

TURBOCOAG® TREATMENT FOR LANDFILL LEACHATE

Avid Water Technology provides advanced water purification via its patented TurboCoag® technology to treat industrial water contaminated with PFAS, emulsified oils, heavy metals, suspended solids, and microorganisms.

Putting a new spin on water treatment.

IDEALLY SUITED FOR REMEDIATION OF:

- PFAS
- Arsenic
- Heavy metals
- Fat, oil, and grease
- Condensate contaminants
- Microorganisms, including e-coli



FEATURES

- Commercial models from 25 to 200 GPM per reactor
- Controllable throughput
- Continuous water treatment
- Self-cleaning system
- Passivation-free anodes, aluminum, or iron
- Sludge-free reactor
- Higher level of suspended solids handled
- Strong flocculant is easily filtered / quickly settled

TURBOCOAG® SPECIFICATIONS

Design Flow Maximum (GPM)	200
System Power Requirement: Typical	40 kW
AC Power Requirement	480 VAC 3Ø
Dose Rate Range Aluminum (PPM)	37-150
Piping Connections (NPT)	4 x 2"
Nominal pH Requirement Range	6 - 8

CASE STUDY: NC LANDFILL

In 2023, Avid treated a sample from a site in North Carolina recognized as producing some of the worst smelling landfill leachate in the area. Treated effluent was sent to a third-party laboratory for contaminant removal verification. The results are displayed in the chart to the left.

TurboCoag® creates a heavy precipitate which takes a few minutes to form and settle out. The precipitate is then separated from the water and final effluent is filtered. The sludge—which passes the toxicity characteristic leaching procedure (TCLP)—can be returned to the landfill.

TurboCoag® is a cost-effective alternative to chemical water treatment via its patented electrocoagulation (EC) reactors.

NC LANDFILL LEACHATE ANALYSIS

CONTAMINANT	RAW mg/L	TREATED mg/L	REMOVED
TSS	712	22	97%
BOD, 5 DAY	308	58.9	81%
Arsenic	0.714	0.368	48%
Barium	0.184	0.003	98%
Chromium	0.245	0.121	51%
Fluoride	1.81	DL	100%
Iron	109	0.551	99%
Lead	0.0026	0.00046	82%
Tetrahydrofuran	0.0151	DL	100%
Toluene	0.0034	DL	100%
PFOA	1.1	DL	100%
PFOS	0.03	DL	100%

Single pass treatment levels.

