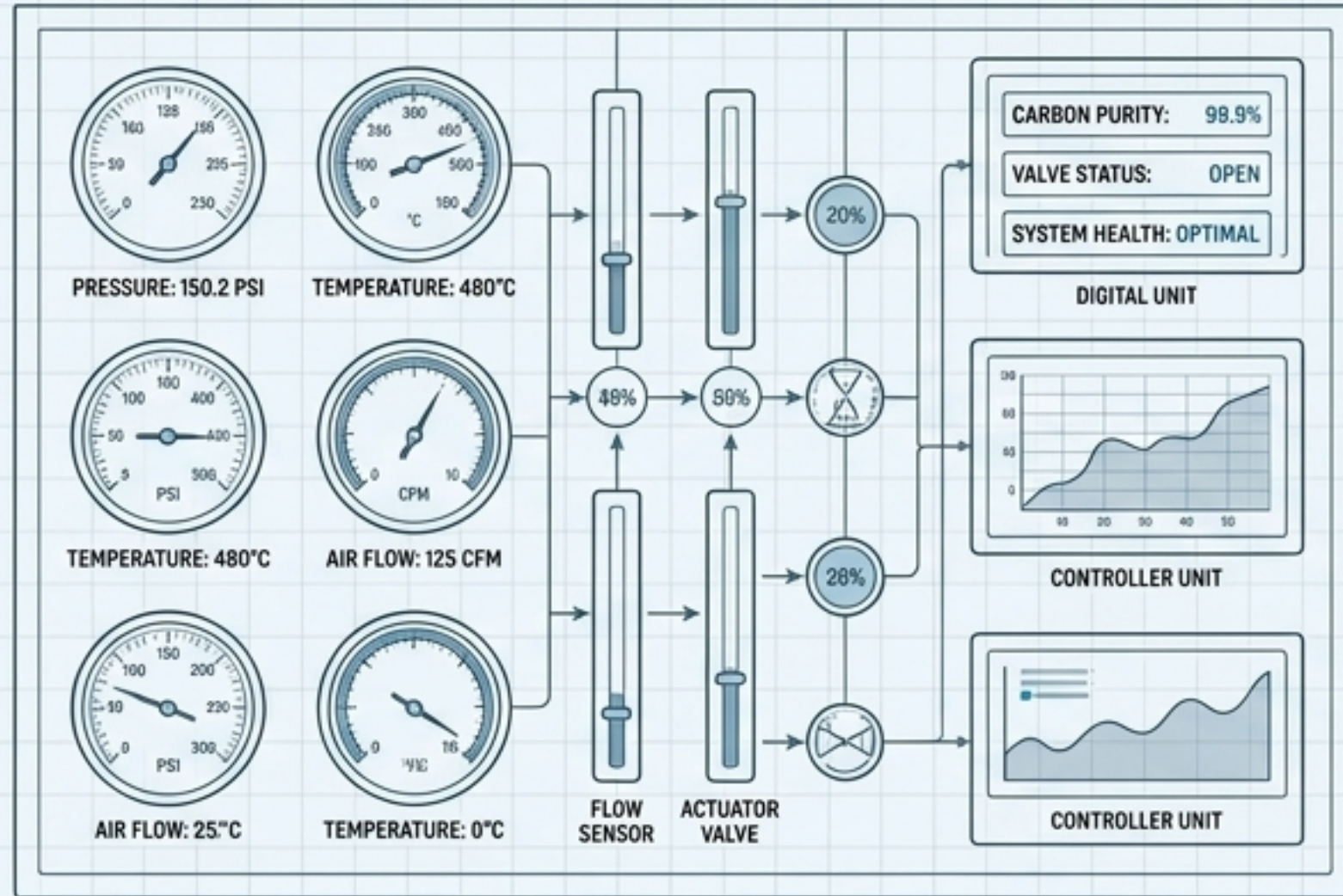


Mobile Platform (US 11,852,411)

Rotatably mounted kilns allowing rapid shifting between loading and unloading operational positions.

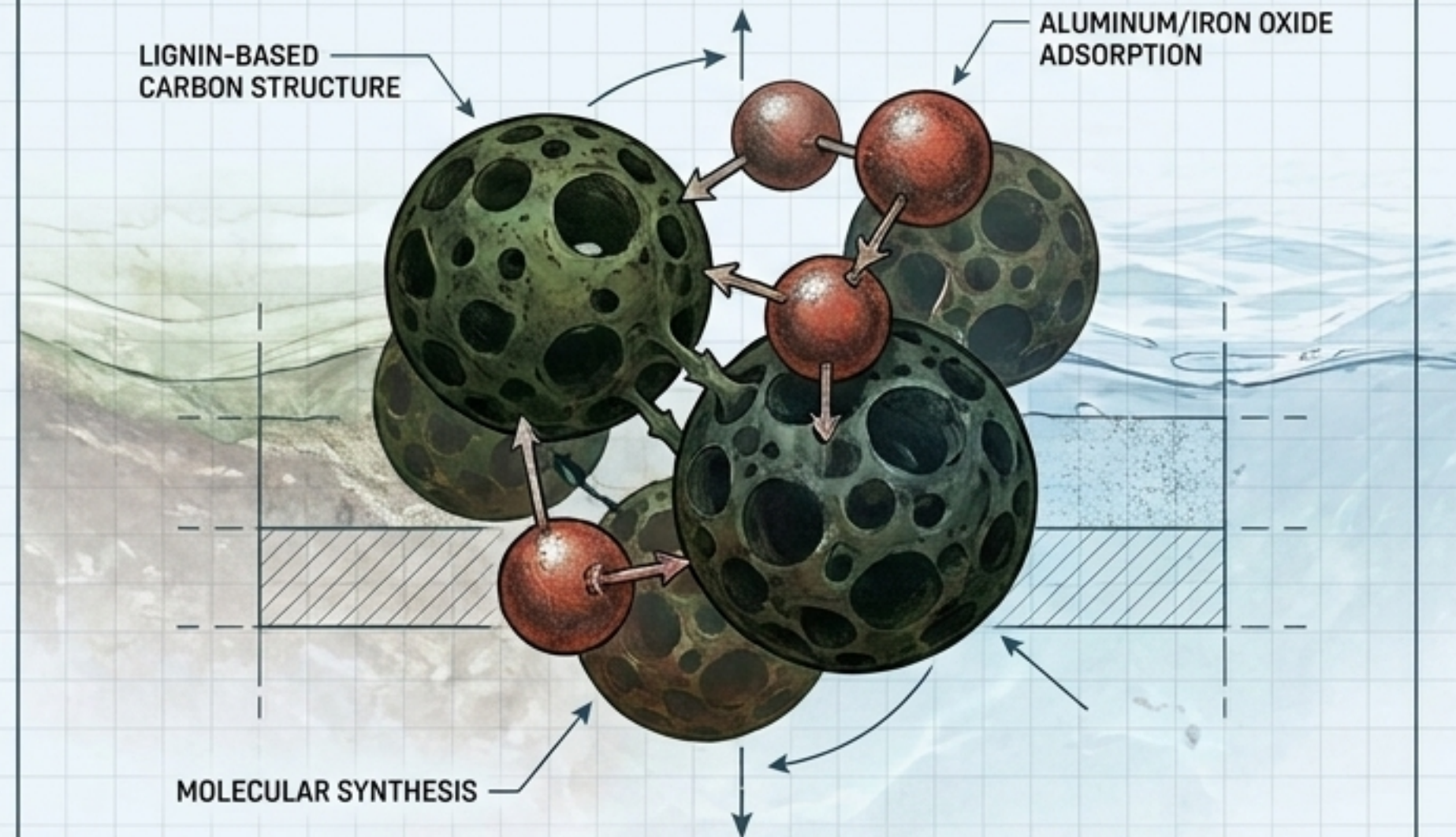


Automated Control & Advanced Material Science



Flow Regulation System (US 10,253,979)

Electronic controllers monitor kiln conditions to automatically open and close air inlet ports, ensuring absolute consistency in carbon purity.



Modified Biochar Treatment Media (US 9,650,261 / CA 2,886,864)

Patented thermo-chemical decomposition of lignin-based carbon combined with highly alkaline red mud (aluminum/iron oxides) to maximize metal adsorption from water and soils.

The Regulatory & Capability Moat

Capability Dimension	Comanche Biochar	Conventional Biochar	Traditional Chemical Remediation
Broad-Spectrum Binding (PFAS, Metals, Dioxins)	✓	✓	✓
100% Secure Bind (Zero Re-release if Ingested)	✓	✗	✗
Proprietary Patented Manufacturing Hardware	✓	✗	✗
US EPA Approved for Production & Environmental Release	✓	✗	✗
USDA Certified Organic Feed Additive	✓	✗	✗

Approved for Direct Environmental Release

The Absolute Differentiator:

- Comanche Biochar is the **ONLY** biochar producer formally approved by the US Environmental Protection Agency (EPA) for both the production of its material and direct release into the environment.



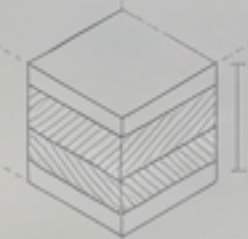
Cross-Border Compliance:

- Additionally recognized and approved by CEPA (Canadian Environmental Protection Act), ensuring legal compliance for massive, multi-jurisdictional ecological restoration projects.

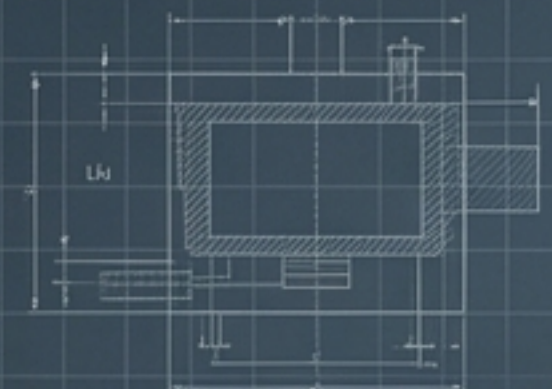


The Gold Standard of Organic Purity

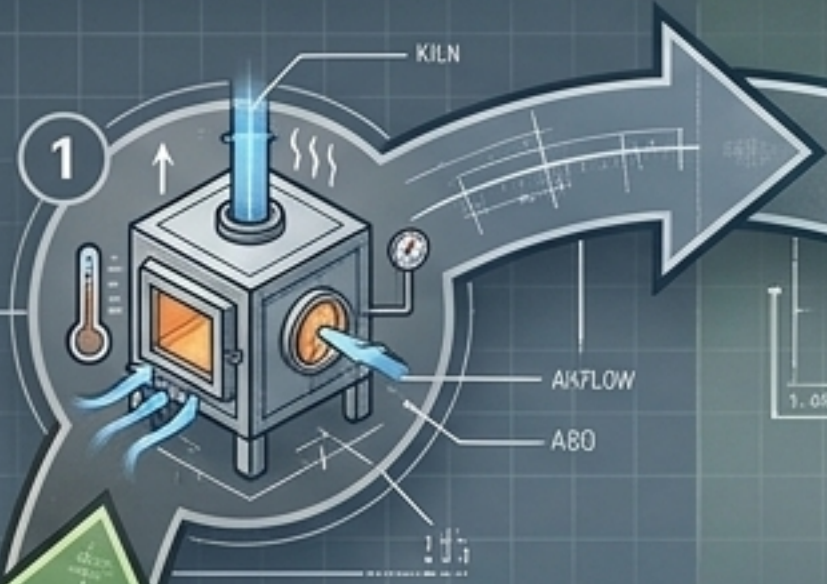
- USDA Certified Biobased Product derived entirely from renewable biological resources.
- OMRI (Organic Materials Review Institute) Listed for verified organic use.
- The pure organic nature of the biochar allows it to act as an unprecedented bridge—powerful enough for heavy industrial remediation, yet safe enough for sensitive, regulated agricultural applications.



The Ecosystem of Remediation



Patented Kiln Control
(Precision temperature & airflow engineering)



Broad-Spectrum Binding Matrix
(Consistent medical-grade porosity)

Circle of Remediation

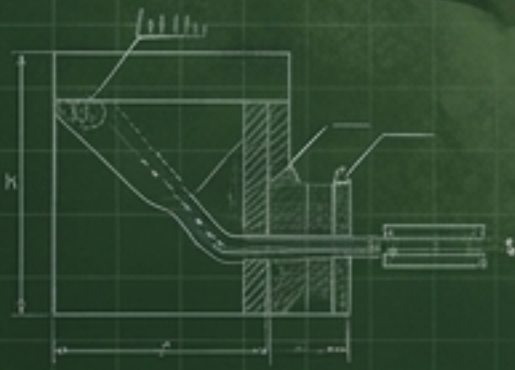
EPA Production & Release Approval
(Validated environmental safety)



Biological Ingestion Safety
(Permanent toxin lock-in)



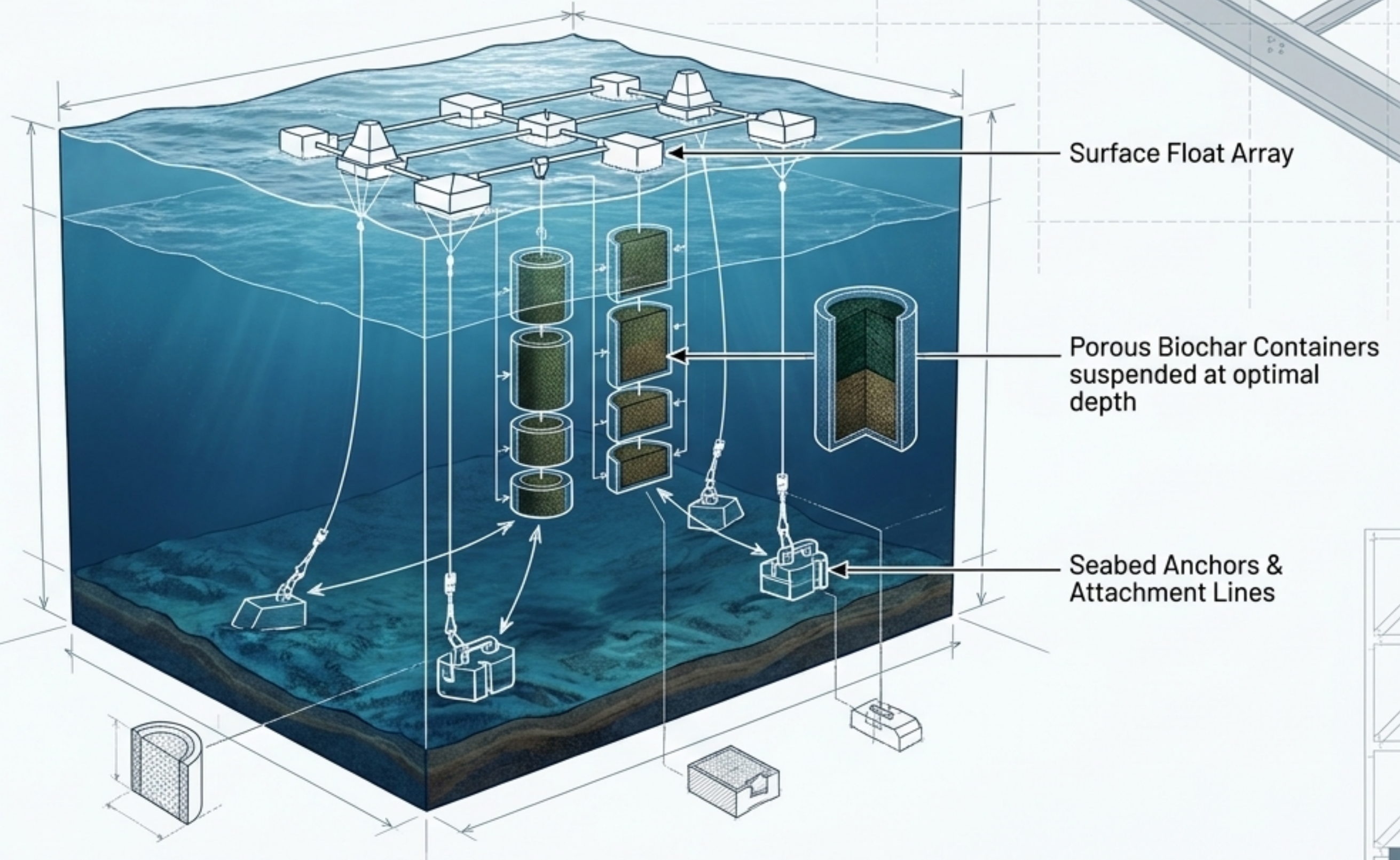
USDA Organic Feed Certification
(Integration into agricultural food chains)



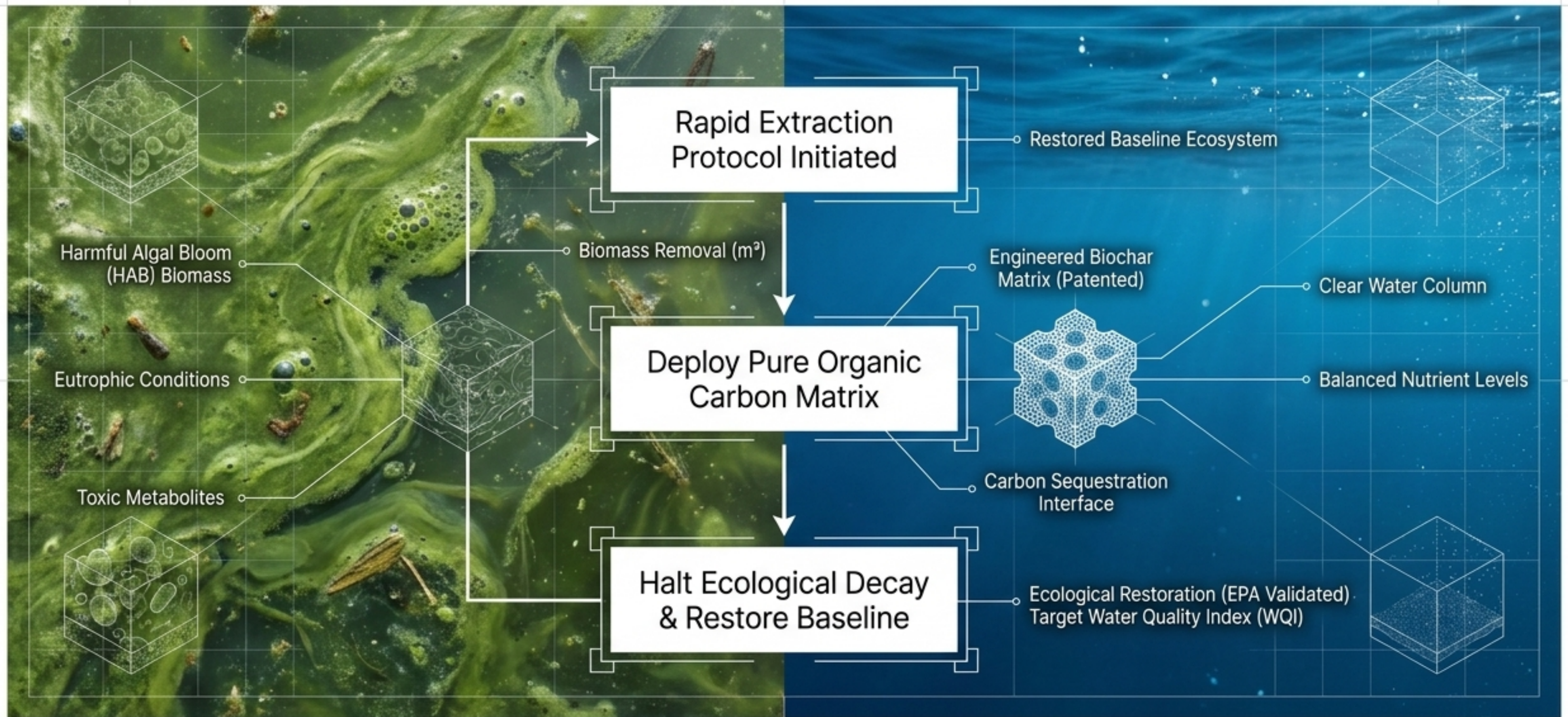
Application: Open Water Remediation

Patented Contaminant Removal System (US 9,878,924)

Deploying porous containers filled with modified biochar directly into water bodies. The system utilizes a precise arrangement of anchors, floats, and attachment lines to suspend the biochar matrix, passively sequestering heavy metals and agricultural runoff from the aquatic environment.



Application: Algae Cleanup & Ecological Restoration




Leveraging specialized patents to extract harmful algae blooms using pure generational knowledge—without introducing secondary synthetic chemicals.

Application: Organic Animal Feed Additive

Because Comanche Biochar absolutely refuses to release bound toxins into an animal's flesh, it operates as a uniquely safe, repeatable industrial solution.

The USDA has officially approved this pure organic biochar specifically for use within the organic animal feed additive market, turning environmental remediation technology into an agricultural asset.



APPROVED: JAN 28, 2019
USDA OFFICIAL DESIGNATION



The Definitive Decontamination Asset

16 Core Patents

Complete manufacturing and deployment IP.

EPA & USDA Validated

Unmatched cross-border environmental approvals.

Zero Re-Release Liability

Total contaminant capture and permanent lock-in.

Comanche Biochar provides the only heavily engineered, fully certified organic carbon solution for the world's most complex remediation challenges.