

STATE OF NEW MEXICO
ENVIRONMENT DEPARTMENT
FIELD OPERATIONS DIVISION

LIQUID WASTE PROGRAM

GUIDANCE NUMBER 6: Voluntary Installation of Advanced Treatment Units

I. PURPOSE:

This guidance is provided to clarify the requirements for advanced treatment units installed but not required to be installed by the liquid waste regulation (20.7.3 NMAC).

II. APPLICABILITY:

This guidance applies to all advanced treatment units installed on sites where only a conventional septic system is required.

III. GENERAL:

The liquid waste regulation requires specific monitoring and maintenance requirements for advanced treatment units installed to overcome a siting condition. However, individuals may install advanced treatment units on sites where a conventional septic system would be authorized.

IV. GUIDANCE STATEMENT:

Section 20.7 .3.901B, C and D NMAC, **MONITORING**, states:

B. On-site liquid waste systems that require secondary treatment levels be achieved shall be sampled and analyzed only for 5-day BOD quarterly for the first year, semi-annually for the second year, and yearly thereafter or as otherwise required by the department to meet the requirements of the permit. Chemical oxygen demand (COD) may be substituted for BOD5 with an acceptable calibration curve as approved by the department.

C. On-site liquid waste systems that require tertiary treatment levels be achieved shall be sampled and analyzed only for total nitrogen quarterly for the first year, semi-annually for the second year, and yearly thereafter or as otherwise required by the department to meet the requirements of the permit.

D. Advanced systems requiring disinfection shall be sampled and analyzed for fecal coliform quarterly for the first year, semi-annually for the second year, and yearly thereafter or as otherwise required by the department.

The key phrase in each of these sections is 'that require'. Systems that require a specific performance level be achieved shall be monitored as indicated. Conversely, these sections do not require systems that are not required to meet a specific performance level to be sampled.

Section 20.7 .3.902A and B NMAC, **OPERATION AND MAINTENANCE REQUIREMENTS AND INSPECTION REQUIREMENTS AT TIME OF TRANSFER**, states:

A. The owner of an on-site liquid waste system, including systems existing prior to the effective date of this regulation, shall be responsible for properly operating and maintaining the system in accordance with the recommendations of the manufacturer or designer of the system

B. The owner of an advanced treatment system installed after the effective date of this regulation shall enter into a department approved maintenance contract with a maintenance service provider that will assume maintenance of the system in accordance with the recommendations of the manufacturer or designer of the system. A maintenance contract shall be in effect at all times.

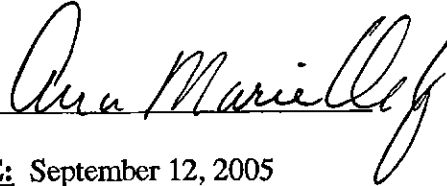
These sections do not exempt advanced treatment systems installed where conventional system may be authorized from being operated and maintained properly.

Therefore, an advanced treatment system installed in lieu of a conventional system on sites where a conventional may be installed shall be required to:

- Be operated as it was permitted, i.e. the mode of operation cannot be changed at a later date without a modification to the permit; and
- a maintenance contract shall be in force at all times.

V. **APPROVAL:**

Approved by FOD Director



VI. **EFFECTIVE DATE:** September 12, 2005

Advanced Wastewater Treatment Systems Approved by NMED

Manufacturer	Model	Capacity (gpd)	Secondary Treatment 30 mg/l TSS 30 mg/l BOD	Tertiary Treatment 20 mg/L total N	Approval Conditions
Systems Reviewed by the WTAC and Approved by NMED					
Swato USA, LLC	Fuji Clean CS-5, CS-7, CS-10	375, 525, 750	yes	yes	
UltraViox, LLC	UltraViox		Conditional	Conditional	experimental-home only
Bord Na Mona Environmental Products US, Inc.	Puraflo Peat Biofilter	500 and up	yes	Conditional	experimental-home only
SludgeHammer Group, Ltd.	SludgeHammer S-46/S-86	500 or 1000 gpd	yes	no	
Consolidated Treatment Systems	Enviro-Guard ENV-0.75	750 gpd	Conditional	Conditional	2-12 sites, home only
Southern Manufacturing Co.	SM500-NR	500 gpd	yes	Conditional	2 sites
Adelante Consulting, Inc.	Adelante ATU	450 gpd	Conditional	Conditional	6 sites home only
Biodigester, Ltd.	Standard & T Series		Conditional	no	6 sites home only
Systems Approved by NMED Prior to Creation of the WTAC					
Ecological Tanks, Inc.	Aqua Safe 500 -1000	500 - 1000	ANSI/NSF certified	no	
Swato Inc., USA	FujiClean LP-5, 6, 7,	500 - 1500	meets standard -	yes	

	8, 10		not NSFcertified	(recirculation - sludge return)
Jet, Inc.	J-500, 600, 750, 1000, 1500	500 - 1500	ANSI/NSF certified	no
Koi Environmental, Inc.	Model 16/12, 16/15, 16/19	500 - 1500	meets standard - not NSFcertified	yes (recirculating trickling filter)
Bio-Microbics, Inc.	MicroFAST 0.5, 0.75, 0.9, 1.5	500 - 15000	ANSI/NSF certified	yes (return to anoxic zone)**
Consolidated Treatment Systems, Inc.	Multi-Flo 0.5, 0.6, 0.75, 1.0, 1.5	500 - 1500	ANSI/NSF certified	no experimental approval given for limited # of installations with restrictions
Consolidated Treatment Systems, Inc.	Nayadic M-6A, 8A, 1050A, 1200A, 1500A	500 - 1500	ANSI/NSF certified	yes (with recirculation to trash tank)
Aqua Test, Inc.	Nibbler		High strength pretreatment unit	not applicable
Norweco, Inc.	Singulair Bio-Kinectic model 960	500 - 1500	ANSI/NSF certified	yes (intermittent aeration)
Orenco Systems, Inc.	Advantex -AX, -RX	500 - 1500	ANSI/NSF certified	yes (recirculating trickling filter)
Bord Na Mona Environmental Products US, Inc.	Puraflo Peat Biofilter	500 and up	meets standard - not NSFcertified	no
Southern Manufacturing Co.	Southern Aerobics SM500, 600, 750, 1000, 1500	500 - 1000	ANSI/NSF certified	approval pending (return line to trash tank)
Waterloo Biofilter Systems, Inc. (aka Zabel Environmental Technology)	Waterloo Biofilter (Scat Biofilter and	500 and up	meets standard - not NSFcertified	yes (recirculation to septic tank)

AeroCell System)

*based upon manufacturer's submittal

**possible design change

Disclaimer for NMED Approval of Liquid Waste Treatment and Disposal System Products

Liquid waste treatment and disposal system products are approved by the New Mexico Environment Department (NMED) based on recommendations from the Wastewater Technical Advisory Committee (WTAC). The WTAC has established performance criteria for secondary and tertiary wastewater treatment systems.

Improper installation, operation or maintenance may cause some of these products to fail to function properly, which may include failure to meet treatment performance criteria. NMED's approval of any liquid waste treatment or disposal system product does not impart or imply any guarantee that the product will, in fact, function properly. Malfunctioning liquid waste treatment and disposal systems may result in hazards to public safety, health and welfare, degradation of water quality, and in violations of applicable Liquid Waste Disposal and Treatment regulations and standards, 20.7.3, NMAC.

Some product manufacturers have made claims, in company websites, literature and advertisements, with regard to issues other than meeting WTAC performance criteria. In some instances, NMED has determined that these claims are either incorrect, or have not been demonstrated to be valid using the scientific method of inquiry. Examples of such claims include, but are not necessarily limited to, assertions regarding treatment process, effluent quality, necessity of tank pumping, drainfield performance or longevity, and regulatory permitting requirements. NMED's approval of any liquid waste treatment or disposal system product does not impart or imply any endorsement of, or concurrence with, any claims made by the manufacturer.

Click on the statement below to go to the Approved Products Webpage

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