

ZONING PERMIT APPLICATION

#289

FULL NAME Marcia Schulze TELE # _____
 MAIL ADDRESS 43611 236th Lane
 CITY Aitkin STATE MN ZIP 56431
 911 ADDRESS OF PROPERTY 43629 236th Lane
 CITY Aitkin STATE MN ZIP 56431
 TOWNSHIP Hazleton
 LEGAL DESCRIPTION Buchanan Beach, Lot 6
 SECTION 28 TOWNSHIP 45 RANGE 27
 (circle) RESIDENTIAL COMMERCIAL ACCESSORY NEW BUILDING ALTERATION

OFFICE USE ONLY	
DATE <u>11/21/06</u>	APPROVE / DENY
PERMIT# <u>34815</u>	
PARCEL# <u>11-1-103600</u>	
RECEIPT# <u>Lp107</u>	
CONFORMING SEPTIC	
YES P#	NO <u>NEW</u>

BUILDING CONTRACTOR AND LICENSE NUMBER: _____
 SIZE OF ALL BUILDINGS COVERED BY THIS APPLICATION _____

COMMENTS: Septic system - Other Aerobic Multi-Flow tank replacement
Must install ASAP
Failing CI 205

DESIGNER: M. Keebles
 DATA FOR SEWER CONSTRUCTION: INSTALLER M. Ritter #BEDROOMS/GPD 2/300

The undersigned hereby makes application for permit to construct as herein specified, agreeing to do all such work in strict accordance with the Ordinances of the County of Aitkin, Minnesota; Minnesota Individual Sewage Disposal Code Minimum Standards set forth by Minnesota Department of Health; and Shoreland Management Standards set forth by Minnesota Department of Natural Resources. Applicant agrees that plot plan, sketches and specifications submitted herewith and which are approved by the Zoning Official, shall become a part of the permit. **APPLICANT FURTHER AGREES THAT NO PART OF THE SEWAGE SYSTEM SHALL BE COVERED UNTIL IT HAS BEEN INSPECTED AND ACCEPTED.** It shall be the responsibility of the applicant for the permit to notify the Zoning Office (at least 24 hours in advance) that the Septic System is ready for inspection.

X [Signature]
 SIGNATURE APPLICANT/AGENT

DO NOT WRITE BELOW THIS LINE

ZONING DISTRICT & FLOOD PLAIN
 ZONING DISTRICT S/L Pine
 LAKE/STREAM/RIVER NAME 1-015 Pine
 LAKE/RIVER ID NUMBER RD
 LAKE/RIVER/STREAM CLASSIF. _____
 PARCEL LOCATED IN FLOOD PLAIN? Y ___ N X
 10/100-YR. FLOOD ELEVATION _____
 LOWEST FLOOR ELEVATION _____
 ELEV. CERTIFICATE REQUIRED Y ___ N ___
 BEFORE CONSTRUCTION Y ___ N X
 AFTER CONSTRUCTION Y ___ N X

STRUCTURE SETBACK DISTANCE REQUIREMENTS
 (Measure from eaves or overhang)
 OHW TO LAKE/RIVER/STREAM 100'
 PROPERTY LINE SETBACK (10-ft. / 20-ft.) _____
 SETBACK TO ROAD R-O-W (30-ft. Twp., 50-ft. Co., State, Fed.) _____
 SETBACK TO BLUFF (30-ft.) _____
SEPTIC SYSTEM SETBACK DISTANCES
 SETBACK TO STRUCTURES - 10-ft. Tank / 20-ft. Drainfield _____
 OHW TO LAKE/RIVER 75'
 PROPERTY LINE SETBACK 10-ft.
 SETBACK TO ROAD R-O-W - 10-ft. _____

****ATTACH COPY OF ELEVATION CERTIFICATES****
 SOIL BORINGS 3 SEPTIC DESIGN Other GARBAGE DISP/HOT TUB YES ___ NO ___
 SSF _____ DEPTH TO RESTRICTING LAYER _____
 MIN. SIZE SEPTIC TANK _____ MIN. SIZE PUMP TANK _____
 DRAINFIELD: MINIMUM SQ.FT. _____ WITH _____ INCHES ROCK BELOW PIPE
 MOUND: MINIMUM ROCK BED SQ.FT. _____ WITH 9 INCHES ROCK BELOW PIPE
 MIN. UPSLOPE SAND WIDTH _____ MIN. DOWNSLOPE SAND WIDTH _____ END SAND WIDTHS _____
 RECOMMENDATIONS: see attached
\$250 other, \$5000

using existing drainfield
 FEE 300 RECEIVED BY MAK DATE 11/21/06

A. M. & Associates, Inc.

29465 442nd Lane
Paliande, MN 56469
(218) 768-4430

Michael D. O'Keeffe
Annette M. O'Keeffe
Septic Systems
Designs & Inspections
MPCA #1357

**THE ENCLOSED INDIVIDUAL SEWAGE TREATMENT SYSTEM (ISTS)
IS DESIGNED SPECIFICALLY FOR:**

Marcella Schulze
43611 236th Lane
Aitkin, MN 56431

For property located at;
43629 236th Lane
Aitkin, MN 56431

Big Pine Lake
Hazelton Township
Sec 28, Twp. 45, Rge. 27W, Lot 6 Buchanan Beach
Parcel# 11-1-103600

October 23, 2006

APPROVED

ONSITE INSPECTION
 NO ONSITE INSPECTION

SIGN MS DATE 11/24/06

**MULTI-FLOW AEROBIC TREATMENT SYSTEM
DISPERSING INTO EXISTING MOUND WITH 21 INCHES OF SEPERATION
SIZED FOR 2 BEDROOMS**

This ISTS is to have the wastewater gravity from the 2 bedroom dwelling into a New 1860 Combination Tank with a Pump Vault placed into the Septic side of the Tank. It will be Timed Dosed at a maximum of 300 gallons per day into a Multi-Flow Aerobic Treatment System, and then gravity into the Lift side of the 1860 Combination Tank. From there, it will pump on demand into the existing Mound with 21 inches of separation.

Note to Property Owner:

Please be advised that with the installation of the enclosed designed septic system, the Property Owner(s) understands and accepts full responsibility of that which is outlined below.

The State of Minnesota has classified the attached ISTS Design as a "Performance Based System", due to the pretreatment devise used to bring the existing Mound into separation compliance. Therefore, the Property Owner(s) accepts all responsibility and risks involved with the installation and hydraulic performance of this Septic System, and holds A.M. & Associates, Inc. harmless from all liability for this Sewage Treatment System whatsoever.

A Maintenance Service, Monitoring and Inspection Contract is required *before* Aitkin Planning & Zoning will accept an application for an Operating Permit.

A WATER METER MUST BE INSTALLED and the Property Owner(s) accepts the responsibility of recording water meter readings on a monthly/regular basis.

The Property Owner(s) accepts the responsibility of all costs involved for the servicing, monitoring, maintenance and mitigation of this system, that may occur.

Marcella Schulze
Parcel # 11-1-103600
10/23/2006

NOTE TO INSTALLER:

1. Installer is to inform property owner of known supplies, contractors, and expenses required in order to make this ISTS operational -that is *not* covered in his contract.
2. Installer *must verify* all measurements and elevations on jobsite.
3. This system *must* be installed according to *current* Minnesota Chapter 7080 and Aitkin County's ISTS & Wastewater Ordinance requirements.
4. Installer is to contact Designer for questions and/or prior to making any changes to the enclosed design.

TANKS and LINES

1. Pump & REMOVE existing 1250 Septic Tank and 300 gallon Lift Tank.
2. Install an 1860 gallon Combination Tank in same spot as Old Lift Tank meeting 75' setback from Lake.
3. Tank(s) should be water tested for cracks or leaks prior to backfilling.
4. Tank lids *must* be installed at ground level for monitoring and maintenance purposes.
5. Be sure the Sewer and Pump Lines are well supported to avoid bowing after ground settlement.
6. Install 2" "waterproof" styrofoam insulation on top of the Tank(s) and Sewer & Pump Lines to help prevent freezing problems.

MULTI-FLO

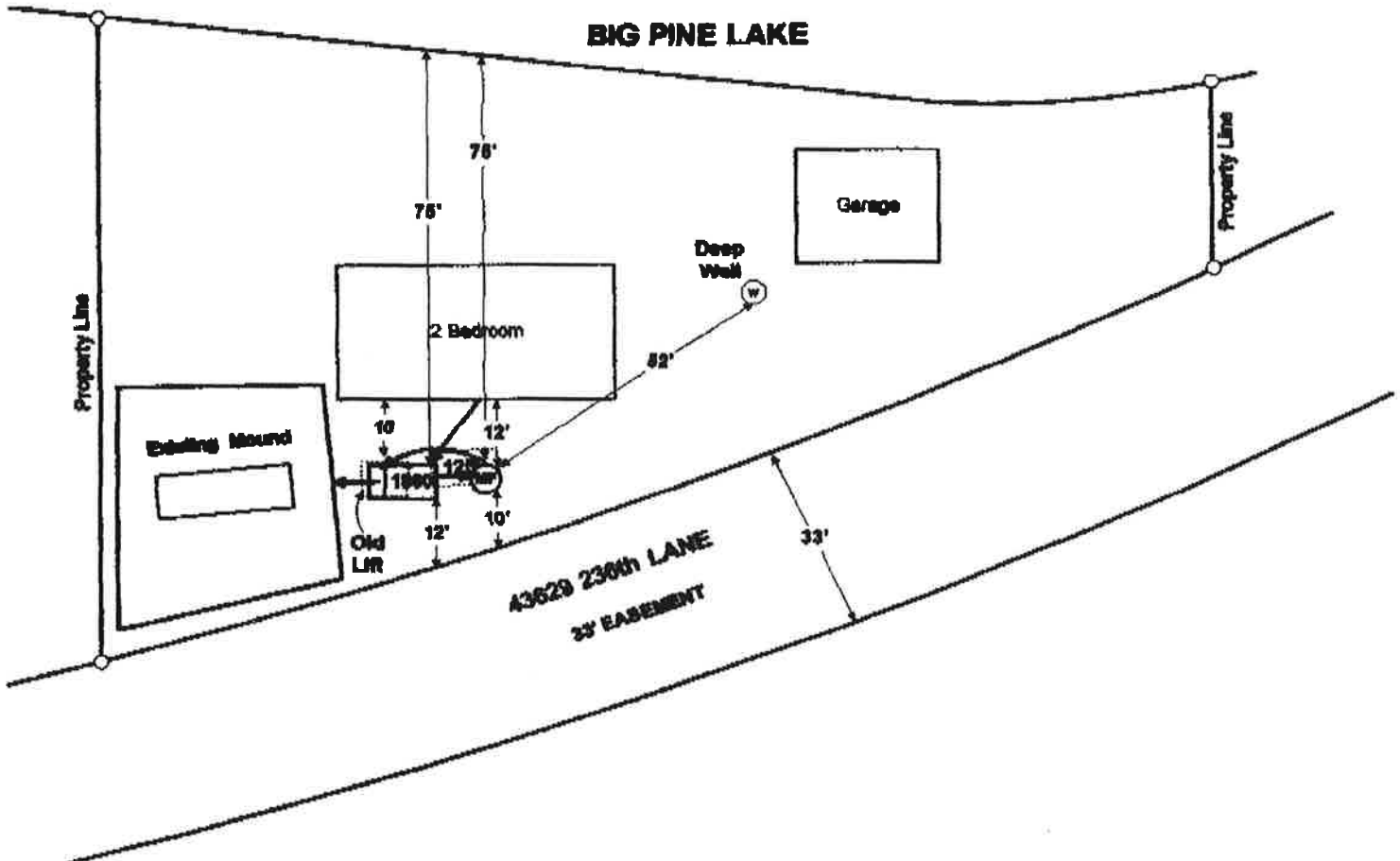
1. Install a Multi-Flo Aerobic Treatment Plant beside the New Combination Tank, meeting 75' setback from Lake, 50' setback from Well.
2. Gravity from the Proposed 2 bedroom dwelling into the New 1860 Combination Tank with a Pump Vault placed into the Septic side of the Tank.
Timed Dosed into the Multi Flow Aerobic Treatment System at a maximum of 300 gallons per day at 12 gallons per hour, 24 times per day.
Gravity from the Multi Flow into the Lift side of the 1860 Combination Tank.
Pump on demand into the existing Mound.

TIMED DOSING & PANEL & PUMP

1. The Pump used for Timed Dosing must have a minimum of 10 feet of Head.
2. The Timer is to be set according to the Pump Curve.
3. Time Dosing is to be set at a maximum of 300 gallons per day, 12 gallons per hour, 24 times per day.
4. Control panel must be a minimum of 4 feet high from finished ground surface for access. (Check with owner on whether to install the panel on house or stand)

MARCELLA SCHULZE
Parcel# 11-1-103600
SEPTIC DESIGN
10/23/2008

MULTI-FLOW AEROBIC TREATMENT SYSTEM



1. Pump & REMOVE existing 1250 Septic Tank and 300 Lift Tank.
2. Install a 1800 Combination Tank and Multi Flow Tank in spot as existing Tanks, meeting 75' setback from Lake, 50' setback from Well, 10' to 12' setback from House.
3. Gravity from House to Septic side of 1800 Combo.
 Time Does into Multi Flow at a maximum of 300gpd at 12 gallons per hour, 24 times per day.
 Gravity from Multi Flow into Lift side of 1800 Combo.
 Pump on Demand Into existing Mound.

Scale: 1" = 30'

SEPTIC INSPECTION SOIL BORING WORKSHEET

PROPERTY OWNER: Marcella Schulze

PARCEL# 11-1-103600

10/14/2005

TYPE OF DRAINFIELD: MOUND

Top of Drainfield Elev. =	(feet)	=	(Inches)
Depth to Bottom of Rock	5' 2"	+	62
Bottom of Rock Elev.		=	24
		=	86

SOIL BORING #1		
DEPTH (Inches)	TEXTURE	COLOR
0 - 16	Top Soil	10YR 3/2
16 - 20+	Sandy Loam Many Large MOTTLES	7.5YR 6/2 7.5YR 5/8

SOIL BORING #2		
DEPTH (Inches)	TEXTURE	COLOR
0 - 16	Sandy Loam	7.5YR 5/2
16 - 24+	Clay Loam MOTTLED	7.5YR 6/1 7.5YR 5/8

Ground Elevation	= 7'7"	=	(Inches)
Soil Boring Depth/Restricting Layer		+	91
Elevation to Restricting Layer		=	18
Less Bottom of Rock Elev.		=	107
Amount of Vertical Separation ***		-	86
		=	21

Ground Elevation	= 7'10"	=	(Inches)
Soil Boring Depth/Restricting Layer		+	95
Elevation to Restricting Layer		=	18
Less Bottom of Rock Elev.		=	111
Amount of Vertical Separation ***		-	86
		=	25

SOIL BORING #3		
DEPTH (Inches)	TEXTURE	COLOR
0 - 6	Top Soil	10YR 3/2
6 - 16+	Sandy Loam Many Large MOTTLES	7.5YR 6/2 7.5YR 5/8

SOIL BORING #4		
DEPTH (Inches)	TEXTURE	COLOR

Ground Elevation	= 8'6"	=	(Inches)
Soil Boring Depth/Restricting Layer		+	102
Elevation to Restricting Layer		=	6
Less Bottom of Rock Elev.		=	108
Amount of Vertical Separation ***		-	86
		=	22

Ground Elevation	=	=	(Inches)
Soil Boring Depth/Restricting Layer		+	
Elevation to Restricting Layer		=	
Less Bottom of Rock Elev.		-	
Amount of Vertical Separation ***		=	

*** AMOUNT OF VERTICAL SEPARATION MUST = 36" OR MORE TO MEET THE 3' SEPARATION REQUIREMENT

AITKIN COUNTY ENVIRONMENTAL SERVICES

APPLICATION for an OPERATING PERMIT FOR WASTEWATER TREATMENT AND DISPERSAL

PERMITTEE Marcella Schulze **PARCEL NUMBER** 11-1-103600
ADDRESS 43611 236th Lane **CITY** Aitkin **STATE** MN **ZIP** 56431
SEC 28 **TWP** 45 **RGE** 27 **BLOCK** **LOT** 6 **ACRES**
TELEPHONE (218) 678-2652 **GIS LOCATION**
SITE LOCATION 43629 236th Lane, Aitkin Big Pine Lake - Buchanan Beach

A. DESCRIPTION OF WASTEWATER TREATMENT AND DISPERSAL SYSTEM:

MULTI-FLOW AEROBIC TREATMENT SYSTEM DISPERSING INTO EXISTING MOUND SIZED FOR 2 BEDROOMS

This ISTS is to have the wastewater gravity from the 2 bedroom dwelling into a New 1860 Combination Tank with a Pump Vault placed into the Septic side of the Tank. It will be Timed Dosed at a maximum of 300 gallons per day into a Multi-Flow Aerobic Treatment System, and then gravity into the Lift side of the 1860 Combination Tank. From there, it will pump on demand into the existing Mound with 21 inches of separation.

Number of Bedrooms 2

Flow = 300 gpd

Hydraulic Loading Rate = Soil Loading Rate

Organic Loading Rate = 0.00010 BOD/sqft

$$\text{Flow} \times \text{BOD}(\text{mg}/1) \times 8.35 + 1,000,000 = \# \text{BOD}$$

$$(300 \times 15 \times 8.35 + 1,000,000 = .037 \text{ BOD})$$

$$\text{System Loading} = \text{organic loading} + \text{area} = \text{BOD/sqft}$$

$$(.037 + 384 = 0.00010 \text{ BOD/sqft})$$

Multi-Flow Output = 5 for pretreatment worksheet

Anticipated System Life = 20 - 30 years

Estimated Cost of:

System Construction =	<u>\$8,000.00 (±)</u>
Operation =	<u>\$12.00 per month</u>
Monitoring, Testing & Service =	<u>\$150.00 per year</u>

B. PERFORMANCE STANDARD REQUIREMENTS:

During the period beginning on the date of the Operating Permit and lasting until the Permit's expiration date, the Permittee is authorized to discharge from the wastewater treatment unit to subsurface dispersal. No surface discharge is permitted.

The discharge from the wastewater treatment unit shall be limited by the Permittee as specified below:

PARAMETER	COMPLIANCE LIMIT	SAMPLE LOCATION	SAMPLE FREQUENCY	SAMPLE TYPE	REPORTING FREQUENCY
Flow	300 gpd	Water Meter	Monthly	Record on Log Sheet	At time of Operating Permit Renewal
5-Day BOD					
Total Nitrogen					
Total Phosphorus					
TSS					
Fats, Oils, Grease (FOG)					
Fecal Coliform	Less than 10,000 cfu / 100 ml	ATU / Pump Tank	Bi-annual 1 st Year	Take Sample for Testing	Annually
Separation Distance	20 inches	Drainfield			Annually

C. MAINTENANCE REQUIREMENTS

PARAMETER	LOCATION	FREQUENCY
Daily Flow	Water Meter	Monthly (record on log sheet)
Sludge & Scum Level	Septic Tank	Annually
Pump, Timers, Alarm, Floats, etc	Tanks	Annually
Pressurization of Laterals in Sand Filter (squirt test)	Multi-Flo	Semi-Annually
Overall visual of entire system for landscaping, drainage and cover material	Total System	Annually

D. MONITORING AND REPORTING REQUIREMENTS:

1. Monitoring results obtained during each year shall be submitted no later than May 1st of each year to:
 Aitkin County Environmental Services
 209 2nd St NW
 Aitkin, MN 56431
2. The monitoring reports shall be signed by the Permittee. Copies are to be retained for your records.
3. The Permittee or designated agent shall notify Aitkin County Environmental Services within thirty (30) days when monitoring results do not meet the monitoring plan requirements of the Operating Permit.
4. Monitoring plans may be modified as necessary and reapproved by Aitkin County Environmental Services.
5. Sampling and laboratory testing procedures shall be performed in accordance with Standard Methods and the testing shall be performed by a Minnesota Department of Health approved laboratory.

E. MITIGATION PLAN:

1. If weeping problems should occur; lower dosing rate, lower water usage.
2. Waste strength: If fecals exceed limit, reduce waste strength or change waste characteristics. If fecals continue to exceed limit, add disinfection.
3. If Multi-Flow experiences problems, fix or repair at recommendations of Manufacturer, or replace.
4. A different or another Performance or Other System may be installed at the owner's expense.
5. If in the event that this system should fail and if there is no other ISTS option available, then Holding Tanks must be installed, to be pumped by Licensed Pumper. A contract must be entered into with a Licensed Pumper.

F. SPECIAL REQUIREMENTS:

1. ERIC LARSON (888) 983-2447 , a licensed ISTS firm, has agreed to perform all monitoring responsibilities, as outlined within this Operating Permit Application, for a period of _____ Year(s).

I hereby certify with my signature as the designer, that all data for the operating permit application is true and correct to the best of my knowledge.

MICHAEL O'KEEFE
(Name)


(Signature)

1357
(License #)

10/23/2006
(Date)

A.M. & ASSOCIATES, INC.
(Company Name)

29465 442nd LANE PALISADE, MN 56469
(Address)

(218) 768-4430
(Telephone)

Display Parcel Description

Notes: No

Parcel number/Tax year: 11-1-103600
Owner(s): 95325
SCHULZE, MARCELLA
43611 236TH LANE
AITKIN MN 56431

2007 Reference parcel: 00211015103600
Parcel type : RE Hold tax stmt:
Com district: 2 Misc1/2:
Escrow agent:
Mortgage hld:
UTA: Twp/City School AMBU **** *
011 0001 00 00 00 00

Taxpayer: 95325 FALCO: 1 F.O.
SCHULZE, MARCELLA
43611 236TH LANE
AITKIN MN 56431

TIF district: 000 000
Lake#/name : 1-0157 BIG PINE LAKE (Hazel
Property adr: 43629 236th Ln
AITKIN

Alternate taxpayer:

Emergency# : 56431 -
Twp/City Plt: HAZELTON TWP 15
Sec/twp/rge : 28 45.0 27 Acres:
Plat: BUCHANAN BEACH
Description: Lot/Block . :

LOT 6

Press Enter to continue or enter new parcel/tax year. 11-1-103600 2007
F1=Full desc F2=Trans hist F3=Exit F6=Prcl hist F7=Backward F9=Escrow hist
F12=Cancel F14=Phy Addr F17=Dsply Note

Compliance Inspection Form for Existing Individual Sewage Treatment Systems

Minnesota Pollution Control Agency

Completion of this form fulfills the minimal requirements of Minn. Stat. 115.55 (2001) and Minnesota R. ch. 7080 (1999). Please Refer to local ordinances for other requirements or information, especially for compliance requirements for bedroom additions.

General:

Date of Inspection: 10/11/2005 Reason for inspection: NOTICE

Property Owner(s) MARCELLA SCHULZE Telephone (218) 678-2652

Person requesting inspection MARCELLA SCHULZE Telephone (218) 678-2652

Site Address 43629 236th LANE City AITKIN Zip Code 56431

Parcel No. 11-1-103600 County AITKIN Township HAZELTON

Legal Description; Section: 28 Twp: 45 Range: 27 Block: Lot #(s): 6, BUCHANAN BEACH

Local Regulatory Authority AITKIN

Date system constructed: 1978 System in Shoreland Area: yes no System in Wellhead Protection Area: yes no

Protection Area: yes no System serving a MDH licensed facility? yes no Local Permit# (if any) _____

Systems built prior to April 1, 1996 and not located in Shoreland or Wellhead Protection Area or Serving a Food, Beverage or Lodging Establishment	Systems located in Shoreland or Wellhead Protection Areas or Serving a Food, Beverage or Lodging Establishment, or systems built after March 31, 1996
<p>Is the system an imminent threat to public health or safety? (a yes answer is an ITPHS system)</p> <p>-Discharge of sewage to the ground surface? YES NO</p> <p>-Discharge of sewage to drain tile or surface waters? YES NO</p> <p>-Sewage backup into dwelling? YES NO</p> <p>-Situation with the potential to immediately and adversely impact or threaten public health or safety? YES NO</p> <p>Is the system failing? (a yes answer is a failing system)</p> <p>-Less than TWO feet of vertical separation between system bottom and saturated soil or bedrock? YES NO</p> <p>-A seepage pit, cesspool, drywell, or leaching pit? YES NO</p> <p>Is the system non-compliant?</p> <p>-Is the system regulated under a monitoring plan or operating permit? (if no, go to page 2) YES NO</p> <p style="text-align: center;"><i>If yes,</i></p> <p>-Has the required monitoring taken place? YES NO (If no, the system in non-complying)</p> <p>-Does the monitoring indicate that the system meets performance expectations? YES NO (If no, the system in non-complying)</p>	<p>Is the system an imminent threat to public health or safety? (a yes answer is an ITPHS system)</p> <p>-Discharge of sewage to the ground surface? YES <input checked="" type="checkbox"/> NO</p> <p>-Discharge of sewage to drain tile or surface waters? YES <input checked="" type="checkbox"/> NO</p> <p>-Sewage backup into dwelling? YES <input checked="" type="checkbox"/> NO</p> <p>-Situation with the potential to immediately and adversely impact or threaten public health or safety? YES <input checked="" type="checkbox"/> NO</p> <p>Is the system failing? (a yes answer is a failing system)</p> <p>-Less than THREE feet of vertical separation between system bottom and saturated soil or bedrock? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p> <p>-A seepage pit, cesspool, drywell, or leaching pit? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p> <p>Is the system non-compliant?</p> <p>-Is the system regulated under a monitoring plan or operating permit? (if no, go to page 2) YES <input checked="" type="checkbox"/> NO</p> <p style="text-align: center;"><i>If yes,</i></p> <p>-Has the required monitoring taken place? YES NO (If no, the system in non-complying)</p> <p>-Does the monitoring indicate that the system meets performance expectations? YES NO (If no, the system in non-complying)</p>

Property Owner(s) MARCELLA SCHULZE

Fire No./ Parcel No. 11-1-103600

System Components (Please describe the system components and attach site sketch showing system location):

MOUND WITH 21 INCHES OF SEPARATION BELOW THE BOTTOM OF THE ROCK.

AN APPROXIMATE 1250 GALLON COMBINATION TANK AND LIFT TANK WAS NOT INSPECTED AT THIS TIME.

What methods were used to make the determinations for the compliance inspection? (Note: No standard protocol exists. The following list is not exhaustive, or in sequential order nor indicates which combinations are necessary to make a determination)

Watertight tank(s)

- Probed tank bottom
- Observed low liquid level
- Examined const. Records
- Examined empty (pumped) tank
- Probed outside tank for "black soil"
- Pressure/vacuum check
- Other NOT INSPECTED

Hydraulic Functioning

- Searched for surface outlet
- Performed hydraulic test
- Searched for seeping in yard
- Checked for back-up in home
- Excessive ponding in soil system/D-boxes
- Homeowner testimony
- Examined for surging in tank
- "Black soil" above soil system
- Other _____

Vertical Separation Distance

- Conducted soil borings
 - Depth to limiting layer 21"
(below bottom of rock)
 - Depth to system bottom 24"
(bottom of rock)
- Examined records
- LGU Limiting Layer Verification
- Other _____

Status of the system

Based on the compliance criteria, the system status is: (check one) failing (to protect groundwater) an imminent threat to public health or safety (ITPHS), non-compliant (monitoring issue) compliant (none of the 3 previous conditions). Therefore, this document is a: Certificate of Compliance Notice of Noncompliance

Is this system an EPA Class V Injection Well? yes no

Certification

I hereby certify as a state of Minnesota licensed Inspector and/or Designer I or Qualified Employee Inspector and/or Qualified Employee Designer I, that I conducted an investigation that accurately determined the compliance status of this system and that my recorded observations are accurate as of this date. No determination of future hydraulic performance has been nor can be made due to unknown conditions during the system construction, abuse of the system, inadequate maintenance, or future water usage.

Inspector's name (print) Michael D. O'Keefe

Phone (218) 768-4430

License and/or Registration Number 1357

Address 29465 442nd Lane Palisade, MN 56469

Employed by A.M. & Associates, Inc.

Address 29465 442nd Lane Palisade, MN 56469

Signature 

Date 10/14/05

Upgrade Requirements (derived from Minnesota Statutes 115.55)

An ITPHS must be upgraded, replaced, or its use discontinued within ten months of receipt of this notice or within a shorter period if required by local ordinance. If the system fails to provide sufficient groundwater protection, then the system must be upgraded, replaced, or its use discontinued within the time required by rule or the local ordinance. If an existing system is not failing as defined in law, and has at least two feet of design soil separation, then the system need not be upgraded, repaired, replaced, or its use discontinued, notwithstanding any local ordinance that is more strict. This does not apply to systems in shoreland areas, wellhead protection areas, or those used in connection with food, beverage, and lodging establishments as defined in law.

Suggested Attachments

- 1) Site sketch could also include: well, well setback to system, dwelling or other buildings, tanks(s), reserved soil treatment area, surface water and soil boring locations. Include as-built drawing if available.
- 2) Soil boring logs, showing heach horizon. Indicate the texture, color, redoximorphic features depth to bedrock, standing water and whether the material is fill.
- 3) A list of any and all requirements of the local ordinance that are different from the state requirements referred to on this form.
- 4) A homeowner's survey of system performance, signed by the homeowner as being factual.
- 5) Monitoring data as appropriate.

SEPTIC INSPECTION SOIL BORING WORKSHEET

PROPERTY OWNER: Marcella Schulze

PARCEL# 11-1-103600

10/14/2005

TYPE OF DRAINFIELD: MOUND

Top of Drainfield Elev.=	(feet)	5' 2"	=	(inches)	62
Depth to Bottom of Rock			+		24
Bottom of Rock Elev.			=		86

SOIL BORING #1		
DEPTH (inches)	TEXTURE	COLOR
0 - 16	Top Soil	10YR 3/2
16 - 20+	Sandy Loam Many Large MOTTLES	7.5YR 6/2 7.5YR 5/8

Ground Elevation	= 7'7"								
		(inches)							
Soil Boring Depth/Restricting Layer			+		16				
Elevation to Restricting Layer					107				
Less Bottom of Rock Elev.			-		86				
Amount of Vertical Separation ***					21				

SOIL BORING #2		
DEPTH (inches)	TEXTURE	COLOR
0 - 16	Sandy Loam	7.5YR 5/2
16 - 24+	Clay Loam MOTTLED	7.5YR 6/1 7.5YR 5/6

Ground Elevation	= 7'10"								
		(inches)							
Soil Boring Depth/Restricting Layer			+		16				
Elevation to Restricting Layer					111				
Less Bottom of Rock Elev.			-		86				
Amount of Vertical Separation ***					25				

SOIL BORING #3		
DEPTH (inches)	TEXTURE	COLOR
0 - 6	Top Soil	10YR 3/2
6 - 16+	Sandy Loam Many Large MOTTLES	7.5YR 6/2 7.5YR 5/8

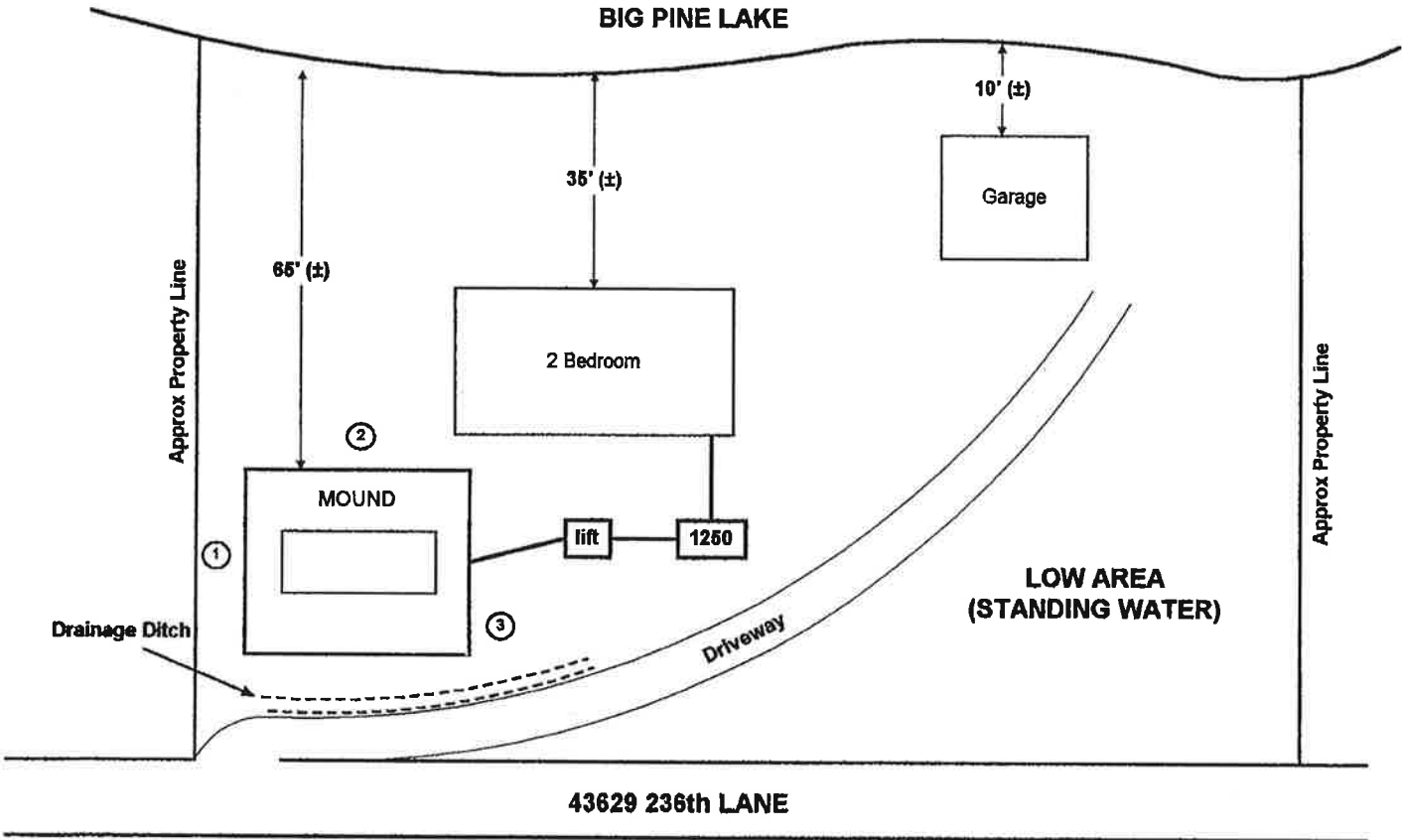
Ground Elevation	= 8'6"								
		(inches)							
Soil Boring Depth/Restricting Layer			+		6				
Elevation to Restricting Layer					108				
Less Bottom of Rock Elev.			-		86				
Amount of Vertical Separation ***					22				

SOIL BORING #4		
DEPTH (inches)	TEXTURE	COLOR

Ground Elevation	=								
		(inches)							
Soil Boring Depth/Restricting Layer			+						
Elevation to Restricting Layer									
Less Bottom of Rock Elev.			-						
Amount of Vertical Separation ***									

*** AMOUNT OF VERTICAL SEPARATION MUST = 36" OR MORE TO MEET THE 3' SEPARATION REQUIREMENT

MARCELLA SCHULZE
Parcel# 11-1-103600
SEPTIC INSPECTION
10/14/2005



⊛ = Soil Boring
Scale: 1" = 30'



12/12/2006

AITKIN COUNTY
CERTIFICATE OF COMPLIANCE/NOTICE OF NONCOMPLIANCE

This certificate of compliance/notice of noncompliance has been issued this 26 day of January 07 to certify compliance/noncompliance with Aitkin County's Individual Sewage Treatment System and Wastewater Ordinance No.

1. The premises covered by this certificate are legally described as: _____

Buchanan Beach lot 16

Section 28 Township 45 Range 27 Lake Big Pine

PERMIT NO. 34875 Owner Name Marcella Schulze

Address 43629 236 Lane Aitkin MN

Installer Name Mark Ritter

Type of System Inspected MultiFlow Aerobic Treatment System

The certificate of compliance/notice of noncompliance was based on, No 1 of the following:

- 1) Inspection of the installation or construction as in accordance with the above referenced permit and application design.

- 2) Review of as-built plans submitted in accordance with Subdivision 4.21 C. Of Aitkin County's Individual Sewage Treatment System and Wastewater Ordinance No. 1.

If the above permitted individual sewage treatment system is in noncompliance with Aitkin County's Individual Sewage Treatment System and Wastewater Ordinance No. 1, then the following shall serve as a Notice of Violation:

1) Statement of the findings of fact through inspections or investigations: _____

2) List of specific violations of Ordinance: _____

3) Requirements for correction or removal of violations: _____

4) Time schedule for compliance: _____

Failure to correct or remove the above violations will result in this matter being turned over to the Aitkin County Attorney's Office for further legal action which may result in revocation of licenses or registrations, fine's and/or imprisonment.

INSPECTOR SIGNATURE Pete Hansen

INDIVIDUAL SEWAGE TREATMENT SYSTEM INSPECTION FORM AITKIN COUNTY, MINNESOTA

Township Hazleton Date of Inspection 12-12-06 Permit Number 34875
 Owner Marcella Schulze Parcel Number 11-1-103600
 Project Address 43629 236th Ln Installer Ritter
 City Aitkin Mn Zip Code 56431 New _____ Repair X

SETBACKS:

Buildings to tank(s) 10'
 Buildings to drainfield ~~10'~~
 Well(s) 50' or 100' 52'
 Lake/Creek/Wetland 76'

SEPTIC TANKS:

Liquid capacity 1230 (1860 combo)
 Manufacturer & type Jacobsen Precast
 Type of baffle Plast.C
 Inspection pipes 1-4"
 Manholes access 1
 No. & height of risers 2 18"

MOUNDS:

Percent slope Existing
 Upslope dike width _____
 Downslope dike width _____
 Sideslope dike width _____
 Drainfield rock below pipe _____
 Depth of sand below rock _____
 Perforation size & spacing _____
 Pipe size & spacing _____
 Dimensions of rock bed _____
 Dimensions of sand base _____
 Final cover _____

**DRAWING OF SYSTEM
(Include Soils)**



Inspector's Comments _____

Corrective Action Required _____

Inspector's Signature L. Pundak Installer's Signature RP

DIST. or DROP BOX & TYPE _____
TRENCHES, BEDS, OR GRAVELLESS LEACHFIELD:
 Trench depth _____
 Trench length _____
 Trench bottom width _____
 Trench bottom level _____
 Trench spacing _____
 Drainfield rock below pipe _____
 Size of gravelless pipe _____
 Depth of backfill _____
 Absorption area: square feet _____
 lineal feet _____

PUMPS:

Tank capacity 630
 Tank manufacturer & type Jacobsen Precast
 No. & height of risers 2 2'
 Pump manufacturer & model # Guid (PE3 IPE4)
 Horsepower & GPM .3 4.4
 Feet of head (main tank to multi-flow)
 Cycles per day Time dosed
 Gallons per cycle _____
 Size of discharge line 2"
 Type of electrical hookup Multi-flow electric
 Type & location of alarm Alarm Panel at Tank
 Cycle counter (commercial) _____

RECEIVED NOV 27 2006

AITKIN COUNTY ENVIRONMENTAL SERVICES-PLANNING & ZONING

209 Second Street, NW
Aitkin, Minnesota 56431

PH: (218) 927-7342
FX: (218) 927-4372



November 21, 2006

RE: Septic Operating Permit #289; Zoning
Permit # 34875; Parcel #11-1-103600

SCHULZE, MARCELLA
43611 236TH LANE
AITKIN MN 56431

Dear Ms. Schulze:

Enclosed is the Operating Permit for an "Other" Septic System (formerly Experimental, Performance, etc.) that you are petitioning Aitkin County Zoning to allow to be installed on your property instead of holding tanks or a standard system. Please review this permit thoroughly and become aquatinted with all of the conditions, then sign the operating permit and return it to me with the enclosed envelope. NOTE: ALL FEES HAVE BEEN PAID THROUGH May 31, 2008.

One provision that is often overlooked by homeowners is the State of Minnesota requirement that a water meter or other flow measuring device be installed and the results recorded by the homeowner on a MONTHLY basis. Please be aware that a Certificate of Compliance can not be issued until this provision is met; you may wish to make provisions for its installation now.

Sometime before this 2008 deadline, you will receive an annual reminder notice on how to renew your operating permit with Aitkin County. This reminder notice will ask that you provide the 1) monthly water meter readings, 2) annual Compliance Inspection report, and 3) renewal application and fee. The Compliance Inspector (CI) is privately hired by you, the landowner and must review the septic system onsite on an annual basis while an operating permit covers the system. This annual review would be a great opportunity to review the conditions of the operating permit.

Should you have questions, please contact me at the number above.

A handwritten signature in blue ink that reads "Missy Kingsley". The signature is written in a cursive, flowing style.

Missy Kingsley
Aitkin County Planning & Zoning

Enclosure

AITKIN COUNTY ENVIRONMENTAL SERVICES

**OPERATING PERMIT FOR WASTEWATER
TREATMENT AND DISPERSAL**

OPERATING PERMIT #: 289

FEE: 50.00

PERMITTEE: Marcella Schulze

PHONE:

ADDRESS: 43611 236th Lane
Aitkin, MN 56431-

ZONING PERMIT # 34875

PARCEL #: 11-1-103600

ISSUE DATE: 11/21/2006

RENEW DATE: 5/31/2008

LEGALDESCRIPTION: Buchanan Beach, Lot 6

Aitkin County Environmental Services authorizes the Permittee to operate a wastewater treatment and dispersal system located on the above described property in accordance with the requirements of this permit.

This permit is effective on the issuance date identified above.

This permit and the authorization to treat and disperse from the above system shall expire on the above expiration date. The Permittee is not authorized to discharge after the date of expiration. The Permittee shall submit such information and forms as required by Aitkin County Environmental Services no later than thirty (30) days prior to the expiration date. When the required information is submitted and approved by Aitkin County Environmental Services, the permit may be renewed. This permit is not transferable from owner to owner.

I hereby certify with my signature as the permittee that I understand the provisions of this permit including the maintenance and monitoring requirements. I agree to indemnify and hold Aitkin County harmless from all loss, damages, costs and charges that may be incurred by use of this system and if I fail to comply with the provisions of this Operating Permit. If I sell this property during the life of the permit, I will inform the new owner(s) of the permit requirements and the need to renew the permit.



Signature of Permittee

11-24-06

Date



Signature of Permitting Authority

Date

If You have any questions regarding this permit, including the specific permit requirements, permit reporting or permit compliance status, please contact Aitkin County Environmental Services at 218-927-7342.

A. DESCRIPTION OF WASTEWATER TREATMENT AND DISPERSAL SYSTEM

This ISTS is to have the wastewater gravity from the 2 bedroom into a new 1860 combo tank with a pump vault placed into the septic side of the tank. It will be time dosed at a max of 300 gpd into a Multi-Flow Aerobic Treatment System, and then gravity into the Lift side of the 1860 combo tank. From there, it will pump on demand into the existing Mound with 21 inches of separation. Aerobic Mulit-Flow and tank replacement. Existing septic system failed using existing drainfield.

B. PERFORMANCE STANDARD REQUIREMENTS:

During the period beginning on the effective date (issuance date) of this permit and lasting until this permits expiration date, the Permittee is authorized to discharge from the wastewater treatment unit to subsurface dispersal. No surface discharge is permitted. The following parameters must be monitored and the reuslts must be found within the compliance limits.

PARAMETER	COMPLIANCE LIMIT	SAMPLE LOCATION	SAMPLE FREQUENCY	SAMPLE TYPE	REPORTING FREQUENC
Separation	300 gpd	Water Meter	MONTHLY	Record on Log Sheet	ANNUALLY

C. MAINTENANCE REQUIREMENTS:

PARAMETER	LOCATION	FREQUENCY
Aerobic Tank Function	Water Meter	MONTHLY

D. MONITORING AND REPORTING REQUIREMENTS:

Monitoring results obtained during each calendar year shall be submitted no later than December 31st of that year to:

Aitkin County Environmental Services
209 2nd Street NW
Aitkin, MN 56431

The monitoring reports shall be signed by the Permittee. Copies are to be retained by the Permittee.

The Permittee shall notify Aitkin County Environmental Services within thirty (30) days when monitoring results do not meet the monitoring plan requirements of this permit.

Monitoring plans may be modified as necessary and reapproved by Aitkin County Environmental Services.

Sampling and laboratory testing procedures shall be performed in accordance with Standard Methods and the testing and shall be performed by a Minnesota Department of Health approved laboratory. All sampling and testing costs shall be the responsibility of the Permittee.

Monitoring will be done by Michael O'Keeffe

E. MITIGATION PLAN:

If weeping occurs; lower dosing rate, lower water usage, or increase distribution area and absorption area A different or another Performance or Other System may be installed at the owner's expense. If in the event that this system should fail and if there is no other ISTS option available, then Holding Tanks must be installed, to be pumped by a licensed Pumper with a contract.

F. SPECIAL REQUIREMENTS:

AITKIN COUNTY ENVIRONMENTAL SERVICES

**OPERATING PERMIT FOR WASTEWATER
TREATMENT AND DISPERSAL**

OPERATING PERMIT #: 289 *Renewed to* **FEE:** \$100
PERMITTEE: Marcella Schulze *5/31/2013* **PHONE:**
ADDRESS: 43611 236th Lane *5 years*
Aitkin, MN 56431- *Paid check # 3252*
ZONING PERMIT # 34875 *Rpt # 413666* **PARCEL #:** 11-1-103600
ISSUE DATE: 5/31/2009 **RENEW DATE:** 5/31/2010
LEGALDESCRIPTION: Buchanan Beach, Lot 6

Aitkin County Environmental Services authorizes the Permittee to operate a wastewater treatment and dispersal system located on the above described property in accordance with the requirements of this permit.

This permit is effective on the issuance date identified above.

This permit and the authorization to treat and disperse from the above system shall expire on the above expiration date. The Permittee is not authorized to discharge after the date of expiration. The Permittee shall submit such information and forms as required by Aitkin County Environmental Services no later than thirty (30) days prior to the expiration date. When the required information is submitted and approved by Aitkin County Environmental Services, the permit may be renewed. This permit is not transferable from owner to owner.

I hereby certify with my signature as the permittee that I understand the provisions of this permit including the maintenance and monitoring requirements. I agree to indemnify and hold Aitkin County harmless from all loss, damages, costs and charges that may be incurred by use of this system and if I fail to comply with the provisions of this Operating Permit. If I sell this property during the life of the permit, I will inform the new owner(s) of the permit requirements and the need to renew the permit.

Marcella Schulze

Signature of Permittee

10-2-09

Date

[Signature]

Signature of Permitting Authority

12-3-09

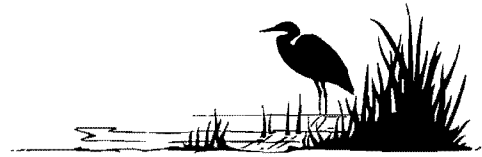
Date

If You have any questions regarding this permit, including the specific permit requirements, permit reporting or permit compliance status, please contact Aitkin County Environmental Services at 218-927-7342.

AITKIN COUNTY ENVIRONMENTAL SERVICES-PLANNING & ZONING

209 Second Street, NW
Aitkin, Minnesota 56431

PH: (218) 927-7342
FX: (218) 927-4372



December 14, 2009

RE: Renewed Operating Permit

Dear Marcella Schulze,

This letter is to inform you that your Operating Permit (No. 289) has been renewed until May 31, 2013.

Please adhere to your monitoring and maintenance contract including monitoring your water use. Failure to do so would violate the agreement to operate your system and could void the operating permit. You should contact your Operation and Maintenance provider directly with questions that you may have during the year.

Thank you for your good stewardship and we hope that your system continues to operate well, protecting groundwater for you and the environment.

Sincerely,

A handwritten signature in black ink, appearing to read "Pete Gansen". The signature is written in a cursive style and is positioned above the printed name.

Pete Gansen
Aitkin County Planning & Zoning and
Environmental Services

AITKIN COUNTY ENVIRONMENTAL SERVICES-PLANNING & ZONING

209 Second Street, NW
Aitkin, Minnesota 56431

PH: (218) 927-7342
FX: (218) 927-4372



OPERATING PERMIT CANCELLATION

September 25, 2009

RE: Operating Permit #289,

Parcel # 14-1-10300

Could not remove operating

SCHULZE, MARCELLA
43611 236TH LANE
AITKIN MN 56431

permit. Multiflow unit

o.p. renewed to 5/31/2013

Dear Marcella Schulze:

Our office is in receipt of the Monitoring and Maintenance Results of your "Other Septic System," No. 289. The results indicate that your septic system is meeting the objectives of the Operating Permit and is reported to be operating and performing as designed. In addition, we are in receipt of a letter from the monitoring designer, **Michael O'Keeffe**, recommending the Operating Permit renewal requirement be removed. Therefore, Aitkin County is no longer requiring the annual renewal of your Operating Permit.

Please be aware that continued good water use management, periodic septic system maintenance and inspection for failure is still the responsibility of the landowner and that this system is not classified as a standard Individual Sewage Treatment System. Your continued diligence will help ensure the longevity and function of the septic system. Aitkin County encourages you to establish a monitoring and maintenance schedule with a qualified professional.

Sincerely,

Aitkin County
Environmental Services

SEP 22 2009

AITKIN COUNTY ENVIRONMENTAL SERVICES

**OPERATING PERMIT FOR WASTEWATER
TREATMENT AND DISPERSAL**

OPERATING PERMIT #: 289

FEE: \$100

PERMITTEE: Marcella Schulze

PHONE:

ADDRESS: 43611 236th Lane
Aitkin, MN 56431-

ZONING PERMIT # 34875

PARCEL #: 11-1-103600

ISSUE DATE: 5/31/2009

RENEW DATE: 5/31/2010

LEGALDESCRIPTION: Buchanan Beach, Lot 6

Aitkin County Environmental Services authorizes the Permittee to operate a wastewater treatment and dispersal system located on the above described property in accordance with the requirements of this permit.

This permit is effective on the issuance date identified above.

This permit and the authorization to treat and disperse from the above system shall expire on the above expiration date. The Permittee is not authorized to discharge after the date of expiration. The Permittee shall submit such information and forms as required by Aitkin County Environmental Services no later than thirty (30) days prior to the expiration date. When the required information is submitted and approved by Aitkin County Environmental Services, the permit may be renewed. This permit is not transferable from owner to owner.

I hereby certify with my signature as the permittee that I understand the provisions of this permit including the maintenance and monitoring requirements. I agree to indemnify and hold Aitkin County harmless from all loss, damages, costs and charges that may be incurred by use of this system and if I fail to comply with the provisions of this Operating Permit. If I sell this property during the life of the permit, I will inform the new owner(s) of the permit requirements and the need to renew the permit.

Signature of Permittee

Date

Signature of Permitting Authority

Date

If You have any questions regarding this permit, including the specific permit requirements, permit reporting or permit compliance status, please contact Aitkin County Environmental Services at 218-927-7342.

A. DESCRIPTION OF WASTEWATER TREATMENT AND DISPERSAL SYSTEM

This ISTS is to have the wastewater gravity from the 2 bedroom into a new 1860 combo tank with a pump vault placed into the septic side of the tank. It will be time dosed at a max of 300 gpd into a Multi-Flow Aerobic Treatment System, and then gravity into the Lift side of the 1860 combo tank. From there, it will pump on demand into the existing Mound with 21 inches of separation. Aerobic Mulit-Flow and tank replacement. Existing septic system failed using existing drainfield.

B. PERFORMANCE STANDARD REQUIREMENTS:

During the period beginning on the effective date (issuance date) of this permit and lasting until this permits expiration date, the Permittee is authorized to discharge from the wastewater treatment unit to subsurface dispersal. No surface discharge is permitted. The following parameters must be monitored and the reuslts must be found within the compliance limits.

PARAMETER	COMPLIANCE LIMIT	SAMPLE LOCATION	SAMPLE FREQUENCY	SAMPLE TYPE	REPORTING FREQUENC
Separation	300 gpd	Water Meter	MONTHLY	Record on Log Sheet	ANNUALLY

C. MAINTENANCE REQUIREMENTS:

PARAMETER	LOCATION	FREQUENCY
Aerobic Tank Function	Water Meter <i>event counter</i>	MONTHLY <i>see report</i>

D. MONITORING AND REPORTING REQUIREMENTS:

Monitoring results obtained during each calendar year shall be submitted no later than December 31st of that year to:

Aitkin County Environmental Services
209 2nd Street NW
Aitkin, MN 56431

The monitoring reports shall be signed by the Permittee. Copies are to be retained by the Permittee.

The Permittee shall notify Aitkin County Environmental Services within thirty (30) days when monitoring results do not meet the monitoring plan requirements of this permit.

Monitoring plans may be modified as necessary and reapproved by Aitkin County Environmental Services.

Sampling and laboratory testing procedures shall be performed in accordance with Standard Methods and the testing and shall be performed by a Minnesota Department of Health approved laboratory. All sampling and testing costs shall be the responsibility of the Permittee.

Monitoring will be done by ~~Michael O'Keefe~~ *Mike Ritt*

E. MITIGATION PLAN:

If weeping occurs; lower dosing rate, lower water usage, or increase distribution area and absorption area A different or another Performance or Other System may be installed at the owner's expense. If in the event that this system should fail and if there is no other ISTS option available, then Holding Tanks must be installed, to be pumped by a licensed Pumper with a contract.

F. SPECIAL REQUIREMENTS:

Meter Readings

<u>Date</u>			
9-4-07	=	999837	= starting
5-24-08	=	999872	= 35
9-3-09	=	000010	= 138

Event Counter is on demand pump that is pumping approximately 150 gp dose.

$$\begin{array}{r}
 35 \\
 \times 150 \\
 \hline
 5,250 \text{ gl.} \\
 = 260 \text{ dys} \\
 \hline
 20 \text{ gl. per day}
 \end{array}$$

$$\begin{array}{r}
 138 \\
 \times 150 \\
 \hline
 20,700 \\
 = 1442 \text{ dys} \\
 \hline
 47 \text{ gl. per day}
 \end{array}$$

System is working good, I believe there is no need for an operating permit. The system will be set up with a maintence contract for annual inspection.

9-22-09

Mark P. R. H.

AITKIN COUNTY ENVIRONMENTAL SERVICES

**OPERATING PERMIT FOR WASTEWATER
TREATMENT AND DISPERSAL**

OPERATING PERMIT #: 289 *Renewed to* **FEE:** \$100
PERMITTEE: Marcella Schulze *5/31/2013* **PHONE:**
ADDRESS: 43611 236th Lane *5 years*
Aitkin, MN 56431- *Paid check # 3252*
ZONING PERMIT # 34875 *Rpt # 413666* **PARCEL #:** 11-1-103600
ISSUE DATE: 5/31/2009 **RENEW DATE:** 5/31/2010
LEGALDESCRIPTION: Buchanan Beach, Lot 6

Aitkin County Environmental Services authorizes the Permittee to operate a wastewater treatment and dispersal system located on the above described property in accordance with the requirements of this permit.

This permit is effective on the issuance date identified above.

This permit and the authorization to treat and disperse from the above system shall expire on the above expiration date. The Permittee is not authorized to discharge after the date of expiration. The Permittee shall submit such information and forms as required by Aitkin County Environmental Services no later than thirty (30) days prior to the expiration date. When the required information is submitted and approved by Aitkin County Environmental Services, the permit may be renewed. This permit is not transferable from owner to owner.

I hereby certify with my signature as the permittee that I understand the provisions of this permit including the maintenance and monitoring requirements. I agree to indemnify and hold Aitkin County harmless from all loss, damages, costs and charges that may be incurred by use of this system and if I fail to comply with the provisions of this Operating Permit. If I sell this property during the life of the permit, I will inform the new owner(s) of the permit requirements and the need to renew the permit.

Marcella Schulze

Signature of Permittee

10-2-09

Date

[Signature]

Signature of Permitting Authority

12-3-09

Date

If You have any questions regarding this permit, including the specific permit requirements, permit reporting or permit compliance status, please contact Aitkin County Environmental Services at 218-927-7342.

AITKIN COUNTY ENVIRONMENTAL SERVICES-PLANNING & ZONING

209 Second Street, NW
Aitkin, Minnesota 56431

PH: (218) 927-7342
FX: (218) 927-4372



December 14, 2009

RE: Renewed Operating Permit

Dear Marcella Schulze,

This letter is to inform you that your Operating Permit (No. 289) has been renewed until May 31, 2013.

Please adhere to your monitoring and maintenance contract including monitoring your water use. Failure to do so would violate the agreement to operate your system and could void the operating permit. You should contact your Operation and Maintenance provider directly with questions that you may have during the year.

Thank you for your good stewardship and we hope that your system continues to operate well, protecting groundwater for you and the environment.

Sincerely,

A handwritten signature in blue ink, appearing to read "Pete Gansen". The signature is stylized and includes a long horizontal line extending to the right.

Pete Gansen
Aitkin County Planning & Zoning and
Environmental Services

A. DESCRIPTION OF WASTEWATER TREATMENT AND DISPERSAL SYSTEM

This ISTS is to have the wastewater gravity from the 2 bedroom into a new 1860 combo tank with a pump vault placed into the septic side of the tank. It will be time dosed at a max of 300 gpd into a Multi-Flow Aerobic Treatment System, and then gravity into the Lift side of the 1860 combo tank. From there, it will pump on demand into the existing Mound with 21 inches of separation. Aerobic Mulit-Flow and tank replacement. Existing septic system failed using existing drainfield.

B. PERFORMANCE STANDARD REQUIREMENTS:

During the period beginning on the effective date (issuance date) of this permit and lasting until this permits expiration date, the Permittee is authorized to discharge from the wastewater treatment unit to subsurface dispersal. No surface discharge is permitted. The following parameters must be monitored and the reuslts must be found within the compliance limits.

PARAMETER	COMPLIANCE LIMIT	SAMPLE LOCATION	SAMPLE FREQUENCY	SAMPLE TYPE	REPORTING FREQUENC
Separation	300 gpd	Water Meter	MONTHLY	Record on Log Sheet	ANNUALLY

C. MAINTENANCE REQUIREMENTS:

PARAMETER	LOCATION	FREQUENCY
Aerobic Tank Function <i>good ✓</i>	Water Meter <i>event counter ✓</i>	MONTHLY <i>see report ✓</i>

D. MONITORING AND REPORTING REQUIREMENTS:

Monitoring results obtained during each calendar year shall be submitted no later than December 31st of that year to:

Aitkin County Environmental Services
209 2nd Street NW
Aitkin, MN 56431

The monitoring reports shall be signed by the Permittee. Copies are to be retained by the Permittee.

The Permittee shall notify Aitkin County Environmental Services within thirty (30) days when monitoring results do not meet the monitoring plan requirements of this permit.

Monitoring plans may be modified as necessary and reapproved by Aitkin County Environmental Services.

Sampling and laboratory testing procedures shall be performed in accordance with Standard Methods and the testing and shall be performed by a Minnesota Department of Health approved laboratory. All sampling and testing costs shall be the responsibility of the Permittee.

Monitoring will be done by ~~Michael O'Keefe~~ *Michael Ritter*

E. MITIGATION PLAN:

If weeping occurs; lower dosing rate, lower water usage, or increase distribution area and absorption area A different or another Performance or Other System may be installed at the owner's expense. If in the event that this system should fail and if there is no other ISTS option available, then Holding Tanks must be installed, to be pumped by a licensed Pumper with a contract.

F. SPECIAL REQUIREMENTS:

Meter Readings

<u>Date</u>	=	999837 =	starting
9-4-07	=	999872 =	35
5-24-08	=	000010 =	138
9-3-09			

Event Counter is on demand pump that is pumping approximately 150 gp dose.

$$\begin{array}{r} 35 \\ \times 150 \\ \hline 5,250 \text{ gl.} \\ \approx 260 \text{ dys} \\ \hline 20 \text{ gl. per day} \end{array}$$

$$\begin{array}{r} 138 \\ \times 150 \\ \hline 20,700 \\ \approx 1,442 \text{ dys} \\ \hline 47 \text{ gl. per day} \end{array}$$

System is working good, I believe there is no need for an operating permit. The system will be set up with a maintene contract for annual inspection.
9-22-09
Mark Ritter

3

**AITKIN COUNTY ENVIRONMENTAL SERVICES
OPERATING PERMIT FOR WASTEWATER
TREATMENT AND DISPERSAL RENEWAL**

MAY 13 2013

ISSUANCE DATE: 5/31/2013
RENEWAL PERIOD: 3 YEAR

OPERATING PERMIT #: 289
ZONING PERMIT #: 34875
PARCEL #: 11-1-103600

PERMITTEE: Marcella Schulze

TELEPHONE:

MAILING ADDRESS:
43611 236th Lane
Aitkin, MN 56431-

PROPERTY ADDRESS:
43629 236th Ln.
Aitkin, MN 56431

LEGAL DESCRIPTION: Buchanan Beach, Lot 6

Aitkin County Environmental Services authorizes the Permittee to operate a wastewater treatment and dispersal system located on the above described property in accordance with the requirements of this permit.

This permit is effective on the issuance date identified above.

This permit and the authorization to treat and disperse from the above system is valid through the renewal period identified above. The Permittee is not authorized to discharge after the renewal period. The Permittee shall submit such information and forms as required by Aitkin County Environmental Services no later than thirty (30) days prior to the expiration date. When the required information is submitted and approved by Aitkin County Environmental Services, the permit may be renewed. This permit is not transferable from owner to owner.

I hereby certify with my signature as the permittee that I understand the provisions of this permit including the maintenance and monitoring requirements. I agree to indemnify and hold Aitkin County harmless from all loss, damages, costs and charges that may be incurred by use of this system and if I fail to comply with the provisions of this Operating Permit. If I sell this property during the life of the permit, I will inform the new owner(s) of the permit requirements and the need to renew the permit.

Marcella Schulze
Signature of Permittee

5-4-13
Date

K. Kurz
Signature of Permitting Authority

5-23-13
Date

If you have any questions regarding this permit, including the specific permit requirements, permit reporting or permit compliance status, please contact Aitkin County Environmental Services at 218-927-7342.

OK 3408, Receipt 374742 5/13/13

May 13, 2013

SEPTIC SYSTEM REVIEW FOR
Marcella Schulze
Operating Permit # 289
Parcel # 11-1-103600

Property located in Hazelton Township

The above mentioned property had a event counter reading of 350 on May 29-2012 . On May 10-2013 the meter reading was 428. This will be a difference of 78 events in 346 days = 34 gpd. The system is set up for 300 gallons per day so I believe that we can put this system on a 3 year operating permit. The tanks, pumps, floats, alarms and control panel are all in good working condition at this time, this system has a Multi-Flow that is working and is in good condition. We have entered into a Maintenance, Monitoring and Inspection Contract with said property owner.

Ritter Sewer & Excavating Inc

Mark P. Ritter
ISTS # 1672

$$\begin{array}{r} 78 \text{ events} \\ \times 150 \text{ gp event} \\ \hline 11,700 \text{ gls} \\ \div 346 \text{ days} \\ \hline 33.8 \text{ gpd or } 34 \text{ gpd} \end{array}$$

* Was already set for 3yr. remaining a 3-yr renewal.

AITKIN COUNTY ENVIRONMENTAL SERVICES-PLANNING & ZONING
209 Second Street, NW Room# 100
Aitkin, Minnesota 56431

PH: (218) 927-734
FX: (218) 927-437



5/23/2013

Marcella Schulze
43611 236th Lane
Aitkin, MN 56431-

Re: Operating Permit # 289
Zoning Permit # 34875
Parcel # 11-1-103600

Dear Permittee:

This letter is to inform you that your Operating Permit has been renewed until 5 /31/2016.

Please adhere to your monitoring and maintenance contract including monitoring your water use. Failure to do so would violate the agreement to operate your system and could void the operating permit. You should contact your Operation and Maintenance provider directly with questions that you may have during the year.

Thank you for your good stewardship and we hope that your system continues to operate well, protecting groundwater for you and the environment.

Sincerely,

Kristi K.

Aitkin County Planning & Zoning

AITKIN COUNTY ENVIRONMENTAL SERVICES-PLANNING & ZONING

209 Second Street, NW Room# 100

Aitkin, Minnesota 56431

PH: (218) 927-7342

FX: (218) 927-4372



5/17/2016

Re: Operating Permit #289
Zoning Permit # 34875
Parcel #11-1-103600

Marcella Schulze
43611 236th Lane
Aitkin, MN 56431-

Dear Permittee:

This letter is to inform you that your Operating Permit has been renewed until 5/31/2021 and the Operating Permit renewal period has been moved to a 5 YEAR based on the recommendation from your Operating and Maintenance provider.

Please adhere to your monitoring and maintenance contract including monitoring your water use. Failure to do so would violate the agreement to operate your system and could void the operating permit. You should contact your Operation and Maintenance provider directly with questions that you may have during the year.

Thank you for your good stewardship and we hope that your system continues to operate well, protecting groundwater for you and the environment.

Sincerely,
Kaleas

Aitkin County Planning & Zoning

AITKIN COUNTY ENVIRONMENTAL SERVICES-PLANNING & ZONING

209 Second Street, NW Room# 100

Aitkin, Minnesota 56431

PH: (218) 927-7342

FX: (218) 927-4372



3/17/2016

Multi-flow aerobic treatment

Marcella Schulze
43611 236th Lane
Aitkin, MN 56431-

Re: Operating Permit # 289
Zoning Permit #34875
Parcel ID#11-1-103600

Mark Ritter

3/11/16 Mark Ritter recommend 5-year renewal

Dear Permittee:

This letter is to remind you that the Operating Permit for the septic system at the above mentioned parcel is due for renewal this year. The enclosed Operating Permit was issued as part of the permit for your septic system and must be renewed.

The Operating Permit for the current renewal period has been enclosed. If there are no changes to the Operating Permit, please submit the following to the County Office:

- the signed Operating Permit Contract
- the \$100 permit renewal fee
- the results of performance and maintenance activities
- a table of your water usage

We have checked all boxes above for information we have received. Please note, only complete applications will be accepted.

If your designer finds the system is operating in conformance with the Operating Permit, please have him/her submit a letter requesting to have the Operating Permit renewed for a longer period or to request terminating the Operating Permit. Our Office will determine if this is possible.

The performance and life expectancy of this septic system is dependent on regular monitoring and maintenance of all parts of the system. Your compliance with the Operating Permit will ensure continued performance of the system. Failure to perform the monitoring and maintenance of this system could cause costly repairs and/or replacement of this system. In addition, failure to comply with the monitoring, maintenance and reporting of the septic system is a violation of the Aitkin County's Subsurface Sewage Treatment System Ordinance and could be prosecuted by the County Attorney's Office.

All information required must be submitted to this Office by the expiration date referenced on your Operating Permit. We are notifying you to give you sufficient time to contact your designer and make any necessary changes, have samples taken and tested, tanks pumped, and any other activities that were required to meet the requirements of your permit.

Please contact our office with any questions regarding the renewal of this permit.

Sincerely,

Aitkin County Planning & Zoning

SEPTIC SYSTEM REVIEW FOR
Marcella Schulze
Operating Permit# 289
Parcel # 11-1-103600

Property located in Hazelton Township

May 1, 2016

The above mentioned property has an event counter installed on it. On May 2013 the meter reading was 428. On May 2016 the meter reading was 718 with a difference of 290 events. So at 290 events by 200 gallons per event = 58,000 gallons divided by 1095 days = 52 gallons per day average.

The system is set up for 300 gallons per day so I believe that we can put this system on a 5 year operating permit.

The tanks, effluent filter, pumps, floats, alarms and control panel will still be inspected ever year.

We have entered into a Maintenance, Monitoring and Inspection Contract with said property owner.

Sincerely,



Mark P. Ritter
Ritter Sewer & Excavating, Inc.

Misc. (OFFICE USE ONLY) App. # App-2016-000229

Aitkin County Planning & Zoning / Environmental Services

209 2nd Street NW, Room 100

Aitkin, MN 56431

Phone: 218-927-7342

Fax: 218-927-4372

Email: aitkinpz@co.aitkin.mn.us

Charge		Cost	Quantity	Total	Note
Operating Permit Renewal added 05/11/2016 10:47 AM \$100		\$100.00	x 1	\$100.00	
Grand Total					
				Total	\$100.00
Payment					
Method:	Check	Note:	ck3533 for renewal of op289		
Date:	05/11/2016				
Made By:	Marcella Schulze				
Confirmed By:	Kalea Suihkonen				

**AITKIN COUNTY ENVIRONMENTAL SERVICES
OPERATING PERMIT FOR WASTEWATER
TREATMENT AND DISPERSAL RENEWAL**

ISSUANCE DATE: 5 /31/2016
RENEWAL PERIOD: 3 YEAR

OPERATING PERMIT #: 289
ZONING PERMIT #: 34875
PARCEL #: 11-1-103600

PERMITTEE: Marcella Schulze

TELEPHONE:

MAILING ADDRESS:
43611 236th Lane
Aitkin, MN 56431-

PROPERTY ADDRESS:
43629 236th Ln.
Aitkin, MN 56431

LEGAL DESCRIPTION: Buchanan Beach, Lot 6

Aitkin County Environmental Services authorizes the Permittee to operate a wastewater treatment and dispersal system located on the above described property in accordance with the requirements of this permit.

This permit is effective on the issuance date identified above.

This permit and the authorization to treat and disperse from the above system is valid through the renewal period identified above. The Permittee is not authorized to discharge after the renewal period. The Permittee shall submit such information and forms as required by Aitkin County Environmental Services no later than thirty (30) days prior to the expiration date. When the required information is submitted and approved by Aitkin County Environmental Services, the permit may be renewed. This permit is not transferable from owner to owner.

I hereby certify with my signature as the permittee that I understand the provisions of this permit including the maintenance and monitoring requirements. I agree to indemnify and hold Aitkin County harmless from all loss, damages, costs and charges that may be incurred by use of this system and if I fail to comply with the provisions of this Operating Permit. If I sell this property during the life of the permit, I will inform the new owner(s) of the permit requirements and the need to renew the permit.



Signature of Permittee



Date



Signature of Permitting Authority



Date

If you have any questions regarding this permit, including the specific permit requirements, permit reporting or permit compliance status, please contact Aitkin County Environmental Services at 218-927-7342.

AITKIN COUNTY ENVIRONMENTAL SERVICES-PLANNING & ZONING

307 Second St NW Room# 219

Aitkin, Minnesota 56431

PH: (218) 927-7342

FX: (218) 927-4372



4/6/2021

Marcella Schulze
43611 236th Lane
Aitkin, MN 56431-

Re: Operating Permit # 289
Zoning Permit #34875
Parcel ID#11-1-103600

Dear Permittee:

This letter is to remind you that the Operating Permit for the septic system at the above mentioned parcel is due for renewal this year by May 31st . The enclosed Operating Permit was issued as part of the permit for your septic system and must be renewed.

The Operating Permit for the current renewal period has been enclosed. If there are no changes to the Operating Permit, please submit the following to the County Office:

7-1-21

- the signed Operating Permit (enclosed)
- \$150 permit renewal fee (\$200 fee after May 31st)
- the results of performance and maintenance activities
- a table of your water usage

We have checked all boxes above for information we have received. Please note, only complete applications will be accepted.

If your designer finds the system is operating in conformance with the Operating Permit, please have him/her submit a letter requesting to have the Operating Permit renewed for a longer period or to request terminating the Operating Permit. Our Office will determine if this is possible.

The performance and life expectancy of this septic system is dependent on regular monitoring and maintenance of all parts of the system. Your compliance with the Operating Permit will ensure continued performance of the system. Failure to perform the monitoring and maintenance of this system could cause costly repairs and/or replacement of this system. In addition, failure to comply with the monitoring, maintenance and reporting of the septic system is a violation of the Aitkin County's Subsurface Sewage Treatment System Ordinance and could be prosecuted by the County Attorney's Office.

All information required must be submitted to this Office by the expiration date referenced on your Operating Permit. We are notifying you to give you sufficient time to contact your designer and make any necessary changes, have samples taken and tested, tanks pumped, and any other activities that were required to meet the requirements of your permit.

Please contact our office with any questions regarding the renewal of this permit.

Sincerely,

Aitkin County Planning & Zoning

SEPTIC SYSTEM REVIEW FOR

Marcella Schulze

Parcel # 11-1-103600

Operating permit #289

Property located in Hazelton Township

July 01, 2021

The above mentioned property has an event counter installed on it. On May 2016 the meter reading was 718. On April 2021 the meter reading was 1,077 with a difference of 359 events. So at 359 events by 200 gallons per event = 71,800 gallons divided by 1,800 days = 40 gallons per day average. The system is also well within its parameters on BOD5, FECAL, and TSS (see attached sheet).

The system is set up for 300 gallons per day so I believe that we can put this system on a 5 year operating permit.

The tanks, effluent filter, pumps, floats, alarms and control panel will still be inspected ever year.

We have entered into a Maintenance, Monitoring and Inspection Contract with said property owner.

Sincerely,



Mark P. Ritter
Ritter Sewer & Excavating, Inc.

**AITKIN COUNTY ENVIRONMENTAL SERVICES
OPERATING PERMIT FOR WASTEWATER
TREATMENT AND DISPERSAL RENEWAL**

ISSUANCE DATE: 5 /31/2021
RENEWAL PERIOD: 5 YEAR

OPERATING PERMIT # 289
ZONING PERMIT #: 34875
PARCEL #: 11-1-103600

PERMITTEE: Marcella Schulze

TELEPHONE:

MAILING ADDRESS:
43611 236th Lane
Aitkin, MN 56431

PROPERTY ADDRESS:
43629 236th Ln
Aitkin, MN 56431

LEGAL DESCRIPTION: Buchanan Beach, Lot 6

Aitkin County Environmental Services authorizes the Permittee to operate a wastewater treatment and dispersal system located on the above described property in accordance with the requirements of this permit.

This permit is effective on the issuance date identified above.

This permit and the authorization to treat and disperse from the above system is valid through the renewal period identified above. The Permittee is not authorized to discharge after the renewal period. The Permittee shall submit such information and forms as required by Aitkin County Environmental Services no later than thirty (30) days prior to the expiration date. When the required information is submitted and approved by Aitkin County Environmental Services, the permit may be renewed. This permit is not transferable from owner to owner.

I hereby certify with my signature as the permittee that I understand the provisions of this permit including the maintenance and monitoring requirements. I agree to indemnify and hold Aitkin County harmless from all loss, damages, costs and charges that may be incurred by use of this system and if I fail to comply with the provisions of this Operating Permit. If I sell this property during the life of the permit, I will inform the new owner(s) of the permit requirements and the need to renew the permit.


Signature of Permittee

4-13-21
Date



7/9/2021
Date

Signature of Permitting Authority

If you have any questions regarding this permit, including the specific permit requirements, permit reporting or permit compliance status, please contact Aitkin County Environmental Services at 218-927-7342.

A. DESCRIPTION OF WASTEWATER TREATMENT AND DISPERSAL SYSTEM

This ISTS is to have the wastewater gravity from the 2 bedroom into a new 1860 combo tank with a pump vault placed into the septic side of the tank. It will be time dosed at a max of 300 gpd into a Multi-Flow Aerobic Treatment System, and then gravity into the Lift side of the 1860 combo tank. From there, it will pump on demand into the existing Mound with 21 inches of separation. Aerobic Mult-Flow and tank replacement. Existing septic system failed using existing drainfield.

B. PERFORMANCE STANDARD REQUIREMENTS:

During the period beginning on the effective date (issuance date) of this permit and lasting until this permit's expiration date, the Permittee is authorized to discharge from the wastewater treatment unit to subsurface dispersal. No surface discharge is permitted. The following parameters must be monitored and the results must be found within the compliance limits.

PARAMETER	COMPLIANCE LIMIT	SAMPLE LOCATION	SAMPLE FREQUENCY	SAMPLE TYPE	REPORTING FREQUENC
Fecal Coliform/TSS/BOD-5	<10,000 CFU	Lift station	Annually	Grab	ANNUALLY ✓
Flow	300 GPD	Event Counter	Monthly	Record on a Log Sheet	ANNUALLY ✓
Separation	20"	Drainfield	MONTHLY	Measure in Field	ANNUALLY ✓

C. MAINTENANCE REQUIREMENTS:

PARAMETER	LOCATION	FREQUENCY
Aerobic Tank Function	Event Counter	MONTHLY <i>see attached</i> ✓

D. MONITORING AND REPORTING REQUIREMENTS:

Monitoring results obtained during each calendar year shall be submitted no later than May 31st of that year to:

Aitkin County Environmental Services
307 2nd Street NW, Room 219
Aitkin, MN 56431

The monitoring reports shall be signed by the Permittee. Copies are to be retained by the Permittee. Any sampling and laboratory testing procedures shall be performed in accordance with Standard Methods at a Minnesota Department of Health approved laboratory. All sampling and testing costs shall be the responsibility of the Permittee. Monitoring plans may be modified as necessary and reapproved by Aitkin County Environmental Services.

The Permittee shall notify Aitkin County Environmental Services within thirty (30) days when monitoring results do not meet the monitoring plan requirements of this permit.

The owner has secured the services of **Mark Ritter** as the Service Provider or qualified individual for this system. The Service Provider or qualified individual is hereby authorized to report the required monitoring data and routine maintenance service records to Aitkin County Environmental Services.

Analysis Report

May 04, 2021

REPORT TO:

Ritter Sewer & Excavating
Mark Ritter
34753 390th Place
Aitkin MN 56431

INVOICE TO:

Ritter Sewer & Excavating
Mark Ritter
34753 390th Place
Aitkin MN 56431

Date Rcvd-Brnd: 4/28/2021
Time Rcvd-Brnd: 09:59

Sampled By: Mark Ritter
Sample Type: WW
Recv Temp°C: 1.3 on ice

LOCATION:
Marcy Schultz

SITE / ANALYTE	Sample Date/Time	Analyzed Value	Units	Reporting Limit	Analytical Method	Analysis Date/Time	Analyst	Code #
Lift Station	4/28/2021 @ 07:10							
Biochemical Oxygen Demand, 5 Day		3.18	mg/L	2	HACH 10360 REV 1.2 (2011)	4/29/21 12:17	ND	045334
Fecal Coliform		< 100	MPN/100mL	1	COLILERT-18 (FECAL COLI)	4/28/21 13:43	MH	045334
Residue-Nonfilterable (TSS)		< 1.00	mg/L	1	USGS I-3765-85	5/3/21 11:22	SZ	045334

Approved By:



Date Approved: 5/4/2021

Sara Ahlers, Laboratory Director

A.W. Research Laboratories, Inc. is accredited by the MNELAP and follows approved methods and procedures. MN State Laboratory ID: 027-035-135 and EPA Lab Code: MN00098. All data generated using non-accredited methods noted as -NC, and all analytes for which accreditation is unavailable -NA. The results above relate only to the samples tested. This report must not be reproduced, except in full, without the written approval of the laboratory. We appreciate your feedback, please email us at awlab@awlab.com with questions or comments. Thank you!

~End of Analysis Report~



Invoice #53118 (07/09/2021)

2. Zoning/Land Use Permit Applications Misc. (OFFICE USE ONLY) App. # App-2021-007672, UID # 203273

Marcella Schulze

(218) 678-2652

43611 236th lane, Aitkin, MN 56431

Aitkin County Planning & Zoning / Environmental Services

307 Second St. NW Room 219

Aitkin, MN 56431

Phone: 218-927-7342

Fax: 218-927-4372

Email: aitkinpz@co.aitkin.mn.us

Charge		Cost	Quantity	Total	Note
Operating Permit Renewal added 07/09/2021 3:50 PM \$150		\$150.00	x 1	\$150.00	
Grand Total					
				Total	\$150.00
Payment #48297					
Method:	Check		3714		
Date:	07/09/2021	Note:	OP 289 2021 renewal		
Made By:	Marcella Schulze				
Confirmed By:	Shannon Westerlund				

AITKIN COUNTY ENVIRONMENTAL SERVICES-PLANNING & ZONING
307 Second Street, NW Room# 219
Aitkin, Minnesota 56431

PH: (218) 927-7342
FX: (218) 927-4372



7/9/2021

Marcella Schulze
43611 236th Lane
Aitkin, MN 56431

Re: Operating Permit # 289
Zoning Permit # 34875
Parcel # 11-1-103600

Dear Permittee:

This letter is to inform you that your Operating Permit has been renewed until 5/31/2026 .

Please adhere to your monitoring and maintenance contract including monitoring your water use. Failure to do so would violate the agreement to operate your system and could void the operating permit. You should contact your Operation and Maintenance provider directly with questions that you may have during the year.

Thank you for your good stewardship and we hope that your system continues to operate well, protecting groundwater for you and the environment.

Sincerely,

Shannon W.

Aitkin County Planning & Zoning