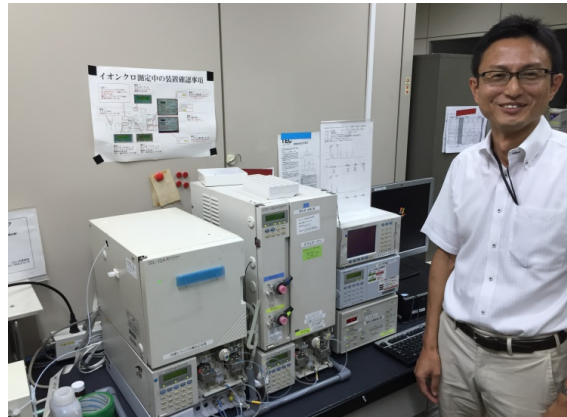




Smart and Reliable Onsite Wastewater Treatment



Company Profile



FUJI CLEAN CO.,LTD.

Founded: February 1961

Employees: 500, including 30+ engineers and 26 in Research & Development

Annual Sales: 50,000 Treatment Systems / 90,000 Blowers

Main Business: Manufacture, sales and maintenance of Onsite Wastewater Treatment Units

Number of Installed and Operating Systems Worldwide: 2+ Million

I/A Spreadsheet

Parent Company: Fuji Clean Co., Ltd. (Nagoya, Japan)

Model Technology Name: CEN Series (denitrification systems)

Years in Production: 16 for CEN Series



Miyoshi Factory



Toyota



Ichinomiya



I/A Spreadsheet

Company: Fuji Clean
USA (Brunswick, Maine)

Incorporated, 2013

Residential Units
installed in the U.S.
3,000 to 4,000 and
growing



Size matters! Fuji Clean systems may be smaller in stature than comparable systems.....but are intelligently engineered to provide optimal and reliable treatment at a highly competitive cost and small footprint.

I/A Spreadsheet

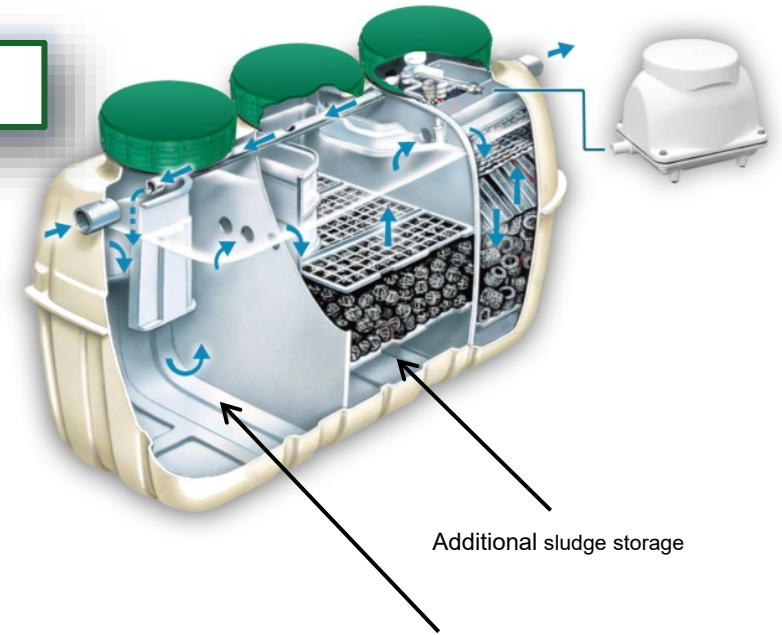
Residential Systems:

Single tank CEN systems;
500 gpd to 1,900 gpd

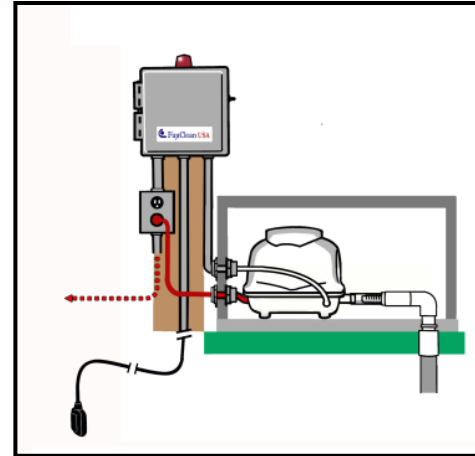


Standard CEN Model for treatment of up to 500 gpd easily fits into a pick-up or trailer and weighs only 463 lbs.

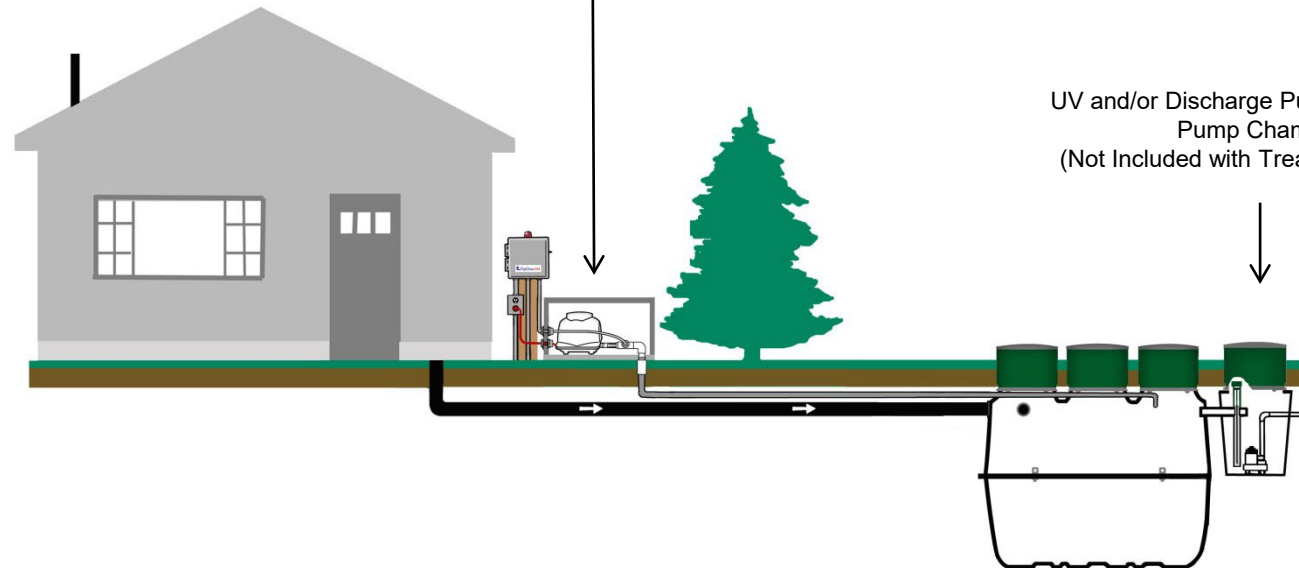
Installation Overview



NSF 40 and 40/245 testing accepted straight wastewater and utilized built-in "sedimentation chamber" as septic tank.



UV and/or Discharge Pump in Separate Pump Chamber
(Not Included with Treatment System)



I/A Spreadsheet

Unique Aspects/Advantages:

Single tank system has a built-in "septic tank" and therefore requires no preceding trash tank for most residential applications.

No moving parts inside tank associated with treatment. Only moving air.

DESIGN SPECIFICATION TABLE

I/A Spreadsheet

Unique Aspects/Advantages: Offering multiple sized models to fit varied job size requirements.

Design Specification Table		CE Series BOD, TSS, TN*						CEN Series BOD, TSS, Enhanced TN				
Model:	CE5	CE7	CE10	CE14	CE21	CE30	CE6KG	CEN5	CEN7	CEN10	CEN14	CEN21
Load Hydraulic (GPD)	500	700	1,000	1,350	1,900	2,700	6,000	500	700	1,000	1,350	1,900
Effluent (assumes domestic strength influent):												
BOD – Effluent (mg/L)	≤20	≤20	≤20	≤20	≤20	≤20	≤20	≤10	≤10	≤10	≤10	≤10
TSS (mg/L)	≤20	≤20	≤20	≤20	≤20	≤20	≤20	≤10	≤10	≤10	≤10	≤10
TN (mg/L)	≤20*	≤20*	≤20*	≤20*	≤20*	≤20*	≤20*	≤10	≤10	≤10	≤10	≤10
Blower Detail:												
Blower Model	80RII	80RII	100RII	150RII	200RII	150RII (2)	200RII (4)	80RII	100RII	150RII	200RII	150RII (2)
Normal Pressure (kPa)	15	15	18	20	20	20	20	15	18	20	20	20
CFM; L/Min	2.8 CFM 80 L/MIN	2.8 CFM 80 L/MIN	3.5 CFM 100 L/MIN	5.3 CFM 150 L/MIN	7.0 CFM 200 L/MIN	10.6 CFM 300 L/MIN	28.0 CFM 800 L/MIN	2.8 CFM 80 L/MIN	3.5 CFM 100L/MIN	5.3 CFM 150 L/MIN	7.0 CFM 200 L/MIN	10.6 CFM 300 L/MIN
Power Use (kWh/day)	1.2	1.2	1.7	2.7	3.7	5.4	14.8	1.2	1.7	2.7	3.7	5.4
Weight (lbs.)	11	11	11	20	20	20 x 2	20 x 4	11	11	20	20	20 x 2
Outlet Diameter OD-inches)	0.70	0.70	0.70	1.0	1.0	1.0	1.0	0.70	0.70	1.0	1.0	1.0
Tank Detail:												
Material	Fiber-reinforced plastic						Fiber-reinforced plastic					
Height (inches)	61.8	65.4	73.2	77.4	81.3	87.2	87.2	65.4	73.2	77.4	81.3	87.2
Length (inches)	85	95.7	98.8	118.9	152.8	183.7	434.7	95.7	98.8	118.9	152.8	183.7
Width (inches)	43.7	49.2	56.7	68.9	72.4	78.3	115.3	49.2	56.7	68.9	72.4	78.3
Weight (lbs.)	397	463	705	926	1,168	1,543	2,900	463	705	926	1,168	1,543
Inlet Invert (inches)	49	53	61	62	65	71	67	53	61	62	65	71
Outlet Invert (inches)	47	51	59	59.5	63	69	64	51	59	59.5	63	69
Access Ports (number)	3	3	3	3	3	3	7	3	3	3	3	3
Access Port Diameter (inches)	3@20"	2@20" 1@24"	2@20" 1@24"	2@20" 1@24"	2@20" 1@24"	2@20" 1@24"	4@24"x24" 3@24"x48"	2@20" 1@24"	2@20" 1@24"	2@20" 1@24"	2@20" 1@24"	2@20" 1@24"
Volume Total (gallons)	545	749	1,069	1,498	2,252	3,199	7,267	749	1,069	1,498	2,252	3,199

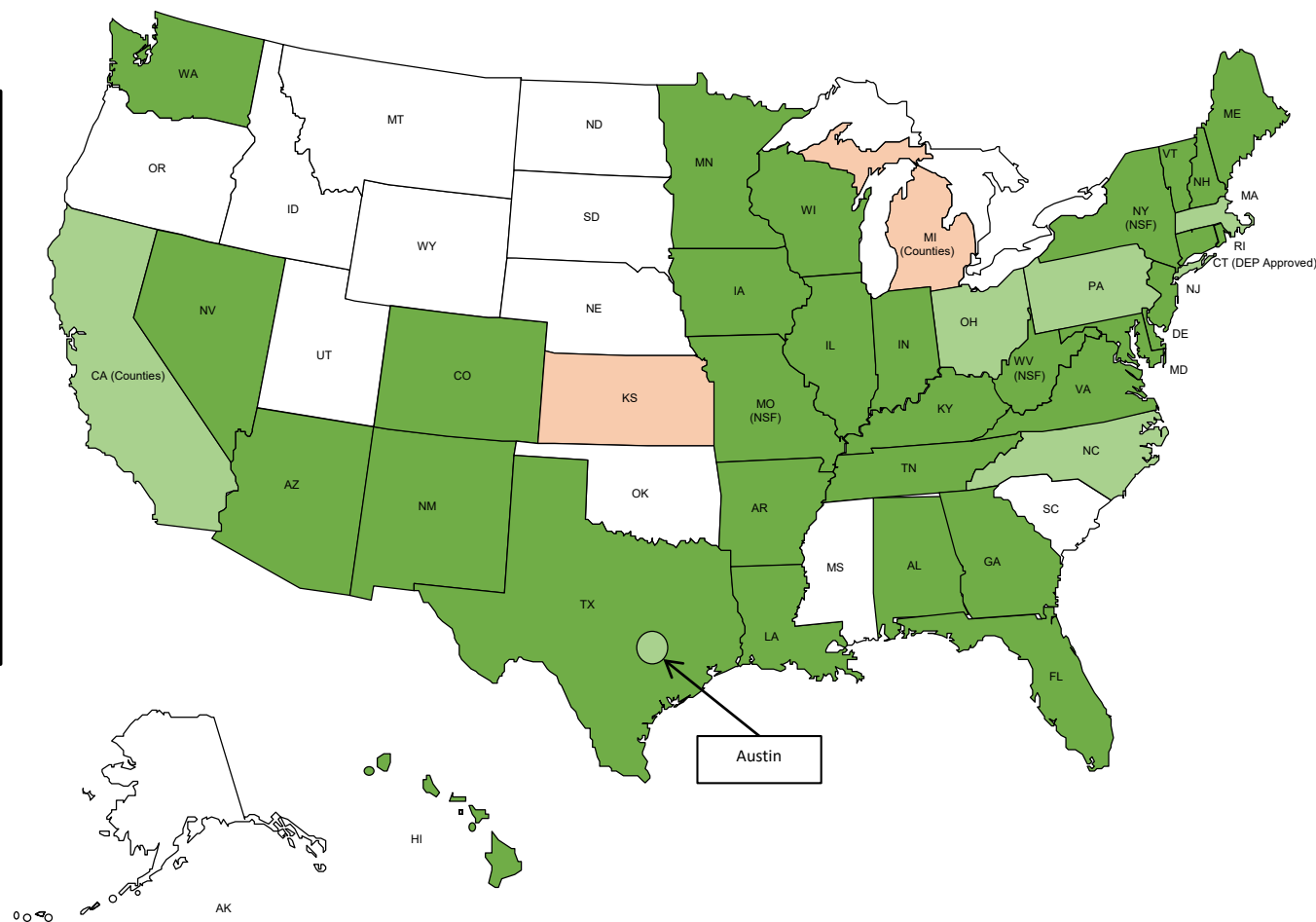
State Approvals (as of October, 2021)

I/A Spreadsheet


Approvals.

Rhode Island Approval: Class 2, Category 1

Massachusetts
Approval: Provisional,
Remedial



 Fully Approved

 Approved with conditions, limited approval or field testing to move to a higher approval level

 Pending Approval

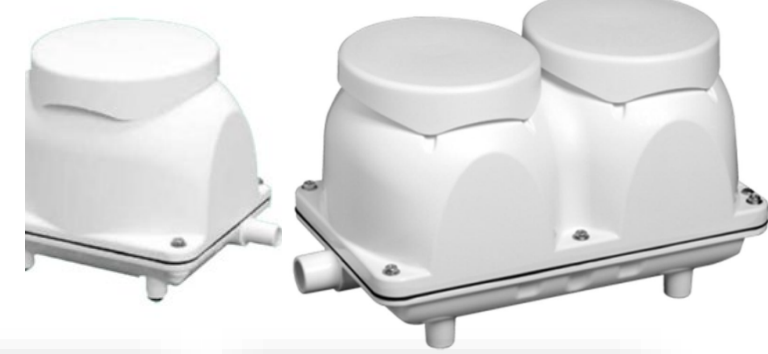


I/A Spreadsheet

Power Requirements:

Only onsite treatment company to manufacture its own blower.

Power miser. Example: Blower for CEN5, 500-gpd system, is a FujiMAC 80RII, which requires only 1.2 kWh/day. (≈\$5.00 per month @ \$0.14/kWh.



FujiMAC Blowers

Best-in-Class Blower Performance (efficiency, durability & low noise) linear diaphragm air pump on the market today

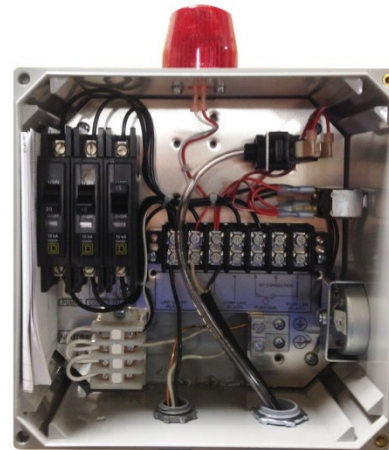
Highest standards manufacturing quality control

I/A Spreadsheet

Alarm/Control Panel:

Multiple panel options to meet site/regulatory requirements.

Wireless communication of alarm condition available using SJE Rhombus, Xpert Alert Wifi Alert System. Inexpensive, easy to install.



Fuji Clean Model Features	A	A1	C	X	D	RI	E	M	KG
Description	Basic Alarm Panel	Basic Alarm Panel w/ Current Sensor	Basic Alarm w/ Comm. Contact & Time Meter	Basic Alarm with 24-Hour Timer (Night Spray)	Duplex Time Dosing	Simplex Time Dosing	Duplex Dosing Control w/ Data Logging	Basic Large System Control w/ 2 Current Sensors	CE6KG Control with 4 Current Sensors
SJE Rhombus Model #	1041972	1064558	1045040	1029522	IFS41W914 X6A8AC10 E27D	IFS11W11 4H6A8AC1 5A17G27D w/current sensor	IFI41W914 X6A8AC10 E27D	1059296	BP2833
NEMA 4X Weather Proof Enclosure	X	X	X	X	X	X	X	X	X
120 Volt AC Breakers (Pump, Air Blower, Alarm)	3	3	3	3	3	3	3	4	5
Alarm/Test/Normal/Silence Switch	X	X	X	X	X	X	X	X	X
Air Blower Low Pressure Alarm Switch	X		X	X	X				
Current Sensor Alarm Switch		X				X	X	X (2)	X(4)
Communication Contacts (Alarm Aux)			X		X	X	X	X	X
Elapsed Time Meter			X		X	X	X		
Duplex Pump Demand or Timed Dosing Control					X	X	X		
24-Hour Timer				X					
Dual Alarm Beacons				X					
Data Logging Panel via USB Port to Flash Drive							X		
UL Listed to Meet and/or Exceed Industry Safety Standards					X	X	X		
Dual Safety Certification for U.S and Canada					X	X	X		

I/A Spreadsheet

Unique Aspects/Advantages:

Contractors: Tiny footprint, one tank, one airline simplicity makes for efficient installation.

Homeowners: Low profile, quiet, (i.e. 39 dB for CEN5 blower) and energy efficient system.

Designers/Engineers: Small footprint, high performance system can be solutions on small, difficult sites.

Regulators: Huge experience, high performing system, well supported system.



Residential Systems



I/A Spreadsheet

Yearly O&M Requirements:
Semi-annual
inspections/maintenance.



O&M



I/A Spreadsheet

Unique Aspects/Advantages:

Designers/Engineers:

Fuji Clean provides treatment train plans as a service to designers.

Site Owners: Compact, unobtrusive and low power draw system.

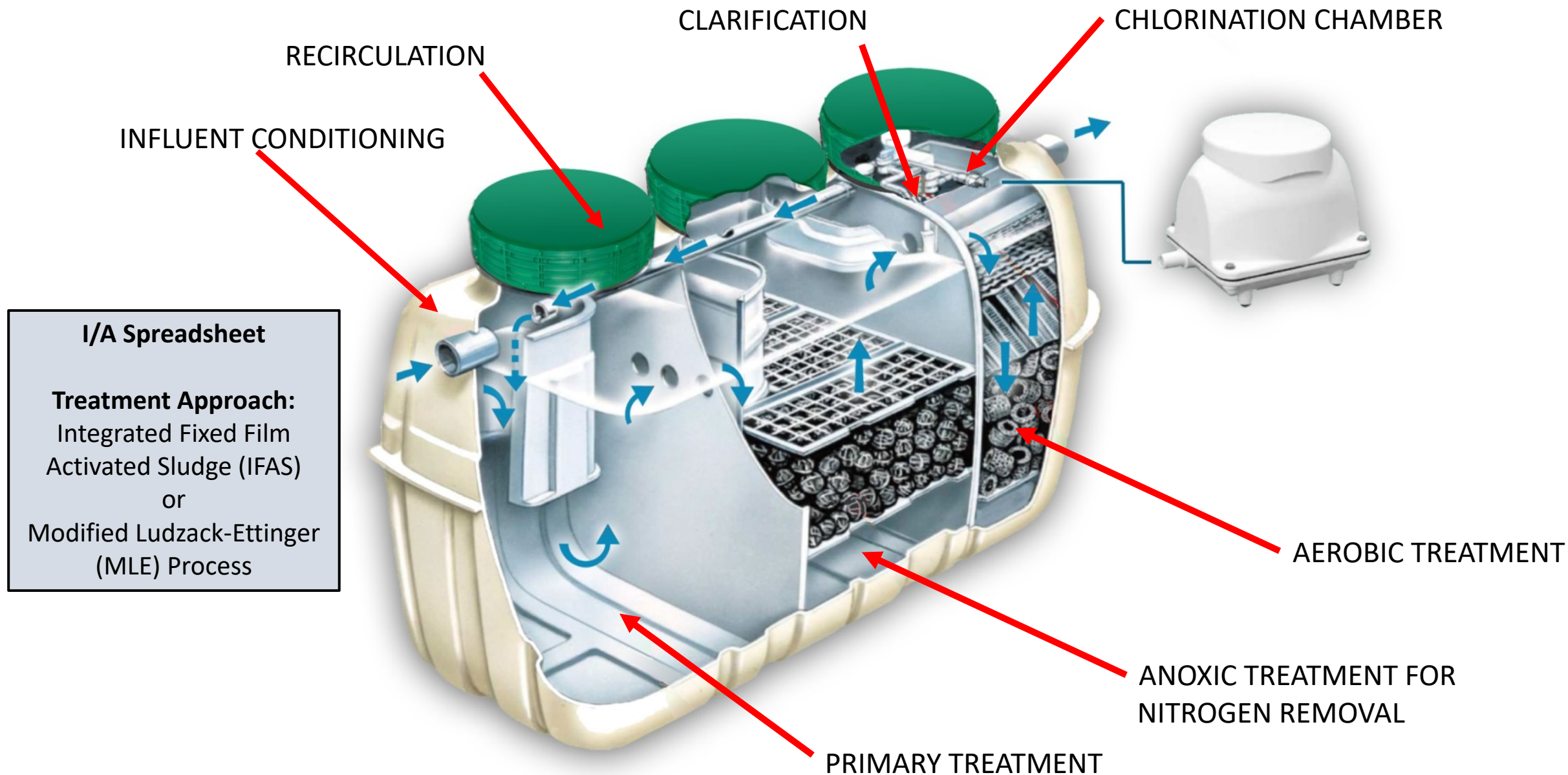
Regulators: Fuji Clean requirement to review all commercial plans provides assurance of system performance to meet regulations.

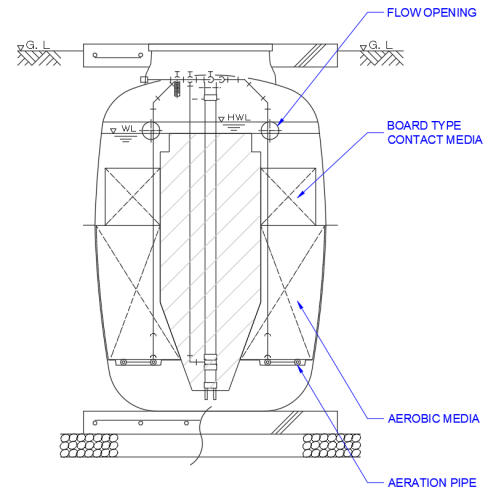
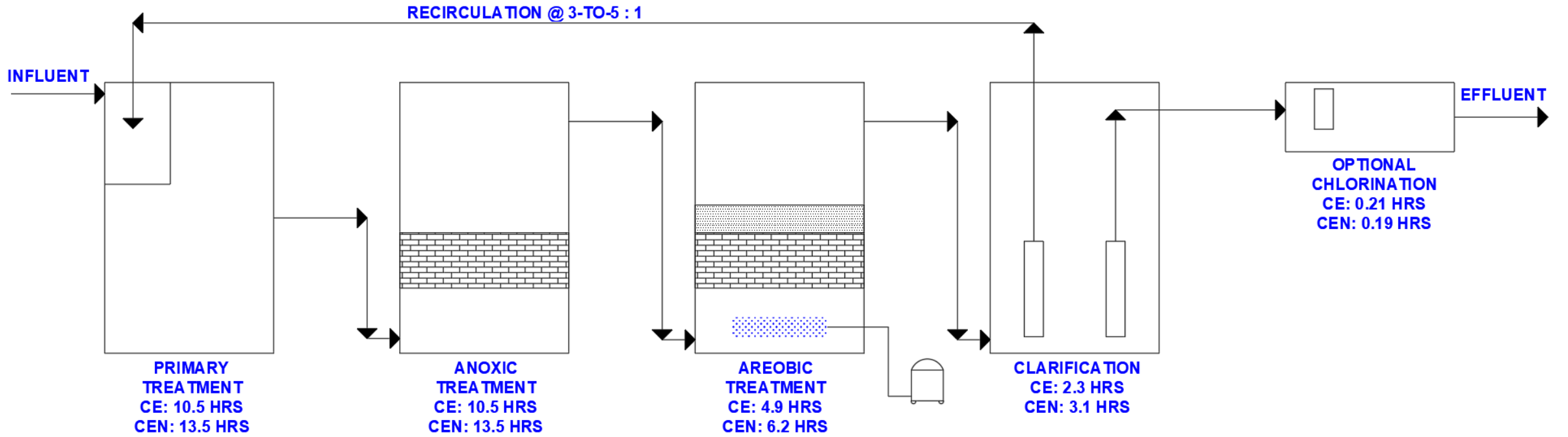


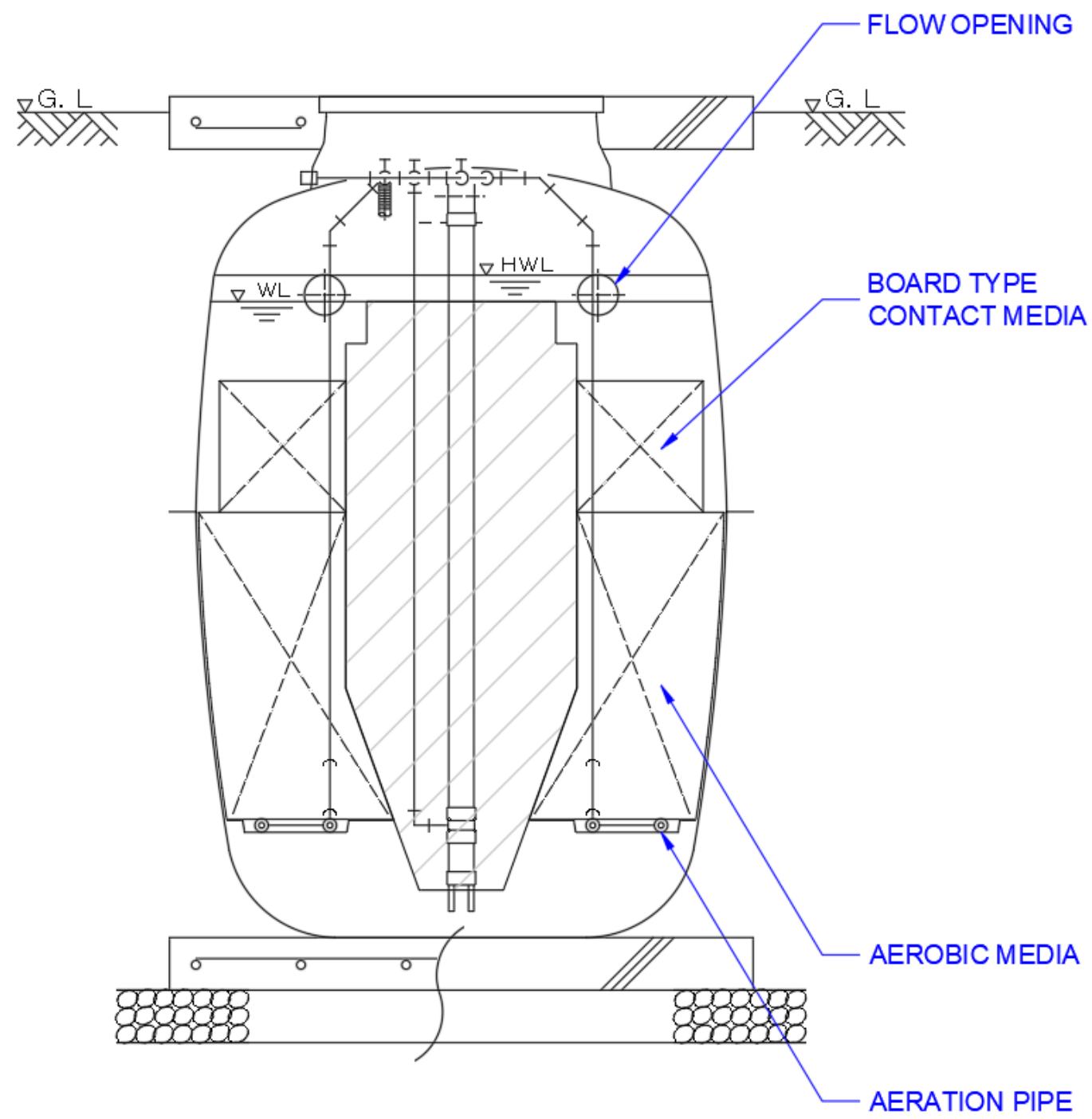
Commercial Systems











I/A Spreadsheet

3rd Party Testing Data:

3rd Party Testing Data – Fuji Clean CEN Series Systems

State(s) (Location)	# of Sites (N)	Testing Frequency	# Samples	Mean CBOD	Mean TSS	Mean TN
Virginia and Maryland	22	Quarterly	105	1.59 mg/L	1.22 mg/L	13.4 mg/L
Suffolk County, NY	20	Quarterly	381+			10.7 mg/L (as of 10/15/21)*

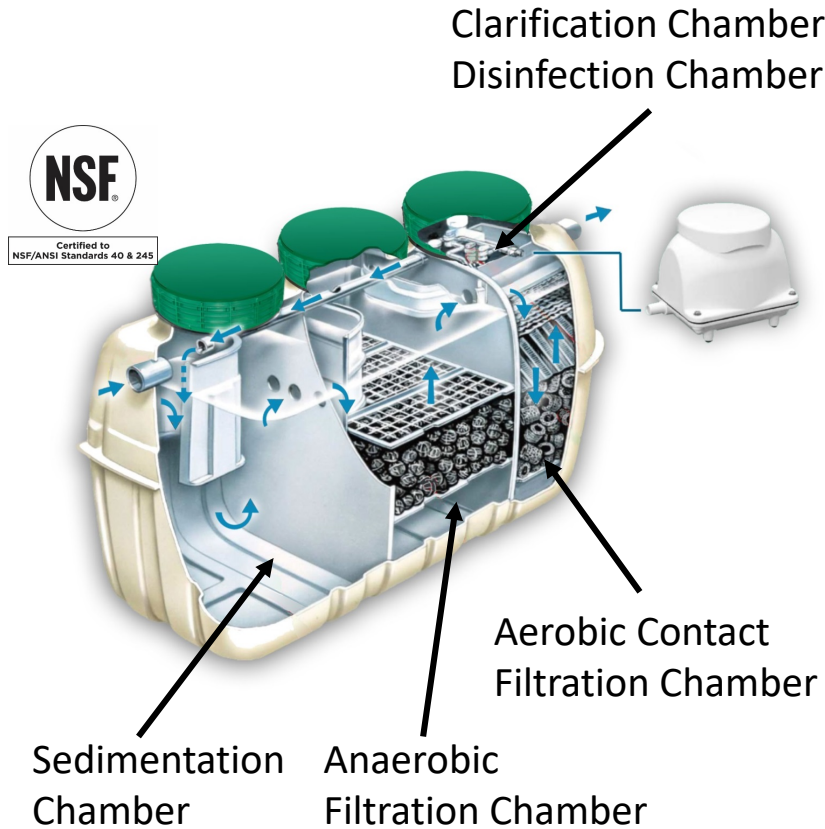
* Currently ranked #1 system in Suffolk County for average TN removed.

PHOSPHORUS REMOVAL

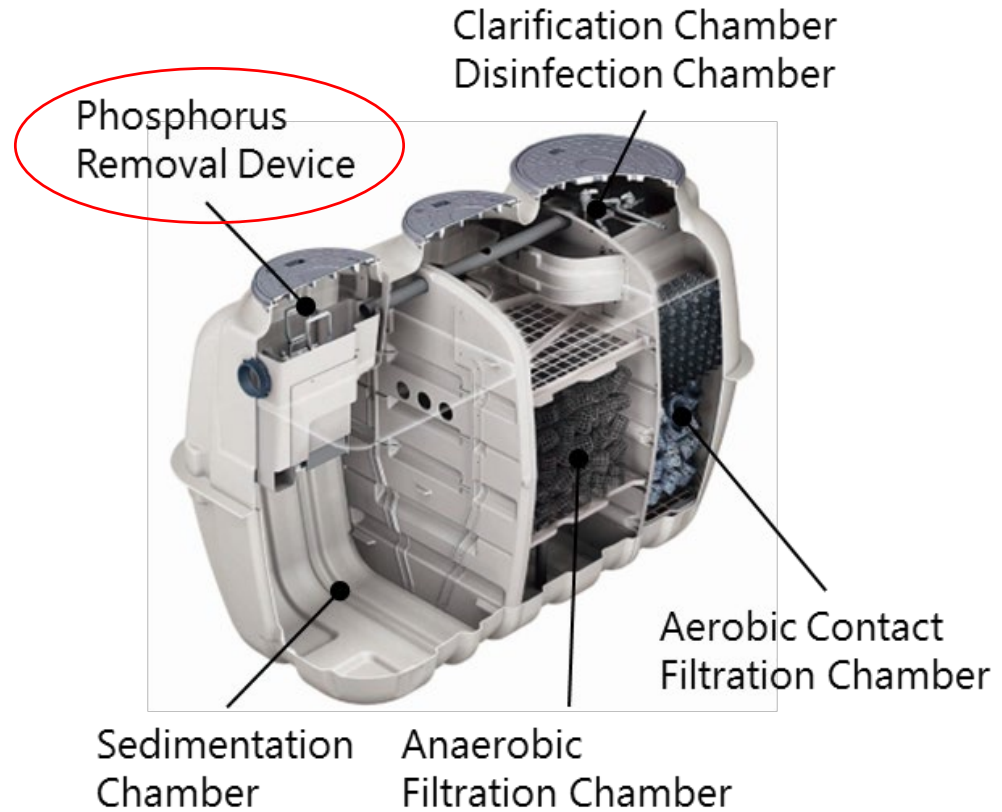
I/A Spreadsheet

Phosphorus Removal

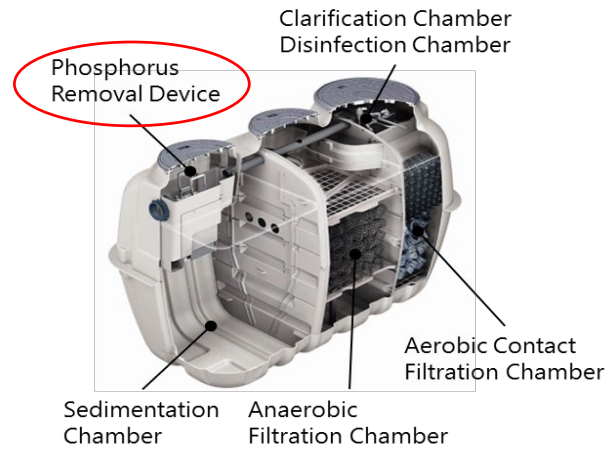
Current participation in
319 Grant Program with
CRXII model (administered
by MASSTC)



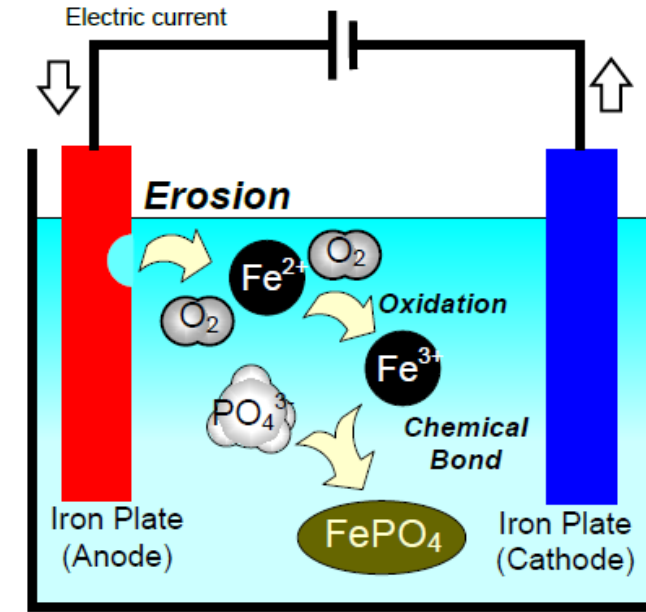
Fuji Clean CEN Series



**Fuji Clean CEN-SERIES
WITH PHOSPHORUS REMOVAL
Using Iron Precipitation
(CRXII)**



Iron Electrode Plate



TP AND TN REMOVAL DATA FROM 27 JAPANESE SITES

	BOD mg/L	CBOD mg/L	TSS mg/L	TN mg/L	TP mg/L
Average	8.0	3.2	4.3	10.0	0.5
Median	3.8	2.0	2.0	7.4	0.3