ZONING PERMIT APPLICATION

117 MK

OFFICE USE ONLY
DATE 6-27-03 (APPROVE) / DENY
PERMIT# 30601
PARCEL# 29-0-035100
RECEIPT# 45826
CONFORMING SEPTIC
YES P# NO (NEW)

FULL NAME Richard Nelson VIGSTOL TELE # 218-426-4268
BIRTHDATE & DL # 01-10-44 V234-738-626-030 763-753-3858
MAIL ADDRESS 21607 Dakota st NW OAKGrove 55303 612-991-1532
911 ADDRESS 49610 Hwy 65 mcGregor mn 55760
TOWNSHIP Shamrock
LEGAL DESCRIPTION part of Gov Lot 5 of NE¼ of SW¼ as in sec
SECTION 18 TOWNSHIP 49 RANGE 23

(circle) RESIDENTIAL COMMERCIAL ACCESSORY NEW BUILDING ALTERATION
BUILDING CONTRACTOR AND LICENSE NUMBER: self
SIZE OF ALL BUILDINGS COVERED BY THIS APPLICATION 1960 sqft (House w/ attached garage)
① 47 x 33 Residence
② 32x 25 Garage
③ 12x16 deck
④ 60x8' deck (irregular)
⑤ septic (other)
COMMENTS:

DATA FOR SEWER CONSTRUCTION: INSTALLER Darlow or Ritter #BEDROOMS/GPD 3

DO NOT WRITE BELOW THIS LINE

ZONING DISTRICT & FLOOD PLAIN

ZONING DISTRICT S/L
LAKE/STREAM/RIVER NAME Big Sandy
LAKE/RIVER ID NUMBER 1-0062
LAKE/RIVER/STREAM CLASSIF. GD
PARCEL LOCATED IN FLOOD PLAIN? Y___ N X
10/100 YR FLOOD ELEVATION 1223.9
LOWEST FLOOR ELEVATION 1224.9
ELEV. CERTIFICATE REQUIRED Y___ N___
BEFORE CONSTRUCTION Y___ N___
AFTER CONSTRUCTION Y___ N X

STRUCTURE SETBACK DISTANCE REQUIREMENTS
(Measure from eaves or overhang)

OHW TO LAKE/RIVER/STREAM 75
PROPERTY LINE SETBACK 10'
SETBACK TO ROAD R-O-W 30' TWSP 50' CO
SETBACK TO BLUFF 30'

SEPTIC SYSTEM SETBACK DISTANCES

SETBACK TO STRUCTURES 10' Tank 20 Drnfld
OHW TO LAKE/RIVER 75
PROPERTY LINE SETBACK 10'
SETBACK TO ROAD R-O-W 10'

****ATTACH COPY OF ELEVATION CERTIFICATES****

SOIL BORINGS 4+ SEPTIC DESIGN other
PERK RATES 6-15 DEPTH TO RESTRICTING LAYER 2
GARBAGE DISP/HOT TUB YES___ NO X
MIN.SIZE SEPTIC TANK ~~1000~~ 1330 MIN.SIZE PUMP TANK ~~630~~ 630
DRAINFIELD: MINIMUM SQ.FT — WITH — INCHES ROCK BELOW PIPE
MOUND: MINIMUM ROCK BED SQ.FT 320 WITH 9 INCHES ROCK BELOW PIPE
MIN.UPSLOPE SAND WIDTH 9.1 MIN.DOWNSLOPE SAND WIDTH 15 END SAND WIDTHS 9.1
RECOMMENDATIONS:

x Richard Vigstol — SIGNATURE APPLICANT/AGENT
$250 +25 = 275 — FEE
RPC — RECEIVED BY
6-16-03 — DATE

EXPIRES IN ONE YEAR

Aitkin County Zoning, Courthouse — AITKIN, MINNESOTA 56431 — Telephone 218/927-7342

WHITE - County PINK - Applicant

Ver. 9/02

AITKIN COUNTY ENVIRONMENTAL SERVICES

OPERATING PERMIT FOR WASTEWATER TREATMENT AND DISPERSAL

OPERATING PERMIT #: 117 **FEE PAID:** $25.0

PERMITTEE: Richard Vigstol **PHONE:** (218) 426-4268

ADDRESS: 21607 Dakota St NW
Oak Grove, MN 55303-

ZONING PERMIT # 30601 **PARCEL #:** 290035100

ISSUE DATE: 6/23/03 **RENEW DATE:** 12/31/04

LEGALDESCRIPTION: part of Govt Lot 5 in NE SW in Doc 275216

Aitkin County Environmental Services authorizes the Permittee to construct, install and 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.

Richard Vigstol
Signature of Permittee

06-27-03
Date

Signature of Permitting Authority

6-27-03
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 will gravity from the proposed house into a new 1960 combination tank. From there the liquids are pumped into a 12X30 OSI Sand filter. AN OSI pump vault placed in the sand filter will pump the treated liquids. Treated liquids will be dosed at a maximum of 375 gpd, into a downsized 2.5 bedroom 1-foot sandbase mound with a 10X32 rockbed. System construction $12,000 +, Operation $10/mo, $150 /year

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 results must be found within the compliance limits.

PARAMETER	COMPLIANCE LIMIT	SAMPLE LOCATION	SAMPLE FREQUENCY	SAMPLE TYPE	REPORTING FREQUENCY
Flow	450 gpd	Water Meter	MONTHLY	Record on Log Sheet	ANNUALLY
Separation	1 foot	Dispersal System	ANNUALLY	Measure in Field	ANNUALLY

C. MAINTENANCE REQUIREMENTS:

PARAMETER	LOCATION	FREQUENCY
Flow	Water Meter	MONTHLY
Pressurization of Laterals	Sand Filter	ANNUAL
Pumps, Floats & Alarms	Pump Chamber	ANNUAL
Solids Removal & Water Tightness	Septic tank(s)	ANNUAL
Surface Discharge	Dispersal System	ANNUAL
Vegetative Cover	Dispersal System	ANNUAL

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 responibility of the Permittee.

Monitoring will be done by Mike O'Keefe

E. MITIGATION PLAN:

1) If weeping occurss; lower dosing rate, lower water usage, increase distribution and absorption area. 2) If OSI Sand Filter experiences problems, fix, or repair at recommendations of Manufacter, replace. 3) A diferent or another Performance or Other System may be installed at the owner's expense. 4) 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:

* A WATER METER MUST BE INSTALLED BEFORE COMPLIANCE CERTIFICATE CAN BE ISSUED **

DSPPRCL1 Display Parcel Description 6/23/03 11:01:55

Notes: No

Parcel number/Tax year: 29-0-035100 2004 Reference parcel: 00-2-290000

Owner(s): 21644
VIGSTOL, RICHARD N & VALERIE G
21607 DAKOTA ST
OAK GROVE MN 55303

Parcel type : RE Hold tax stmt:
Com district: 4 Misc1/2:
Escrow agent:
Mortgage hld:
UTA: Twp/City School AMBU **** **** ****
029 0004 00 00 00 00
TIF district: 000 000
Lake#/name : 1-0062 BIG SANDY
Property adr:

Taxpayer: 21644 FALCO: 1 F.O.
VIGSTOL, RICHARD N & VALERIE G
21607 DAKOTA ST
OAK GROVE MN 55303

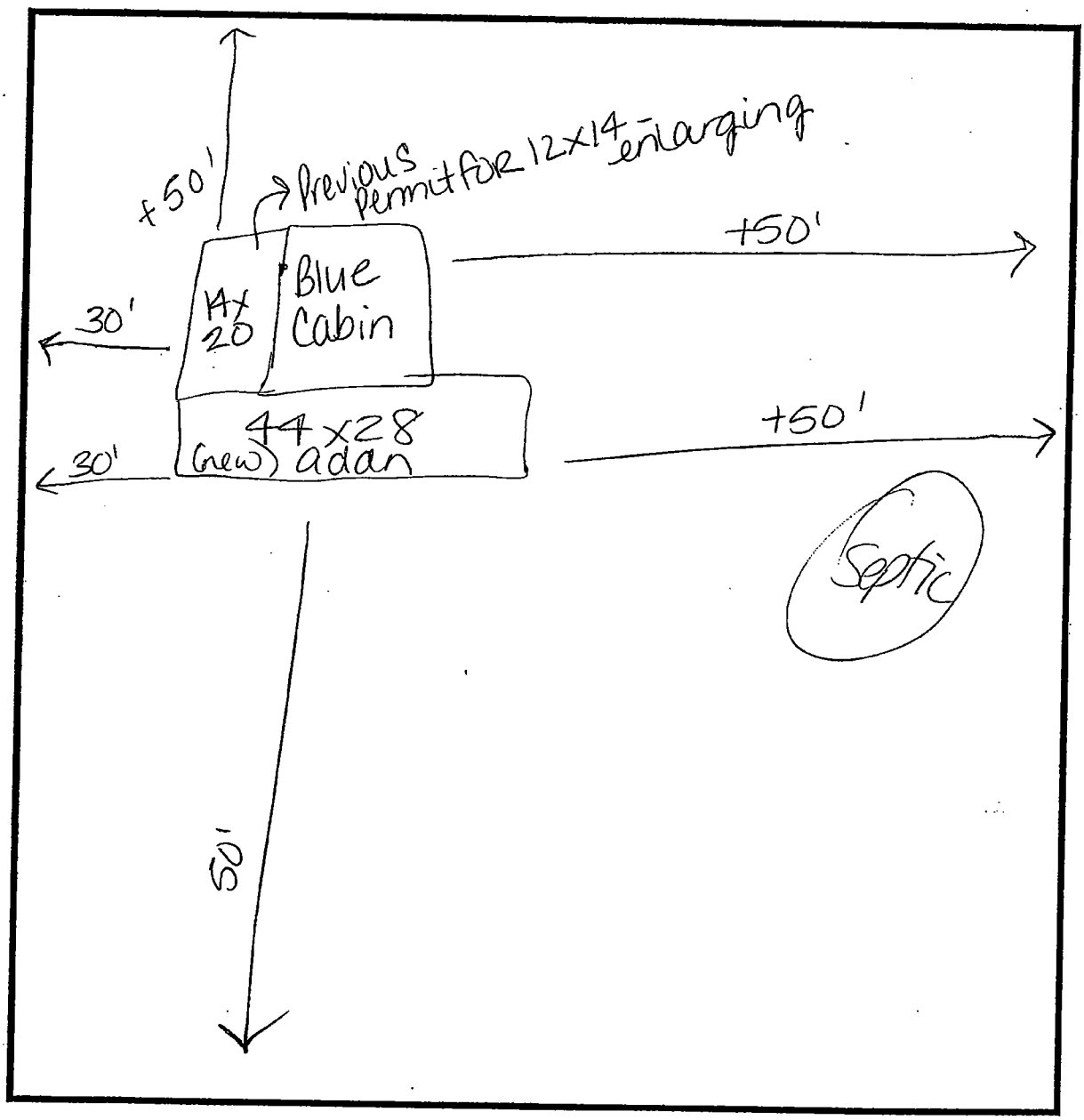
Emergency# : -
Twp/City Plt: SHAMROCK TWP
Sec/twp/rge : 18 49.0 23 Acres: 5.00
Plat:
Description: Lot/Block . :
THAT PART OF LOT 5 & NE-SW IN DOC 275216

Alternate taxpayer:

Press Enter to continue or enter new parcel/tax year. 29-0-035100 2004
F1=Full desc F2=Trans hist F3=Exit F6=Prcl hist F7=Backward F9=Escrow hist
F12=Cancel F14=Phy Addr F17=Dsply Note

AITKIN COUNTY
BUILDING PERMIT SITE PLAN

Please indicate the location of: Wells, well setback to system components, buildings, septic system components, reserved septic system area, property lines, waterways, and buried lines. Include size, length, and appropriate distances from fixed reference points. Provide a North directional arrow!



A. M. & Associates, Inc.
29465 442ND LANE
Pallsade, MN 56469
(218) 768-4430

Michael D. O'Keeffe
Annette M. O'Keeffe
SEPTIC SYSTEMS
DESIGNS * INSPECTIONS * MAINTENANCE
MPCA #1357

ONE YEAR
MAINTENANCE, MONITORING AND INSPECTION SERVICE CONTRACT
FOR INDIVIDUAL SEWAGE TREATMENT SYSTEM
FOR 1ST YEAR

It is hereby agreed this 13 day of June, 20 03 by and between A.M. & Associates, Inc. and

Property Owner(s):	**RICHARD VIGSTOL**	Parcel Code:	**29-0-035100**
Home Address:	**21607 DAKOTA ST. NW** **ANOKA, MN 55303**	Site Address:	**49610 HWY 65** **McGREGOR, MN 55760**
Phone (home)	**(763) 535-3858**	Township	**SHAMROCK**
(work)			
(cell)	**(612) 991-1532**	Phone:	**(218) 426-4268**
(fax)			

DESCRIPTION OF INDIVIDUAL SEWAGE TREATMENT SYSTEM

This ISTS is to have the wastewater gravity from the proposed house into a new 1960 combination tank. From there, the liquids are pumped into an 12' x 30' OSI Sand Filter. An OSI Pump Vault placed inside the Sand Filter will pump the treated liquids, Timed Dosed at a maximum of 375 gpd, into a downsized 2 ½ Bedroom 1 foot sandbase Mound with a 10' x 32' Rockbed.

Installation Date: _____ Installer: _____ Phone#: _____

That A.M. & Associates, Inc. will provide the services to perform Preventative Maintenance, Monitoring and Inspection of the parameters and frequency described herein as your Operating Permit requires for your Individual Sewage Treatment System (ISTS).

Each inspection includes an examination of the ISTS followed by a written report to the Property Owner. This inspection report shall contain recommendations for operation and maintenance for failure-preventative measures, if any are deemed appropriate by the inspector, and a list of recommended corrective measures or replacement parts. A.M. & Associates, Inc. is authorized to submit a copy of the report to the pertaining County's Environmental Services Department.

This contract does not assume any responsibilities or obligations, which are normally the responsibilities of the Property Owner, or as related to parts or labor and does not extend to cover any costs that may be associated with any recommendations made under this contract.

A.M. & Associates, Inc. can only contract or subcontract for parts or labor after authorization by you. Billings for service calls shall be made on a case by case basis. This contract only covers maintenance, monitoring and inspection services per current pertaining County Operating Permit and does not cover alarm calls of any kind.

On-site Service Calls cost of a minimum of $35.00 per hour for time and labor required from A.M. & Associates and/or Minnesota Onsite Specialties, due to alarms, misuse or abuse of any portion of this System, is the responsibility of the Property Owner(s), payable within 10 days of billing.

All additional cost, time and labor required from A.M. & Associates, Inc. due to modifications made by the pertaining County's Environmental Services Department, is the responsibility of the Property Owner(s), payable within 10 days of billing.

In no event shall A.M. & Associates, Inc. or the Inspector be responsible for special or consequential damages, including but not limited to, loss of time, injury to personal property or any other consequential damages or incidental or economic loss due to equipment failure or for any other reason.

A.M. & Associates, Inc. shall be provided access to the site and the system in order to perform the following services that are marked:

CONTROL/ALARM PANEL ***(Annually)***

- X 1. Check pump operations in manual mode
- X 2. Check timer settings
- X 3. Record elapsed time meter and counter readings
- X 4. Confirm operation of audible and visual alarms

LIFT PUMPING STATION ***(Annually)***

- X 1. Verify no leaks in riser
- X 2. Inspect splice box for moisture and secure connections
- X 3. Verify condition of and correct operation of all floats
- X 4. Verify neat wrap of float cords
- X 5. Pull pump and clean intake screen if necessary
- ___ 6. Visually inspect recirculating splitter valve (if applicable) and liquid level
- X 7. Check general appearance

EFFLUENT FILTERS/PUMP SCREENS ***(Annually)***

- X 1. Check effluent filter for buildup of biomat growth
- X 2. Clean (if needed)

SEPTIC TANK ***(Annually)***

- X 1. Measure sludge and scum level
- X 2. Tank(s) should be pumped if the sludge layer is closer than 12" to the bottom of the inlet baffel or whenever the scum is closer than 3" to the bottom of the outlet baffel
  - * (If the test results determine a need for solids removal, the Property Owner will bear the cost and responsibility for doing so)
- X 3. Check general appearance

PRETREATMENT DEVICE *(Annually)*

X 1. Inspect for ponding; assess character and color of biomat
X 2. Test pressurization of laterals (squirt test)
X 3. Verify proper orifice position, equal spray under orifices, no clogged orifices
X 4. Check for odors: adjust recirculating time (if necessary)
X 5. Clean and flush manifold (if necessary)
X 6. Re-check squirt height (if necessary)
X 7. Inspect the appearance of the wastewater inside the unit for color and turbidity.

DISPERSAL FIELD *(Annually)*

X 1. Inspect for visible signs of failure (surface discharge, soggy ground, wet spots, settling, etc.)
X 2. If liquid level monitors are installed, levels will be observed and recorded.
___ 3. Flush filters and clean cartridges, if applicable
___ 4. Check field control unit solenoid operations or manual control, if applicable
X 5. Check for required separation

SAMPLING *(As Deemed Necessary)*

X 1. Aquire and deliver samples for analysis of BODs, TSS, Fats Oils and Grease, and Fecal Coliform (cost of sampling analysis plus delivery charges is the responsibility of the Property Owner. If more than one analysis is recommended and required within the duration of this contract, the additional labor costs aquired by A.M. & Associates, Inc. along with sampling analysis fees and delivery charges is the responsibility of the Property Owner).

MISCELLANEOUS *(Annually)*

X 1. Review water usage from water meter records kept by the Property Owner.

*** **PROPERTY OWNER(S)'S RESPONSIBILITIES** *(Monthly and/or as Required)*

During the term hereof, I/we as the current Property Owner(s) understand that I/we;

1. Must *notify* A.M. & Associates, Inc. of the installation date of this ISTS, a ***minimum*** of one week *prior* to installation.
2. Will provide A.M. & Associates, Inc. with access to the System. Access includes electrical controls & disconnects, hose hookup water supply and sufficient workspace to perform the necessary maintenance services
3. Will be responsible for recording water meter readings on a *monthly* basis.
4. Must *notify* A.M. & Associates, Inc. *immediately* when signs of weeping problems, sewage smell or any other indication that the system may not be functioning properly.
5. Will provide A.M. & Associates, Inc. copies of the water meter records, upon request.
6. Must aquire pre-authorization from A.M. & Associates, Inc., *prior* to the Property Owner or any other individual performing or attempts to:
    a. make alterations or modifications to the System, or
    b. misuse the System, or
    c. attach devices to it , or
    d. execute any type of Maintenance services to the system or any portion thereof
7. Will notify A.M. & Associates, Inc. of new ownership of property if within the duration of this contract.
8. Will accept all responsibility and risks involved with the installation and hydraulic performance of this Septic System and hold A.M. & Associates, Inc. harmless from all liability for this Sewage Treatment System whatsoever.
9. May be required to perform additional maintenance responsibilities as deemed necessary by A.M. & Associates, Inc.

This contract shall remain in force for a period of one year, beginning **on date of installation** and ending **December 31st of the following year.**

Maintenance, Monitoring & Inspection Service Contract		$300.00	**Due at time of signing contract**
Sample Analysis Fees & Supplies	(approx)	N/A	**Due at time of sampling**
*Time & Mileage to Deliver Samples for Analysis		N/A	**Due at time of sampling**

NOTE: SAMPLING OF FECAL COLIFORM, BOD, TSS, AND FATS OIL AND GREASE IS *NOT* REQUIRED AT THIS TIME. IF SAMPLING IS FOUND TO BE NECESSARY DURING THE DURATION OF THE USE OF THIS SEPTC SYSTEM, THE PROPERTY OWNER(S) IS RESPONSIBLE FOR *ALL* COSTS INVOLVED, AND IS DUE AT TIME THE SAMPLES ARE TO BE TAKEN.

*If at time of sampling, the Property Owner(s) wishes to transport the samples to Brainerd himself for analysis, within the *required time limit*, A.M. & Associates, Inc. will wave the time, mileage delivery fees of $100.00.

A.M. & Associates, Inc. agrees to provide inspection, monitoring and routine maintenance service only under this contract.

I hereby certify with my signature as the Property Owner(s) that I understand the provisions, requirements and responsibilities of this Maintenance, Monitoring and Inspection Service Contract. I also understand failure to comply with the requirements outlined in my Operating Permit, this Contract, along with any future requirements that may arise, set forth by Aitkin County Environmental Services, Orenco Systems, Inc. (OSI) or A.M. & Associates, Inc., could result in the condemning of my septic system, removal of the use of the drainfield, and require the use of Holding Tanks with a pumping Contract.

Property Owner(s):

Name: **RICHARD VIGSTOL** (please print) Richard Vigstol (signature) Date: 06-13-03

Spouse: _____ (please print) _____ (signature) Date: _____

A.M. & Associates, Inc.:

Name: **MICHAEL D. O'KEEFFE** (please print) (signature) Date: 6-13-03

AITKIN COUNTY ENVIRONMENTAL SERVICES

APPLICATION for an OPERATING PERMIT FOR WASTEWATER TREATMENT AND DISPERSAL

PERMITTEE **Richard Vigstol** PARCEL NUMBER **29-0-035100**

ADDRESS **21607 Dakota St. NW** CITY **Anoka** STATE **MN** ZIP **55303**

SEC **8** TWP **49** RGE **23** BLOCK _____ LOT **12** ACRES _____

TELEPHONE **(763) 753-3858** GIS LOCATION _____

SITE LOCATION **49610 HWY 65, Big Sandy Lake**

A. DESCRIPTION OF WASTEWATER TREATMENT AND DISPERSAL SYSTEM:

This ISTS is to have the wastewater gravity from the proposed house into a new 1960 combination tank. From there, the liquids are pumped into an 12' x 30' OSI Sand Filter. An OSI Pump Vault placed inside the Sand Filter will pump the treated liquids, Timed Dosed at a maximum of 375 gpd, into a downsized 2 ½ Bedroom 1 foot sandbase Mound with a 10' x 32' Rockbed.

Number of Bedrooms **3** **(sized for 2 ½ Bedrooms)**

Flow = **375** gpd

Hydraulic Loading Rate = **1.0 – 1.2** gpd/ft2

Organic Loading Rate = **0.00009** BOD/sqft

Flow x BOD(mg/l) x 8.35 ÷ 1,000,000 = #BOD
(375 x 15 x 8.35 ÷ 1,000,000 = .046 BOD)

System Loading = organic loading ÷ area = BOD/sqft
(.046 ÷ 320 = 0.00014 BOD/sqft)

Anticipated System Life = **20 - 30 years**

Estimated Cost of:

System Construction = **$12,000.00 +**
Operation = **$10.00 per month**
Monitoring, Testing & Service = **$150.00 ± per year**

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	**450 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					
Separation Distance	**1 foot Separation beneath Rock layer**	**Mound**	**Annually**	**Shoot Elevations, Soil Borings**	**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	**Lift Tank, Pump Vault**	**Annually**
Pressurization of Laterals in Sand Filter (squirt test)	**Sand Filter**	**Annually**
Acceptance of Effluent into ground and 1 foot of separation to water table.	**Mound**	**Annually**
Overall visual of entire system for landscaping, drainage and cover material	**Mound, Sand Filter, Tanks**	**Annually**

D. MONITORING AND REPORTING REQUIREMENTS:

1. Monitoring results obtained during each calendar year shall be submitted no later than December 31st 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, increase distribution and absorption area.
2. If OSI Sand Filter experiences problems, fix or repair at recommendations of Manufacturer, or replace.
3. A different or another Performance or Other System may be installed at the owner's expense.
4. 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. A.M. & ASSOCIATES , a licensed ISTS firm, has agreed to perform all monitoring responsibilities, as outlined within this Operating Permit Application, for a period of 1 Year(s), only upon signing a contract stating so.

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'KEEFFE		1357	10/16/2002
(Name)	(Signature)	(License #)	(Date)
A.M. & ASSOCIATES, INC.	29465 442nd LANE PALISADE, MN 56469		(218) 768-4430
(Company Name)	(Address)		(Telephone)

SUPPLEMENTAL DATA FOR LAND USE PERMITS

*** COMPLETE BOTH SIDES ***

A. PLANNING CHECKLIST ~~(required)~~:

	YES	NO	???
1. Are you aware of setback requirements and will your project meet them? *Note: Setback distances are taken from any projection of the building (i.e. overhangs, eaves, decks, etc.)*	☒	☐	☐
2. Have you taken in consideration locations for future buildings, septic systems, decks, driveways, etc?	☒	☐	☐
3. Are there any lowlands or wetlands on or near the site project?	☐	☒	☐
4. Is there a steep slope or bluff on or near the site? (If yes, complete Section D)	☐	☐	☒
5. Will the project involve the clearing of trees or shrubs within the Shore Impact Zone of a lake or river? (If yes, complete Section D)	☐	☒	☐
6. Will the project involve grading, filling or landscaping within the shoreland district of a lake or river? (If yes, complete Section D)	☐	☒	☐
7. Is your property in a floodplain?	☒	☐	☐

If it is, the lowest floor(which includes basement or crawl space, regardless of a dirt floor) must be one foot (1') above the 100-year flood elevation. A benchmark established by a registered surveyor or licensed engineer may be required before granting a land use permit.

B. PRE-EVALUATION INSPECTION REQUEST *(required)*:

Defining and staking the property lines, road right-of-ways, septic sites, and wells are the responsibility of the property owner. In some cases, a registered survey may be required to verify setbacks before granting a permit.

ALL PROPOSED DEVELOPMENT REQUESTS MUST BE CLEARLY STAKED AT ALL FOUR CORNERS IF APPLICABLE, IF STAKES ARE NOT PRESENT OR VISIBLE IT MAY RESULT IN ADDITIONAL FEES OR A DELAY IN THE PERMIT PROCESS.

The undersigned hereby makes application for a pre-evaluation permit inspection, agreeing that all setback information and delineation of property lines, well location, road setbacks, and development corners have been properly marked in accordance with the standards and requirements of the Aitkin County Ordinances.

Telephone Number between the hours of 8:00 A.M. and 4:00 P.M. 218-426-4268 / 612-991-~~15~~ 32

Landowner: Richard Vigstol **Date:** 06-16-03

Address: 21607 Dakota St NW

Oak Grove MN 55303

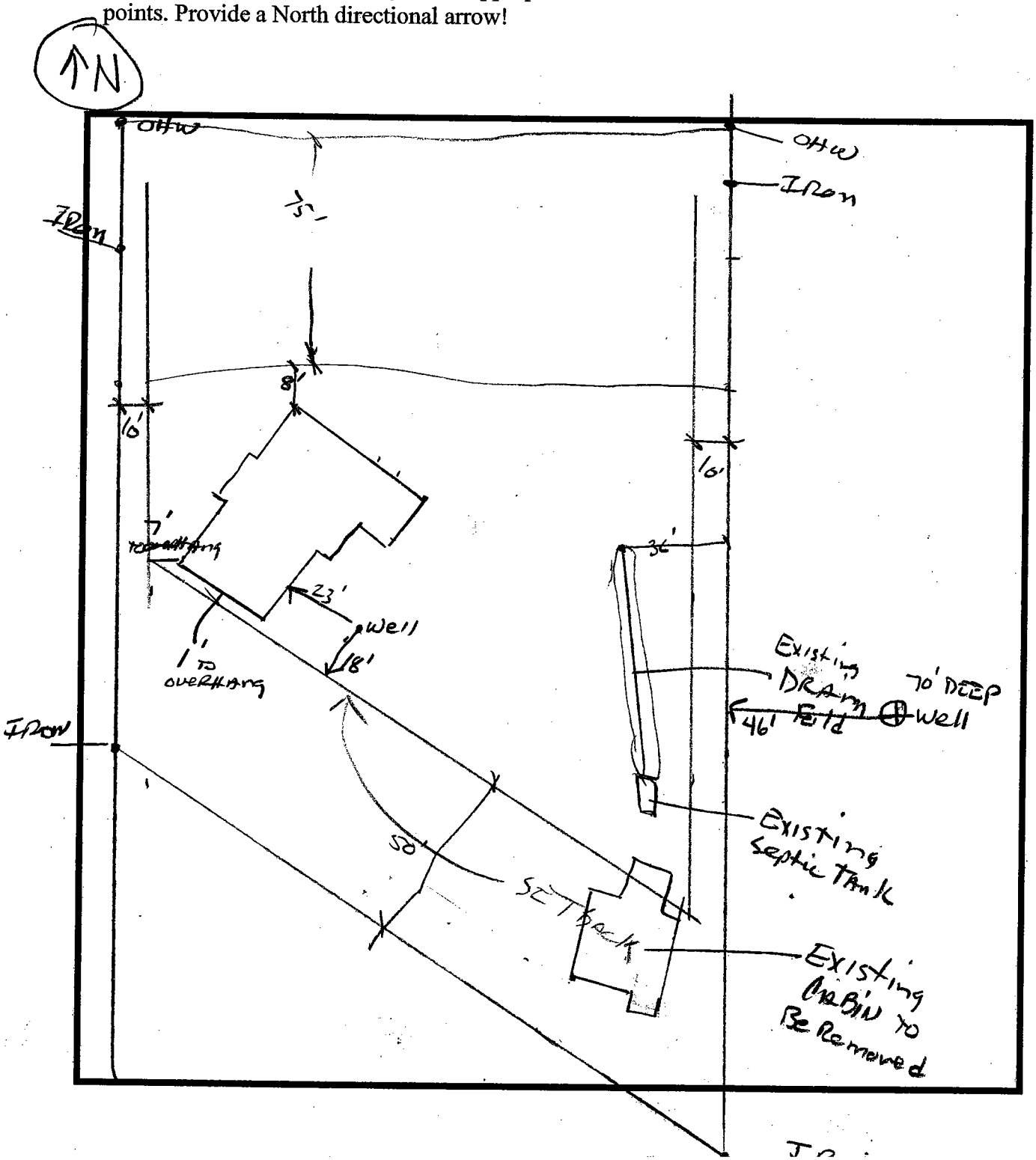
LANDOWNER SIGNATURE: X Richard Vigstol

If you have any questions please contact the Planning and Zoning office at (218) 927-7342
Ordinances and Publications are available FREE online at: www.co.aitkin.mn.us

WE LOOK FORWARD TO WORKING WITH YOU

AITKIN COUNTY
BUILDING PERMIT SITE PLAN

Please indicate the location of: Wells, well setback to system components, buildings, septic system components, reserved septic system area, property lines, waterways, and buried lines. Include size, length, and appropriate distances from fixed reference points. Provide a North directional arrow!



A. M. & Associates, Inc.
29465 442nd Lane
Pallsade, 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:

Richard Vigstol
21607 Dakota St. NW
Anoka, MN 55303
(763) 753-3858
(218) 426-4268

For property located at;
49610 HWY 65
Big Sandy Lake
Shamrock Township
Sec 8, Twp 49, Rge 23

Parcel# 29-0-035100

June 9, 2003

Reviewed RPC

3 BEDROOM OSI SANDFILTER TIME DOSING INTO A 2 ½ BEDROOM 1 FOOT SANDBASE MOUI

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 an "Other System", due to the FILL, Pretreatment Device, and the Downsized Drainfield. 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.

An Operating Permit for Wastewater Treatment and Dispersal is required.

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

The Property Owner(s) accepts the responsibility of recording water meter readings on a monthly 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.

- additional soils were taken by Mr. Rich Courtemanche

OWNER IS RESPONSIBLE TO PROTECT THE DRAINFIELD SITE FROM CONSTRUCTION, VEHICLES, EQUIPMENT, STUMP REMOVAL OR ANY OTHER SOURCE THAT MAY COMPACT OR DAMAGE THE CURRENT CONDITION OF THE SOIL PRIOR TO INSTALLATION. IF SUCH DAMAGES SHOULD OCCUR TO YOUR SITE, A NEW SITE OR DESIGN MAY BE REQUIRED. (TREES CAN BE CUT BUT LEAVE THE STUMPS IN THEIR NATURAL STATE)

RECOMMEND using Insulated Pipe or laying "waterproof" styrofoam insulation on top of the pipes running from House to the Tank and from the Tank to the Drainfield to help prevent freezing problems.

Note to Installer:

1. This ISTS is to have the wastewater gravity from the proposed house into a new 1960 combination tank. From there, the liquids are pumped into an 12' x 30' OSI Sand Filter. An OSI Pump Vault placed inside the Sand Filter will pump the treated liquids, Timed Dosed at a maximum of 375 gpd, into a downsized 2 ½ Bedroom 1 foot sandbase Mound with a 10' x 32' Rockbed.
2. 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.
3. Installer is to *verify* all measurements on jobsite.
4. This system *must* be installed according to *current* Minnesota Chapter 7080 and Aitkin County's ISTS & Wastewater Ordinance requirements.
5. A WATER METER MUST BE INSTALLED.
6. Installer is to contact Designer for questions and/or prior to making any changes to the enclosed design.
7. Install a 1960 Combination Tank (be sure to be at least 50 feet from well)
   THIS TANK *MUST* CONTAIN A 4" FLOW-THROUGH PORT HOLE, 31.8" IN THE DIVIDING WALL, FROM THE BOTTOM OF THE INSIDE OF THE TANK.
   THIS 4" CLEAR ZONE HOLE CAN BE EITHER SPECIAL ORDERED WITH THE TANK MANUFACTURER, OR CUT BY THE INSTALLER *AT TIME OF INSTALLATION OF THE TANK.*
8. Be sure the Sewer Line from the House to the Tank, and the Pump Line from the Tank to the Sandfilter are well supported to avoid bowing after ground settlement.
9. Owner would like an OSI Biotube Effluent Filter installed in the Tank.
10. Install 2" "waterproof" styrofoam insulation on top of the Tank to help prevent freezing problems.
11. Tank lids & risers *will* be provided by Minnesota Onsite Specialties and *must* be installed at ground level for monitoring and maintenance purposes.
12. Construct a 12' x 30' OSI Sand Filter with a Pump Vault.
13. *All* manufacturer's requirements and specifications must be used when installing the OSI Sand Filter.

14. Minnesota Onsite Specialties is to provide the required OSI Sand Filter kit, Pumps, Control Panel, Risers insulated Tank lid, and related equipment, *onsite* expertise of installation, start-up, maintenance and all other related requirements when installing the OSI Sand Filter System. (lumber for sand filter, sand & rock not included)
    (contact John Walsh, 12428 Tamarack Road, Floodwood, MN 55736, (218) 476-2201)
    NOTE: Be sure you understand any *additional* supplies *you* must provide.

15. Installer *must* schedule installation date with John Walsh with Minnesota Onsite Specialties (218) 476-2201 and Annette O'Keeffe with A.M. & Associates, Inc. (218) 768-4430 of whom *must* be present at time of installation.

16. Installer *must* schedule an Electrician (experienced with installing OSI Control Panels) to be on site *during* installation of Sand Filter to wire Control Panel for testing Time Dosing, Pumps, Alarms, Squirt Levels, etc.

17. The System is to have Timed Dosing set at a MAXIMUM of 375 gallons per day, 3 minutes on and 8 hours off, from the Sandfilter to the Mound.

18. The Control Panel *must* be a minimum of 4 feet from the ground surface for easy access.

19. Pumps and Alarms *must* be on separate circuits.

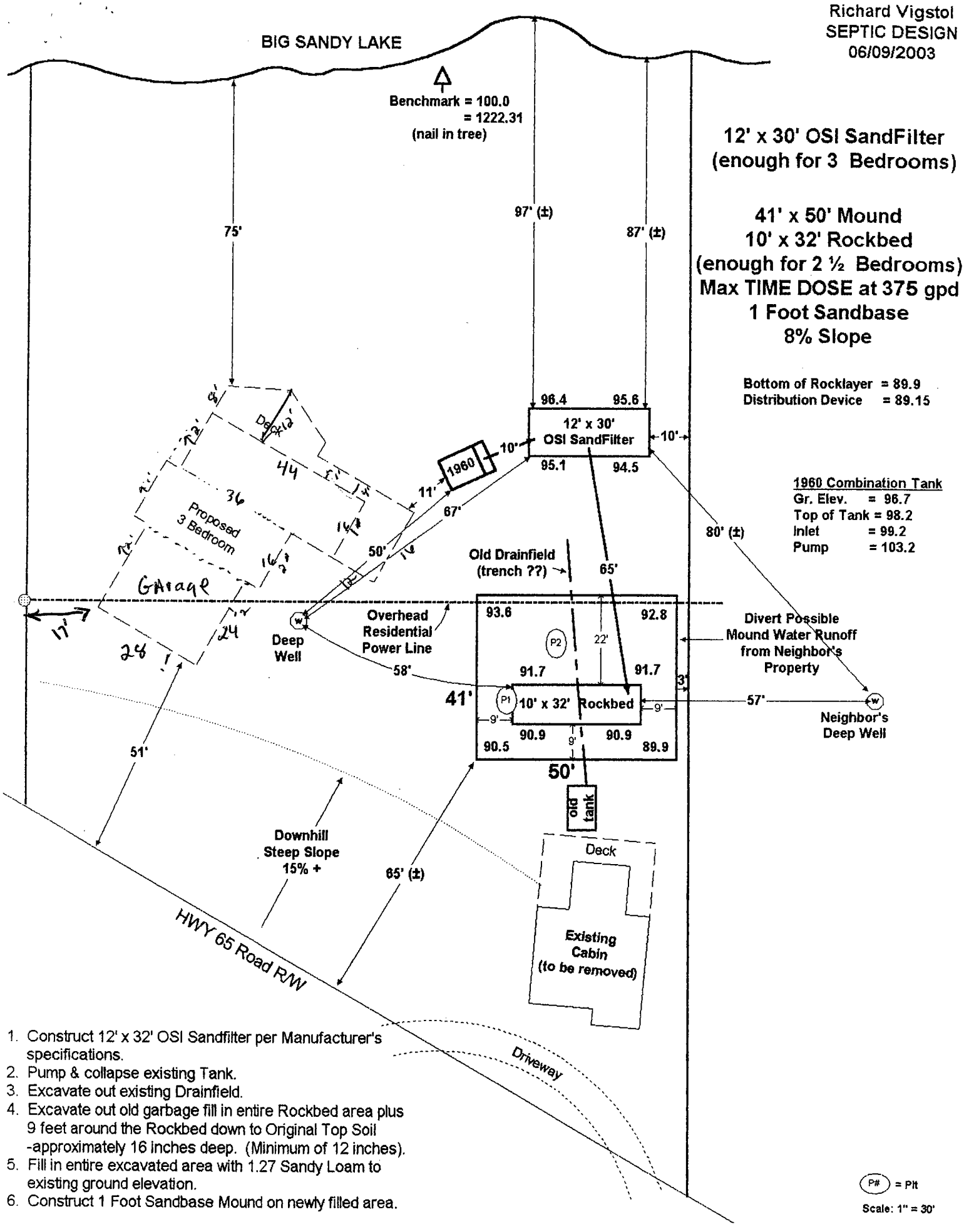
20. Pump & collapse existing Tank.

21. Excavate out existing Drainfield.

22. Excavate out old garbage FILL in entire Rocbed area –plus- 3 feet around the Rockbed down to the depth of the original Top Soil, -approximately 16 inches deep. (Minimum of 12 inches deep).

23. Fill entire excavated area with 1.27 Sandy Loam to existing ground surface.

24. Construct 1 foot sandbase Mound on newly filled area. (DUE TO WELL SETBACKS, MOUND MUST BE INSTALLED EXACTLY AS DESIGNED)


Richard Vigstol
SEPTIC DESIGN
06/09/2003
BIG SANDY LAKE
Benchmark = 100.0
= 1222.31
(nail in tree)
12' x 30' OSI SandFilter
(enough for 3 Bedrooms)
41' x 50' Mound
10' x 32' Rockbed
(enough for 2 ½ Bedrooms)
Max TIME DOSE at 375 gpd
1 Foot Sandbase
8% Slope
Bottom of Rocklayer = 89.9
Distribution Device = 89.15
75'
97' (±)
87' (±)
96.4
95.6
12' x 30'
OSI SandFilter
10'
95.1
94.5
1960
1960 Combination Tank
Gr. Elev. = 96.7
Top of Tank = 98.2
Inlet = 99.2
Pump = 103.2
Deck 12'
44
36
Proposed
3 Bedroom
Garage
24
11'
67'
50'
80' (±)
Old Drainfield
(trench ??)
65'
Overhead
Residential
Power Line
Deep
Well
93.6
92.8
P2
22'
Divert Possible
Mound Water Runoff
from Neighbor's
Property
91.7
91.7
41'
P1
10' x 32' Rockbed
9'
57'
Neighbor's
Deep Well
90.9
90.9
90.5
89.9
51'
50'
old
tank
Downhill
Steep Slope
15% +
65' (±)
Deck
Existing
Cabin
(to be removed)
HWY 65 Road R/W
Driveway
1. Construct 12' x 32' OSI Sandfilter per Manufacturer's specifications.
2. Pump & collapse existing Tank.
3. Excavate out existing Drainfield.
4. Excavate out old garbage fill in entire Rockbed area plus 9 feet around the Rockbed down to Original Top Soil -approximately 16 inches deep. (Minimum of 12 inches).
5. Fill in entire excavated area with 1.27 Sandy Loam to existing ground elevation.
6. Construct 1 Foot Sandbase Mound on newly filled area.
P# = Pit
Scale: 1" = 30'

FLOAT AND VAULT SETTING WORKSHEET
1960 Gallon 2 Compartment Tank - 375 GPD

A. **Thickness of Tank =** 3 inches

B. **Liquid Level from Inlet =** 45.5 inches

C. **Tank Depth** from outside top of tank to inside bottom of tank = 55.5 inches

D. **Depth from outside top of tank to bottom of pump vault =** 51.5 inches
(vault should be a minimum of 2" from the bottom of the tank. If the tank is deep, use a 4-8" block.

E. **Baffle Wall Flow-through Port Height =** 31.8 inches Take "B" x 70% (liquid capacity) to get port height. (45.5 x 70% = 31.8)

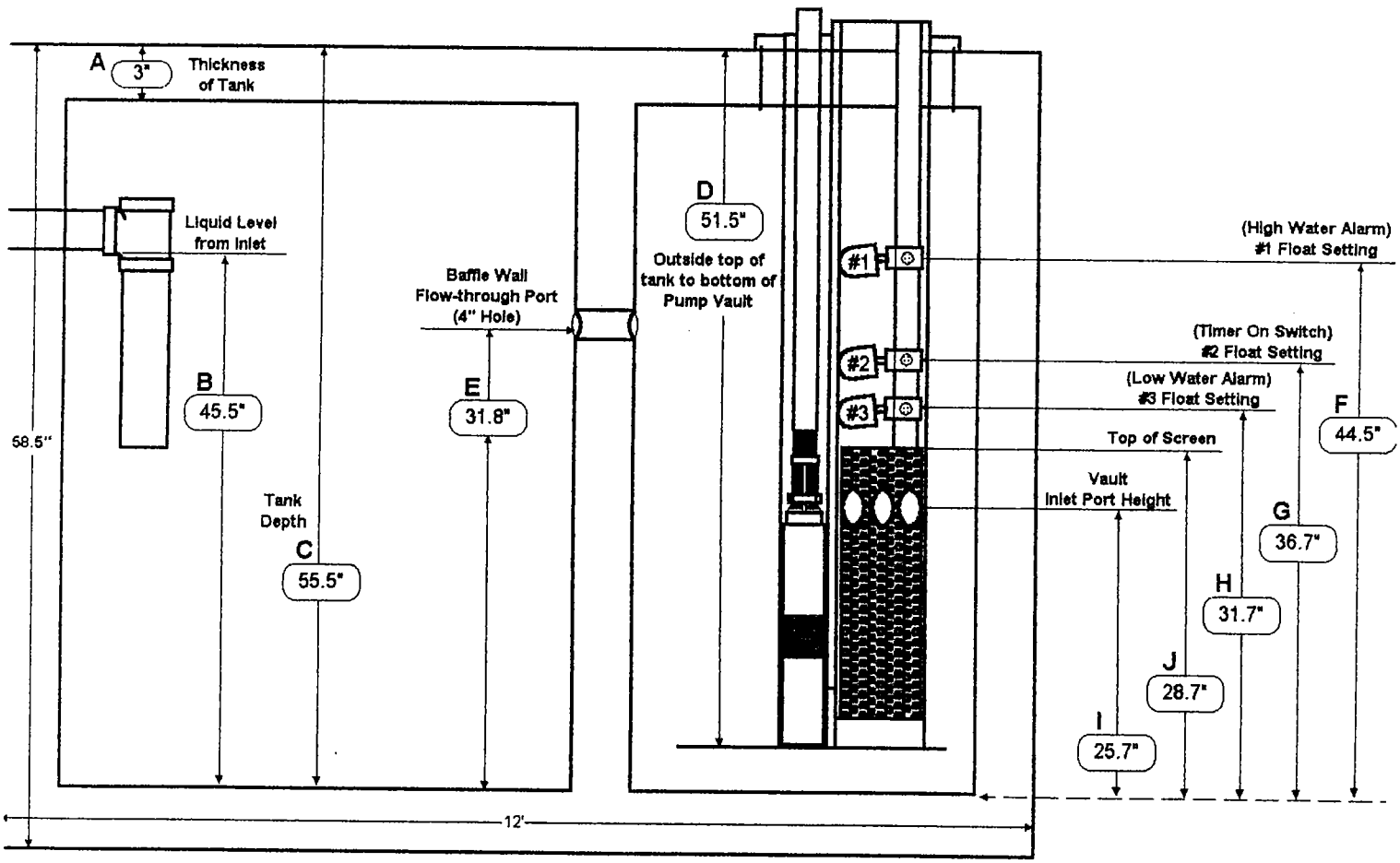
F. **#1 Float Setting =** 44.5 inches (this setting is 1" less than "B")

G. **#2 Float Setting =** 36.8 inches Take the tank size divide by "B" to get gal per inch. (1960 ~ 45.5 = 43 gpi)
Use a minimum reserve capacity of 200 gallons, divide by the gal per inch,
then subtract from #1 Float Setting "F" to get #2 float setting.
(use minimum reserve of 200 gallons or the design flow)
(375 gpd ~ 43 = 8.72 44.5 - 8.72 = 36.78)

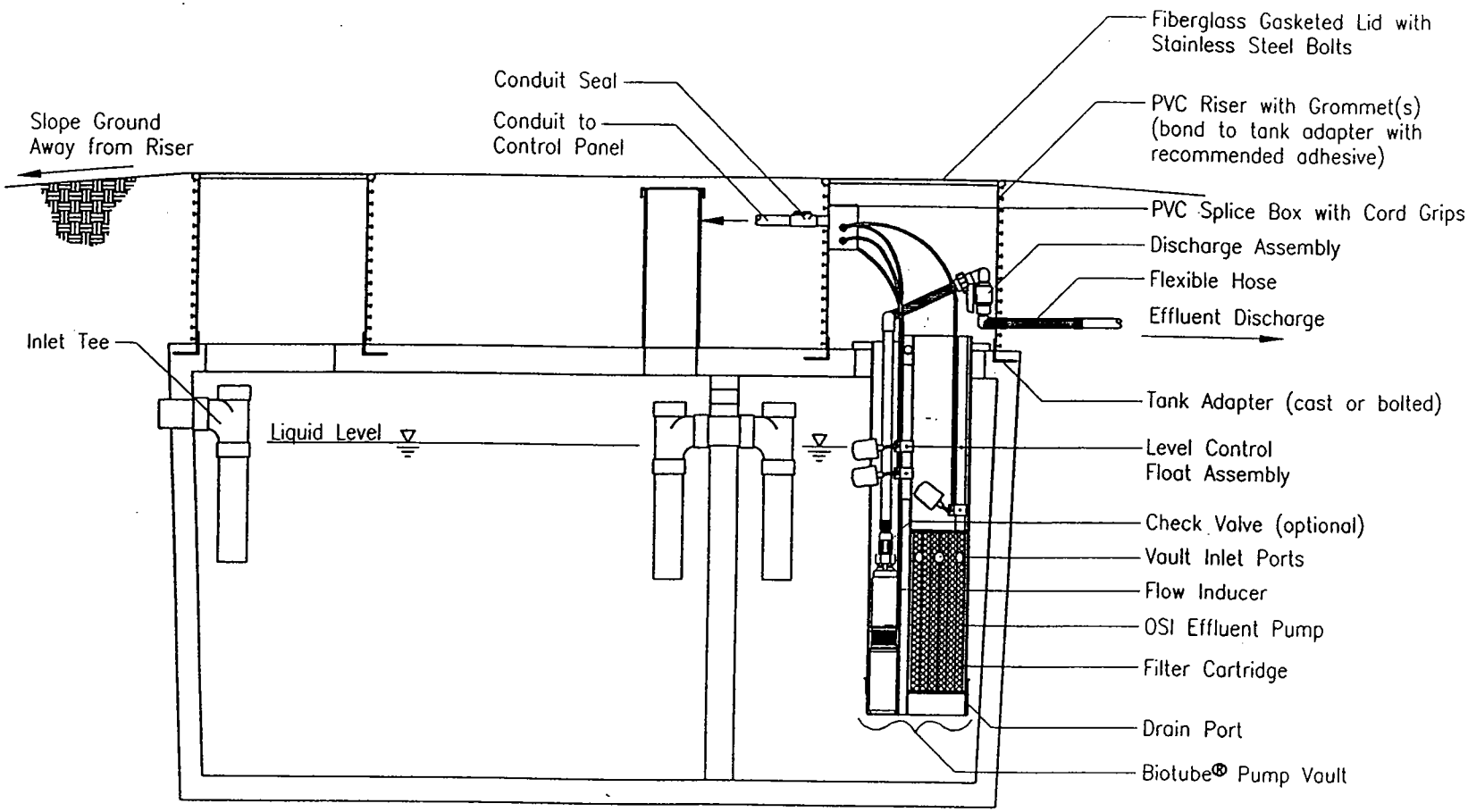
H. **#3 Float Setting =** 31.7 inches Calculate "I" and "J" to get "H". "H" should be 3" above "J". (28.7 + 3 = 31.75)

I. **Vault Inlet Port Height =** 25.7 inches Take "G" x 70% (liquid capacity) to get port height. (36.7 x 70% = 25.7)

J. **Top of Screen in Screen Vault =** 28.7 inches The screen is 3" above port height "I". (25.7 + 3 = 28.7)



luent Pumping System - 2nd Compartment Drawdown



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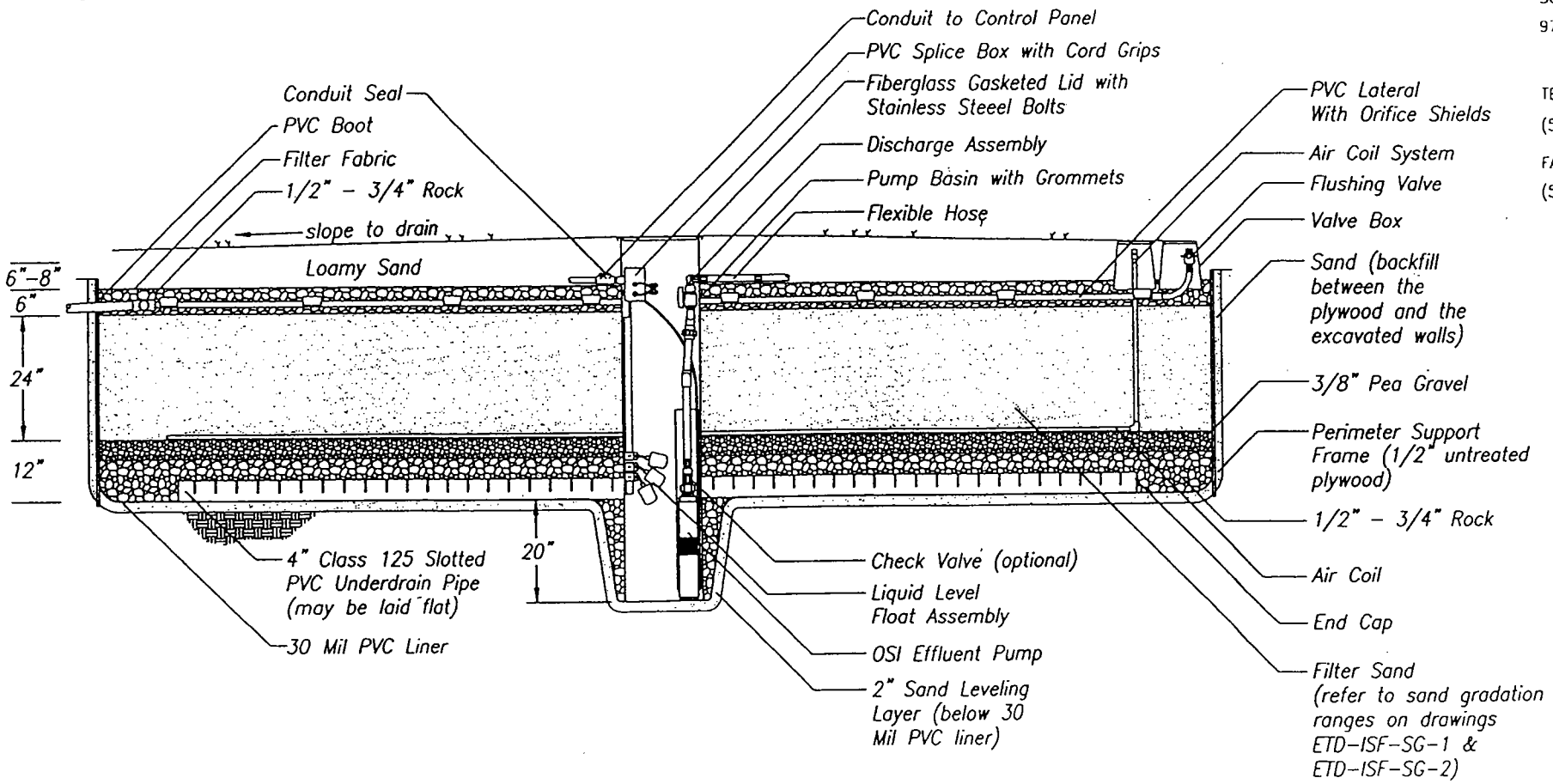
SUTHERLIN, OREGON
97479-9012

TELEPHONE:
(541) 459-4449

FACSIMILE:
(541) 459-2884

Typical Intermittent Sand Filter with Pump Discharge

In cold weather applications, slope entire transport line and manifold system to drain back into tank. If draining back is not possible, refer to non-drainback orifice detail on drawing EDW-ISF-S-3.



SIDE VIEW - TYPICAL SAND FILTER WITH PUMP DISCHARGE

SCALE: 3/8" = 1'-0"

Note: See additional details on EDW-ISF-S-3

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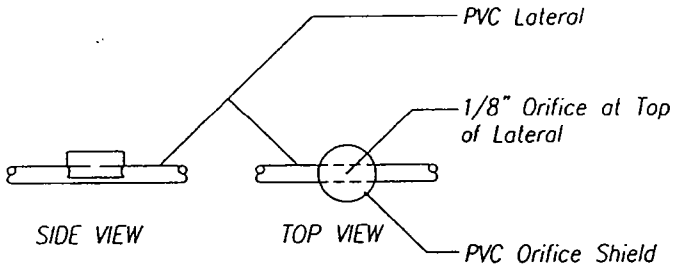
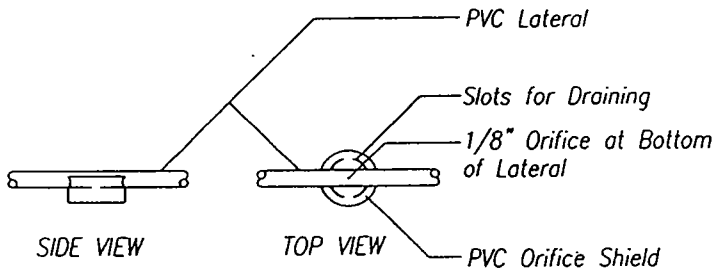
Typical Intermittent Sand Filter Detail Sheet



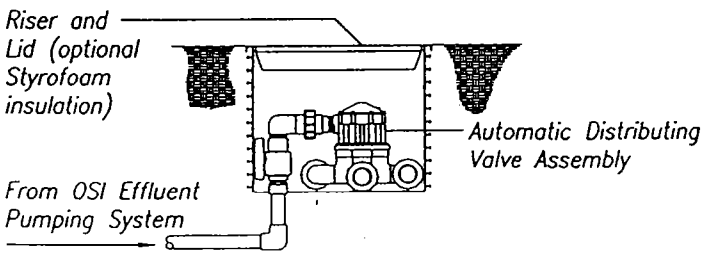
STANDARD ORIFICE SHIELD DETAIL

SCALE: 1" = 1'-0"



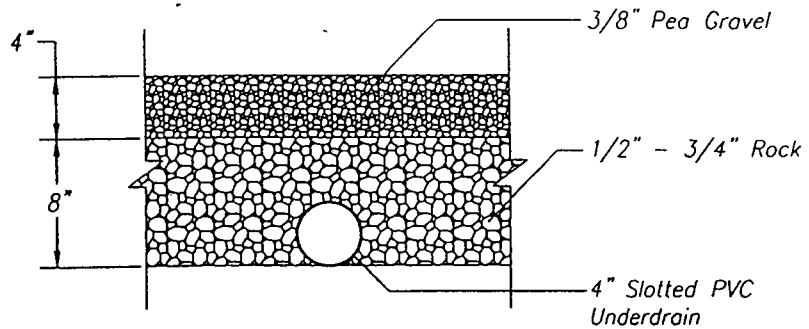
NON-DRAINBACK ORIFICE DETAIL

SCALE: 1" = 1'-0"



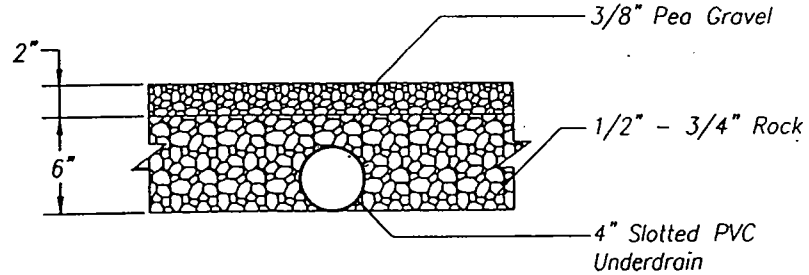
DISTRIBUTING VALVE DETAIL

SCALE: 1/2" = 1'-0"



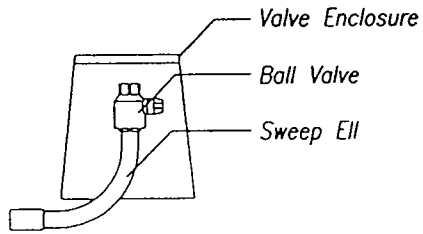
UNDERDRAIN DETAIL FOR PUMP DISCHARGE

SCALE: 1" = 1'-0"



UNDERDRAIN DETAIL FOR GRAVITY DISCHARGE

SCALE: 1" = 1'-0"



FLUSHING VALVE DETAIL

SCALE: 1" = 1'-0"

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EDW-ISF-S-3
Rev. 1.0 (2/98)

12'x30' Intermittent Sand Filter* with Pump Discharge

* Configured for loading rates up to *1.25 GPD/FT.*^{2} Follow appropriate intermittent sand filter design criteria.

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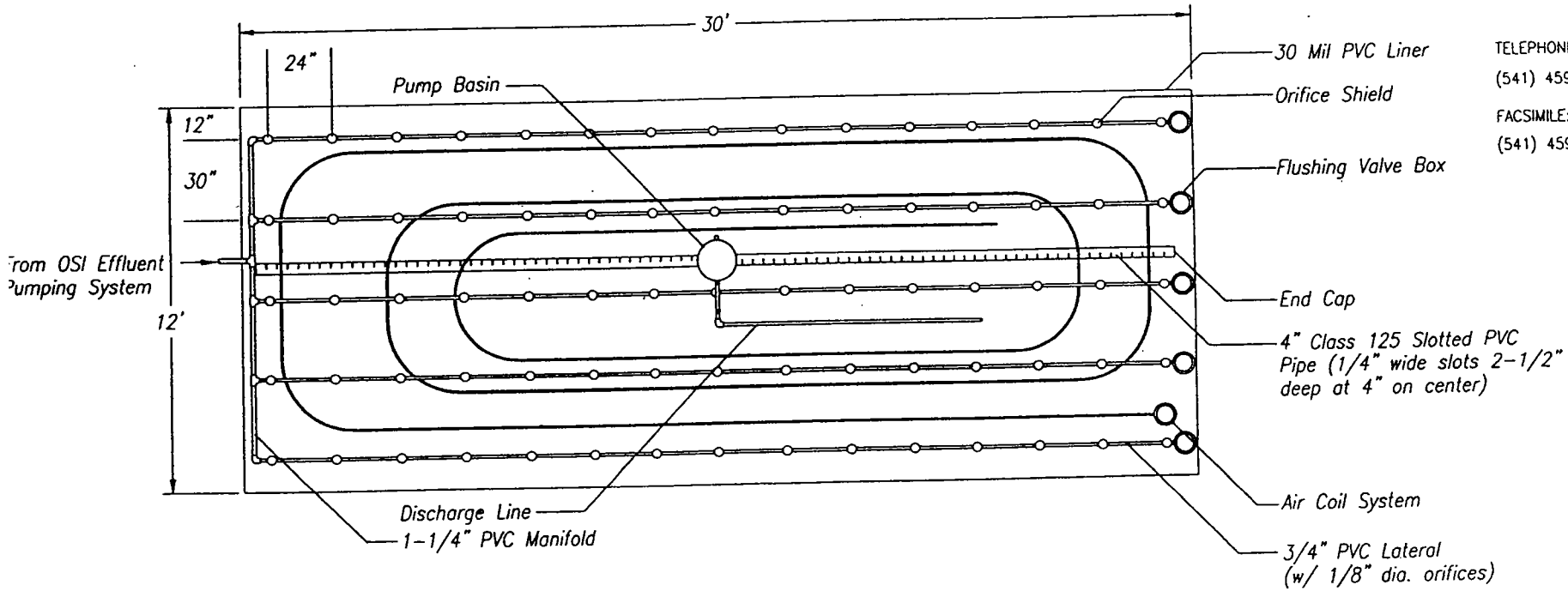


TOP VIEW - 12'X30' PUMP DISCHARGE SAND FILTER

SCALE: 1" = 5'-0"

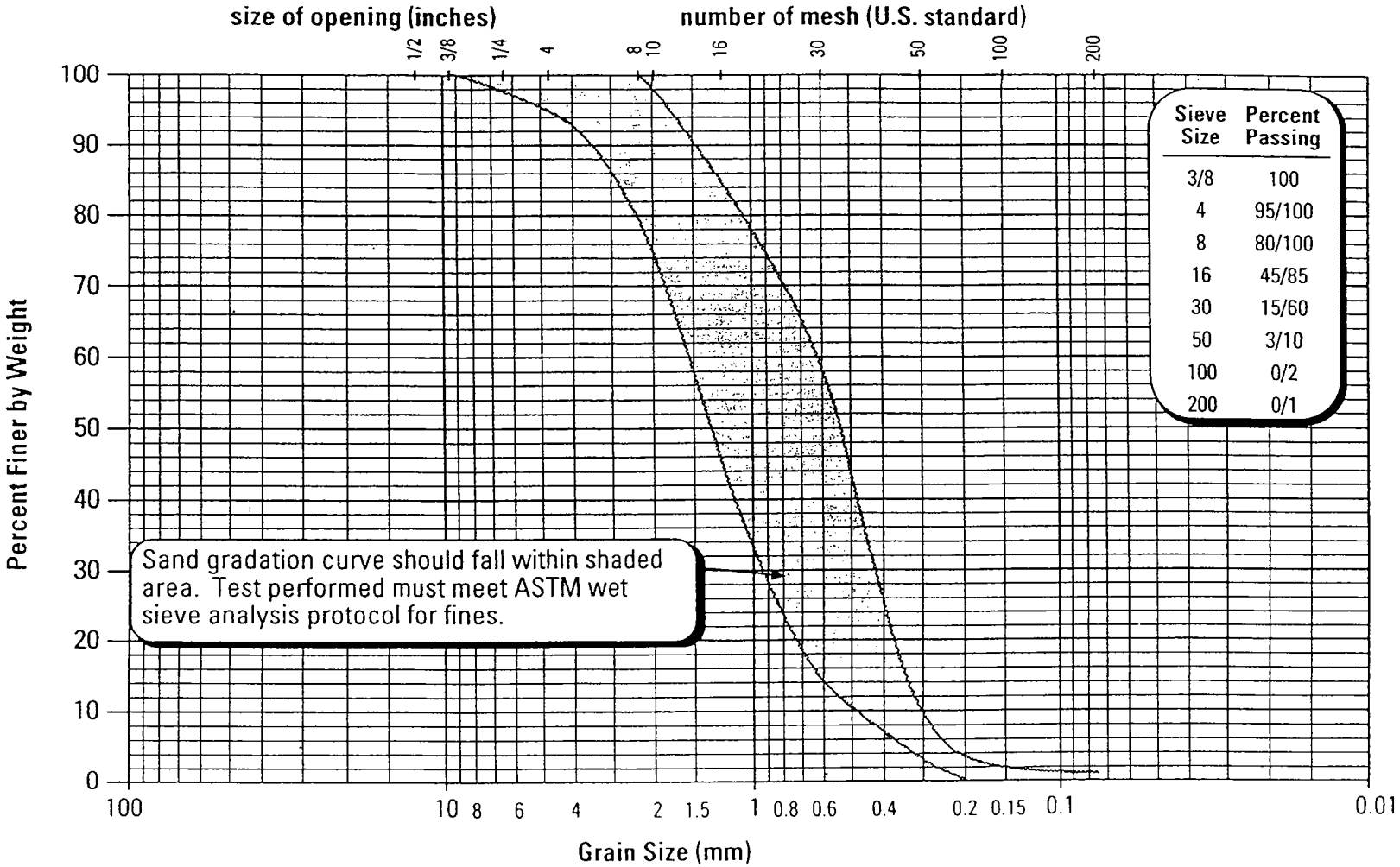
Note: See additional details on EDW-ISF-S-3

Potent # 5 ,556

EDW-ISF-1230L-2
Rev) (2/98)

Sand Gradation Range for Intermittent Sand Filter Systems Loaded up to 1.25 gpd/ft^2* *(D_{10} = 0.3 to 0.5 mm C_u = 1 to 4)*

Follow appropriate Intermittent Sand Filter design criteria.



Note: Sand must be properly washed as excessive fines will cause plugging. To ensure the sand consolidates sufficiently, keep it wetted while placing.

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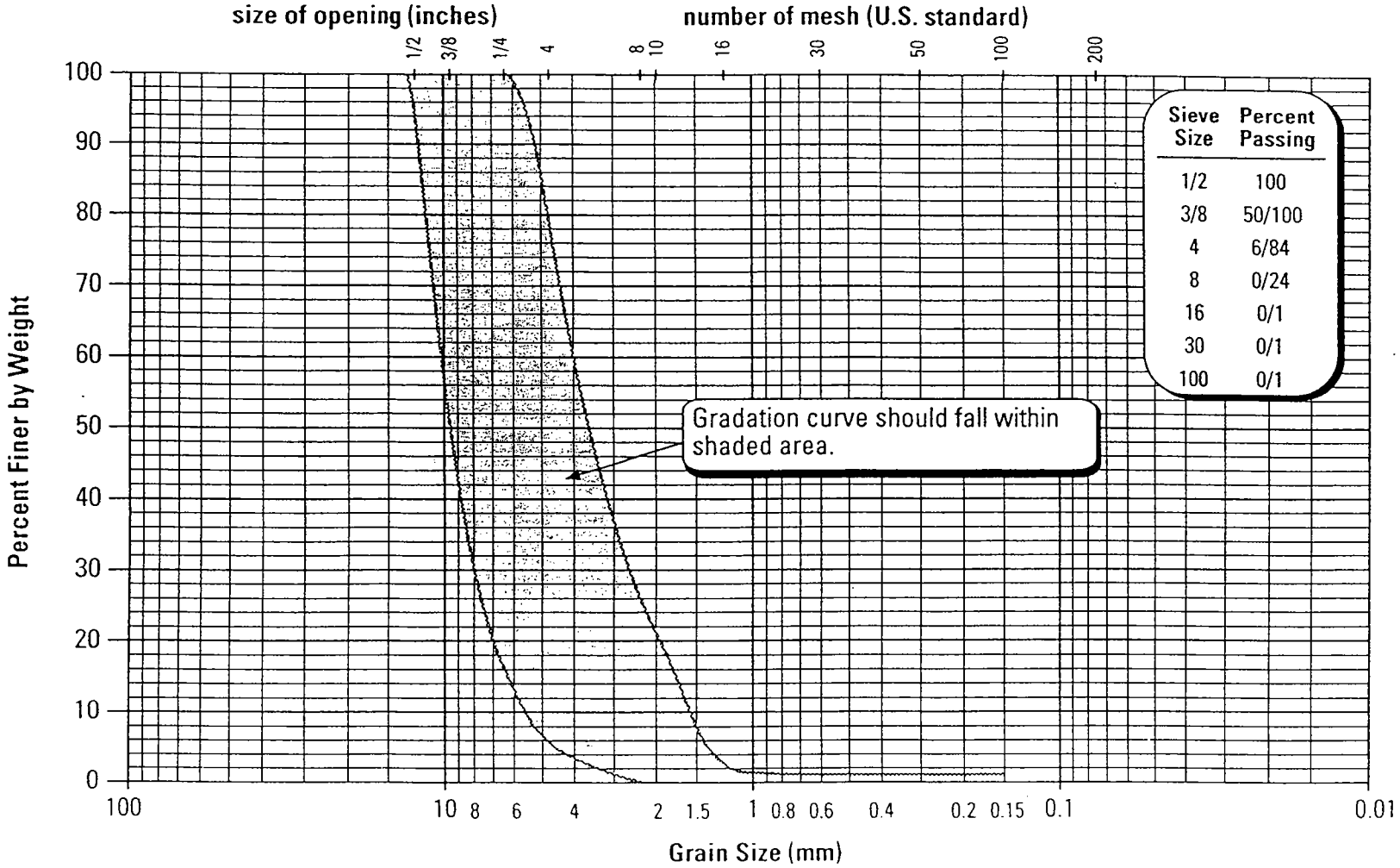
Pea Gravel Gradation Range for Supporting Sand Filter Treatment Media



Note: Gravel in sand filters must be well washed.

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MOUND DESIGN SHEET

COUNTY: Aitkin

PROPERTY OWNER: Richard Vigstol TWP: Shamrock

PERMIT#: _____ PIN#: 29-0-035100 DATE: _____

DESIGNER NAME: Michael D. and Annette M. O'Keeffe LICENCE#: 1357

SIGNATURE: _____ DATE: 06/09/2003

OF BEDROOMS: 3 / 2½ TYPE: I GARBAGE DISPOSAL: No AIR TEST Unknown

WELL: Deep (50+) X Shallow ____ SETBACKS: Tank 50' Drainfield 55+' Sewer Line ??'

FLOW

(DRAINFIELD SIZED FOR 2 ½ BEDROOMS = 375 GPD)

A. ESTIMATED 450/375 GPD OR MEASURED GPD
B. SEPTIC TANK VOLUME 1960 Combo GALLONS
C. MIMINUM PUMP TANK VOLUME 730 GALLONS
C1. ALARM TYPE OSI

EST SEWAGE FLOW IN GPD

NUMBER OF BEDROOMS	TYPE I	TYPE II	TYPE III
2	300	225	180
3	450	300	218
4	600	375	256
5	750	450	294
6	900	525	332
7	1050	600	372
8	1200	675	408

SOILS

(2 FOOT REDUCTION WITH SANDFILTER)

D. DEPTH TO RESTRICTING LAYER = 2 FEET
E. DEPTH OF SAND ON UPSLOPE EDGE 1 FEET
F. SOIL TEXTURE = Sandy Loam
G. PERCOLATION RATE = 6 to 15 MPI
H. SOIL SIZING FACTOR = 1.27 SQ FT/GPD
I. LAND SLOPE % = 8 %

SEPTIC TANK CAPACITIES/VOLUME (gal)

NUMBER OF BEDROOMS	MINIMUM CAPACITIES TANK	GARBAGE DISPOSAL
2 OR LESS	1000	1500
3 OR 4	1000	1500
5 OR 6	1500	2250
7 OR 8	2000	3000
OVER 9	SEE FIG C-6	(x 1.5)____

ROCK LAYER DIMENSIONS

J. (A) 375 x 0.83 = 311.3 SQ FT
K. ROCK LAYER WIDTH = 10.0 FEET
L. LENGTH OF ROCK BED = (J) ÷ (K) = 32 FT
(rounded up)

ROCK VOLUME

M. (J) 311.3 x 1 Ft. (Rock Depth) = 311.3 CU FT
N. (M) 311.3 ÷ 27 = 11.5 CU YD
O. (N) 11.5 x 1.4 = 16.1 TONS OF ROCK

ABSORPTION WIDTH

P. ABSORPTION WIDTH RATIO = 1.50
Q. ABSORPTION WIDTH = (P) x (K)
(P) 1.50 x (K) 10 = 15 FEET

SIZING TABLE

PERC RATE	SOIL TEXTURE	(SSF) SQ FT GAL/DAY	ABSORPTION WIDTH RATIO
< THAN 0.1	COARSE SAND	——	1.00
0.1 TO 5	SAND	0.83	1.00
0.1 TO 5	FINE SAND	1.67	2.00
6 TO 15	SANDY LOAM	1.27	1.50
16 TO 30	LOAM	1.67	2.00
31 TO 45	SILT LOAM	2.00	2.40
46 TO 60	CLAY LOAM	2.20	2.67
> THAN 60	CLAY	——	5.00
> THAN 120	CLAY	——	6.00

06/09/2003

MOUND SIZE

Property Owner: Richard Vigstol

1. **MINIMUM DOWNSLOPE BERM TOE**
   = Absorption Width (Q) - Rock Layer Width (K)
   (Q) 15 - (K) 10 = 5 Feet

2. **DEPTH OF CLEAN SAND FILL AT UPSLOPE EDGE OF ROCK LAYER**
   = Separation 3' - 2 ft = 1 Feet

3. **MOUND HEIGHT AT UPSLOPE EDGE OF ROCK BED**
   = Depth of Clean Sand for Separation (2) + Depth of Rock Layer (1ft) + Depth of Cover (1ft)
   (2) 1.0 + 1ft + 1ft = 3.0 Feet

4. 3:1 = UPSLOPE BERM MULTIPLIER 2.42
   4:1 = UPSLOPE BERM MULTIPLIER 3.03

5. **UPSLOPE BERM WIDTH**
   = Upslope Berm Multiplier (4) x Upslope Mound Height (3)
   3:1 = (4) 2.42 x (3) 3 = 7.3 Feet
   4:1 = (4) 3.03 x (3) 3 = 9.1 Feet

6. **DROP IN ELEVATION**
   = Rock Layer Width (K) x Landslope % (I) ÷ 100
   (K) 10 x (I) 8 ÷ 100 = 0.8 Feet

7. **DOWNSLOPE HEIGHT**
   = Drop in Elevation (6) + Upslope Mound Height (3)
   (6) 0.8 + (3) 3 = 3.8 Feet

8. 3:1 = DOWNSLOPE BERM MULTIPLIER 3.95
   4:1 = DOWNSLOPE BERM MULTIPLIER 5.88

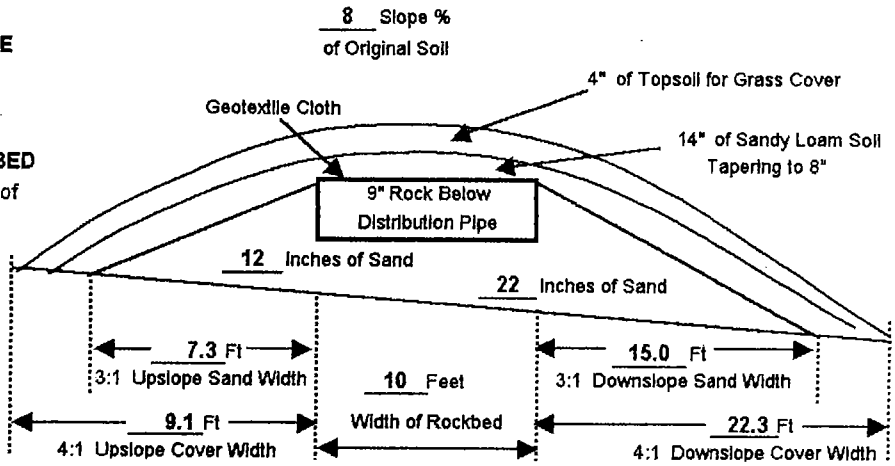
9. **DOWNSLOPE BERM WIDTH**
   = Downslope Berm Multiplier (8) x Downslope Height (7)
   3:1 = (8) 3.95 x (7) 3.8 = 15.0 Feet
   4:1 = (8) 5.88 x (7) 3.8 = 22.3 Feet

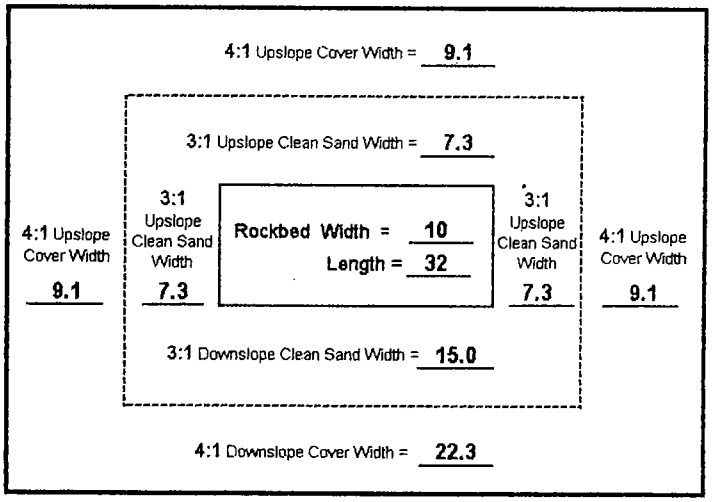
10. **ACTUAL DOWNSLOPE BERM WIDTH** = Compare Step (1) 5.0
    3:1 = with Step (9) 15.0
    Select the Greater of the two values 15.0 Feet
    4:1 = with Step (9) 22.3
    Select the Greater of the two values 22.3 Feet

11. **TOTAL MOUND WIDTH**
    = Upslope Berm Width (5) + Rock Layer Width (K) + Downslope Berm Width (10)
    3:1 = (5) 7.3 + (K) 10 + (10) 15.0 = 32.3 Ft
    4:1 = (5) 9.1 + (K) 10 + (10) 22.3 = 41.4 Ft

12. **TOTAL MOUND LENGTH**
    = Upslope Berm Width (5) + Rock Layer Length (L) + Upslope Berm Width (5)
    3:1 = (5) 7.3 + (L) 32 + (5) 7.3 = 46.6 Ft
    4:1 = (5) 9.1 + (L) 32 + (5) 9.1 = 50.2 Ft

MOUND CROSS-SECTION





Final Dimensions = Width 41.4 Ft x Length 50.2 Ft

Land Slope %	Berm Multipliers for various berm slope ratios			
	DOWNSLOPE		UPSLOPE	
	3:1	4:1	3:1	4:1
0	3.00	4.00	3.00	4.00
1	3.09	4.17	2.91	3.85
2	3.19	4.35	2.83	3.70
3	3.30	4.54	2.75	3.57
4	3.41	4.76	2.68	3.45
5	3.53	5.00	2.61	3.33
6	3.66	5.26	2.54	3.23
7	3.80	5.56	2.48	3.12
8	3.95	5.88	2.42	3.03
9	4.11	6.25	2.36	2.94
10	4.29	6.67	2.31	2.86
11	4.48	7.14	2.26	2.78
12	4.69	7.69	2.21	2.70

FINAL DIMENSIONS

	Width	Length
3:1 Clean Sand =	32.3	x 46.6
4:1 Total Cover =	41.4	x 50.2

SOIL BORING / PIT LOG

PROPERTY OWNER: **Richard Vigstol** PARCEL CODE: **29-0-035100** **06/09/2003**

NOTE: A MINI-EXCAVATOR WITH A MAXIMUM 4 FOOT DEPTH IS USED TO DIG SOIL PITS.
SOIL BORINGS THEN TAKEN AT BOTTOM OF PITS FOR FURTHER DEPTH SOIL ANALYSIS.

Depth	Color	Texture
Pit #1		
0 – 16		Loamy Mottled Fill
16 – 23	10YR 3/2	Loam Original Top Soil
23+	**10YR 5/8, 6/1**	**Mottled**
Pit #2		
0 – 20		Loamy Mottled Fill
20+	**10YR 5/8, 6/1**	**Mottled**

AITKIN COUNTY
CERTIFICATE OF COMPLIANCE/NOTICE OF NONCOMPLIANCE

This certificate of compliance/notice of noncompliance has been issued this _____ day of 7/8/04 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: _____

Part of Gov. lot 5 of NE¼ of SW¼

Section 18 Township 49 Range 23 Lake Big Sandy

PERMIT NO. 30601 Owner Name Richard Vigstol

Address 49610 Hwy 65 McGregor, MN 55760

Installer Name Darlow

Type of System Inspected "other" Mound w/sand filter

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 _____

c:\wp61\terry.dir\certform.doc

30601

INDIVIDUAL SEWAGE TREATMENT SYSTEM INSPECTION FORM
AITKIN COUNTY, MINNESOTA

Township Shamrock Date of Inspection 10/1/03 Permit Number 30601

Owner Richard Vigstol Parcel Number 29-0-035100

Project Address pt. of Gov. LOT 5 of NE¼ of SW¼ Installer Darlow

City _____ Zip Code _____ New ✓ Repair _____

DIST. or DROP BOX & TYPE _____

SETBACKS:
Buildings to tank(s) 10'
Buildings to drainfield 30
Well(s) 50' or 100' 50
Lake/Creek/Wetland 75'

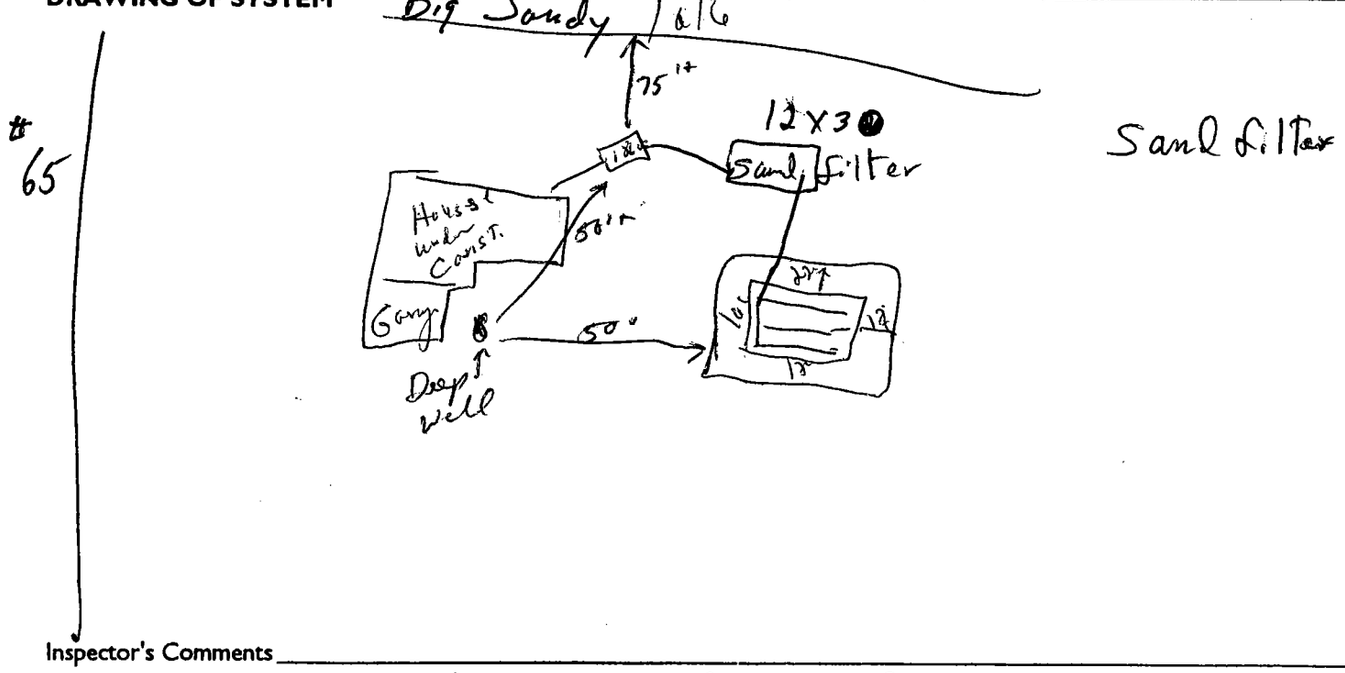
SEPTIC TANKS:
Liquid capacity 1860 Combo
Manufacturer & type Jae - pre-cast
Type of baffle plastic
Inspection pipes 1 - 4" - 1 - 6"
Manholes access 1
No. & height of risers 18" 24"

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 _____

MOUNDS:
Percent slope 8%
Upslope dike width 18'
Downslope dike width 22'
Sideslope dike width 12'
Drainfield rock below pipe 9"
Depth of sand below rock 18"
Perforation size & spacing 1/4 - 3"
Pipe size & spacing 1½ - 3 Alternate
Dimensions of rock bed 18 X 38
Dimensions of sand base 44 X 54
Final cover 16" in Center 12" on Rock Edge

PUMPS:
Tank capacity 630
Tank manufacturer & type Jae pump
No. & height of risers 24"
Pump manufacturer & model# _____
Horsepower & GPM _____
Feet of head 12
Cycles per day Time Dosed
Gallons per cycle Time Dosed
Size of discharge line 2"
Type of electrical hookup Elec. Post
Type & location of alarm Time dosed
Cycle counter (commercial) _____

DRAWING OF SYSTEM



Inspector's Comments
Took out old Mound and filled in with Clean Sand.

Corrective Action Required _____

Inspector's Signature Joe Tuhy Installer's Signature Eric Darlow SR

White-County Yellow-Applicant Pink-Installer

#30601 29-0-035100

AITKIN COUNTY ENVIRONMENTAL SERVICES-PLANNING & ZONING

209 Second Street, NW
Aitkin, Minnesota 56431

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

August 26, 2005

RE: Renewed Operating Permit

To Whom It May Concern:

This letter is to inform you that your Operating Permit (No. 117) has been renewed until May 31, 2006. You should note that all renewal dates that were formerly on December 31 have been moved forward to allow your Operation and Maintenance provider suitable time to complete the monitoring report.

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,

Richard Courtemanche
Assistant Zoning Administrator
Aitkin County

29-0-035100

AITKIN COUNTY ENVIRONMENTAL SERVICES

OPERATING PERMIT FOR WASTEWATER TREATMENT AND DISPERSAL

OPERATING PERMIT #: 117

FEE: $50.00

PERMITTEE: Richard Vigstol

PHONE: (218) 426-4268

ADDRESS: 49610 Hwy 65
McGregor, MN 55760-

ZONING PERMIT # 30601

PARCEL #: 29-0-035100

LEGALDESCRIPTION: part of Govt Lot 5 in NE SW in Doc 275216

ISSUE DATE 1/ 1/05

EXPIRATION DATE ~~12/31/05~~ 5-31-06

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.

Richard Vigstol
Signature of Permittee

08-03-05
Date

Signature of Permitting Authority

08-03-05
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.

continue

A. DESCRIPTION OF WASTEWATER TREATMENT AND DISPERSAL SYSTEM

This ISTS will gravity from the proposed house into a new 1960 combination tank. From there the liquids are pumped into a 12X30 OSI Sand filter. AN OSI pump vault placed in the sand filter will pump the treated liquids. Treated liquids will be dosed at a maximum of 375 gpd, into a downsized 2.5 bedroom 1-foot sandbase mound with a 10X32 rockbed. System construction $12,000 +, Operation $10/mo, $150 /year

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 FREQUENCY
Flow	450 gpd	Water Meter	MONTHLY	Record on Log Sheet	ANNUALLY
Separation	1 foot	Dispersal System	ANNUALLY	Measure in Field	ANNUALLY

C. MAINTENANCE REQUIREMENTS:

PARAMETER	LOCATION	FREQUENCY
Flow	Water Meter	MONTHLY
Pressurization of Laterals	Sand Filter	ANNUAL
Pumps, Floats & Alarms	Pump Chamber	ANNUAL
Solids Removal & Water Tightness	Septic tank(s)	ANNUAL
Surface Discharge	Dispersal System	ANNUAL
Vegetative Cover	Dispersal System	ANNUAL

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 responibility of the Permittee.

Monitoring will be done by A.M. and Associate

E. MITIGATION PLAN:

1) If weeping occurss; lower dosing rate, lower water usage, increase distribution and absorption area. 2) If OSI Sand Filter experiences problems, fix, or repair at recommendations of Manufacter, or replace. 3) A diferent or another Performance or Other System may be installed at the owner's expense. 4) 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:

* A WATER METER MUST BE INSTALLED BEFORE COMPLIANCE CERTIFICATE CAN BE ISSUED **

A. M. & Associates, Inc.
29465 442ND LANE
Palisade, MN 56469
(218) 768-4430

Michael D. O'Keeffe
Annette M. O'Keeffe
SEPTIC SYSTEMS
DESIGNS * INSPECTIONS * MAINTENANCE
MPCA #1357

ONE YEAR
MAINTENANCE, MONITORING AND INSPECTION SERVICE CONTRACT
FOR INDIVIDUAL SEWAGE TREATMENT SYSTEM
FOR June 1st 2005 thru May 31st 2006

It is hereby agreed this 27th day of July, 20 05 by and between A.M. & Associates, Inc. and

Property Owner(s):	**RICHARD VIGSTOL**	Parcel Code:	**29-0-035100**
Home Address:	**49610 HWY 65** **McGREGOR, MN 55760**	Site Address:	**SAME**
Phone (home)	**(218) 426-4268**	Township	**SHAMROCK**
(cell)	**(612) 991-1532**	Phone:	**(218) 426-4268**
(fax)			

DESCRIPTION OF INDIVIDUAL SEWAGE TREATMENT SYSTEM

3 BEDROOM OSI SANDFILTER TIME DOSED INTO A 2½ BEDROOM 1 FOOT SANDBASE MOUND

This ISTS is to have the wastewater gravity from the proposed house into a new 1960 combination tank. From there, the liquids are pumped into an 12' x 30' OSI Sand Filter. An OSI Pump Vault placed inside the Sand Filter will pump the treated liquids, Timed Dosed at a maximum of 375 gpd, into a downsized 2 ½ Bedroom 1 foot sandbase Mound with a 10' x 32' Rockbed.

Installation Date: **06/01/2004** Installer: **Ernie Darlow** Phone#: **(218) 426-4320**

That A.M. & Associates, Inc. will provide the services to perform Preventative Maintenance, Monitoring and Inspection of the parameters and frequency described herein as your Operating Permit requires for your Individual Sewage Treatment System (ISTS).

Each inspection includes an examination of the ISTS followed by a written report to the Property Owner. This inspection report shall contain recommendations for operation and maintenance for failure-preventative measures, if any are deemed appropriate by the inspector, and a list of recommended corrective measures or replacement parts. A.M. & Associates, Inc. is authorized to submit a copy of the report to the pertaining County's Environmental Services Department.

This contract does not assume any responsibilities or obligations, which are normally the responsibilities of the Property Owner, or as related to parts or labor and does not extend to cover any costs that may be associated with any recommendations made under this contract.

A.M. & Associates, Inc. can only contract or subcontract for parts or labor after authorization by you. Billings for service calls shall be made on a case by case basis. This contract **only** covers maintenance, monitoring and inspection services per current pertaining County Operating Permit and **does not** cover alarm calls of any kind.

On-site Service Calls cost of a minimum of $50.00 plus $50.00 per hour for time and labor required from A.M. & Associates, due to alarms, misuse or abuse of any portion of this System, is the responsibility of the Property Owner(s), payable at time of Service. Minnesota Onsite Specialties fees for Service calls are separate.

All cost for parts time and labor, required to analyze, fix or replace any portion of this system, for damages caused by winter freezing, is the responsibility of the Property Owner(s).

All additional cost, time and labor required from A.M. & Associates, Inc. and/or Minnesota Onsite Speciaties due to modifications made by the pertaining County's Environmental Services Department, is the responsibility of the Property Owner(s), and is payable within 20 days of billing.

In no event shall A.M. & Associates, Inc., Minnesota Onsite Specialties, or the Inspector be responsible for special or consequential damages, including but not limited to, loss of time, injury to personal property or any other consequential damages or incidental or economic loss due to equipment failure or for any other reason.

A.M. & Associates, Inc. shall be provided access to the site and the system in order to perform the following services that are marked:

CONTROL/ALARM PANEL ***(Annually)***

- X 1. Check pump operations in manual mode
- X 2. Check timer settings
- X 3. Record elapsed time meter and counter readings
- X 4. Confirm operation of audible and visual alarms

LIFT PUMPING STATION ***(Annually)***

- X 1. Verify no leaks in riser
- X 2. Inspect splice box for moisture and secure connections
- X 3. Verify condition of and correct operation of all floats
- X 4. Verify neat wrap of float cords
- X 5. Visually inspect recirculating splitter valve (if applicable) and liquid level
- X 6. Check general appearance

EFFLUENT FILTERS/PUMP SCREENS ***(Annually)***

- X 1. Check effluent filter for buildup of biomat growth
- X 2. Clean (if needed)

SEPTIC TANK ***(Annually)***

- X 1. Measure sludge and scum level
- X 2. Tank(s) should be pumped if the sludge layer is closer than 12" to the bottom of the inlet baffel or whenever the scum is closer than 3" to the bottom of the outlet baffel
  * (If the test results determine a need for solids removal, the Property Owner will bear the cost and responsibility for doing so)
- X 3. Check general appearance

PRETREATMENT DEVICE *(Annually)*

X 1. Inspect for ponding; assess character and color of biomat
X 2. Test pressurization of laterals (squirt test)
X 3. Verify proper orifice position, equal spray under orifices, no clogged orifices
X 4. Check for odors: adjust recirculating time (if necessary)
X 5. Clean and flush manifold (if necessary)
X 6. Re-check squirt height (if necessary)
X 7. Inspect the appearance of the wastewater inside the unit for color and turbidity.

DISPERSAL FIELD *(Annually)*

X 1. Inspect for visible signs of failure (surface discharge, soggy ground, wet spots, settling, etc.)
X 2. If liquid level monitors are installed, levels will be observed and recorded.
___ 3. Flush filters and clean cartridges, if applicable
___ 4. Check field control unit solenoid operations or manual control, if applicable
X 5. Check for required separation

SAMPLING *(As Deemed Necessary)*

___ 1. Aquire and deliver samples for analysis of BODs, TSS, Fats Oils and Grease, and Fecal Coliform (cost of sampling analysis plus delivery charges is the responsibility of the Property Owner. If more than one analysis is recommended and required within the duration of this contract, the additional labor costs aquired by A.M. & Associates, Inc. along with sampling analysis fees and delivery charges is the responsibility of the Property Owner).

MISCELLANEOUS *(Annually)*

X 1. Review water usage from water meter records kept by the Property Owner.

*** **PROPERTY OWNER'S RESPONSIBILITIES** *(Monthly and/or as Required)*

During the term hereof, I/we as the current Property Owner(s) understand that I/we;

1. Will provide A.M. & Associates, Inc. with access to the System. Access includes electrical controls & disconnects, hose hookup water supply and sufficient workspace to perform the necessary maintenance services
2. Will be responsible for recording water meter readings on a *monthly* basis.
3. Must *notify* A.M. & Associates, Inc. *immediately* when signs of weeping problems, sewage smell or any other indication that the system may not be functioning properly.
4. Will provide A.M. & Associates, Inc. copies of the water meter records, upon request.
5. Must aquire pre-authorization from A.M. & Associates, Inc., *prior* to the Property Owner or any other individual performing or attempts to:
    a. make alterations or modifications to the System, or
    b. misuse the System, or
    c. attach devices to it , or
    d. execute any type of Maintenance services to the system or any portion thereof
6. Will notify A.M. & Associates, Inc. of new ownership of property if within the duration of this contract.
7. Will accept all responsibility and risks involved with the installation and hydraulic performance of this Septic System and hold A.M. & Associates, Inc. harmless from all liability for this Sewage Treatment System whatsoever.
8. May be required to perform additional maintenance responsibilities as deemed necessary by A.M. & Associates, Inc.

This contract shall remain in force for a period of one year, beginning **June 1st 2005** and ending **May 31st 2006.**

FEES

Maintenance, Monitoring & Inspection Service Contract		**0.00**	**Due at time of signing contract**
Sample Analysis Fees & Supplies	(approx)	**N/A**	**Due at time of sampling**
***Time & Mileage to Deliver Samples for Analysis**		**N/A**	**Due at time of sampling**

NOTE: SAMPLING OF FECAL COLIFORM, BOD, TSS, AND FATS OIL AND GREASE IS *NOT* REQUIRED AT THIS TIME. IF SAMPLING IS FOUND TO BE NECESSARY DURING THE DURATION OF THE USE OF THIS SEPTC SYSTEM, THE PROPERTY OWNER(S) IS RESPONSIBLE FOR *ALL* COSTS INVOLVED, AND IS DUE AT TIME THE SAMPLES ARE TO BE TAKEN.

*If at time of sampling, the Property Owner(s) wishes to transport the samples to Brainerd himself for analysis, within the *required time limit*, A.M. & Associates, Inc. will wave the time, mileage delivery fees of $100.00.

A.M. & Associates, Inc. agrees to provide inspection, monitoring and routine maintenance service only under this contract.

I hereby certify with my signature as the Property Owner(s) that I understand the provisions, requirements and responsibilities of this Maintenance, Monitoring and Inspection Service Contract. I also understand failure to comply with the requirements outlined in my Operating Permit, this Contract, along with any future requirements that may arise, set forth by Aitkin County Environmental Services, Orenco Systems, Inc. (OSI) or A.M. & Associates, Inc., could result in the condemning of my septic system, removal of the use of the drainfield, and require the use of Holding Tanks with a pumping Contract.

Property Owner(s):

Name: **RICHARD VIGSTOL** (please print) _____ (signature) Date: 08-03-05

Spouse: _____ (please print) _____ (signature) Date: _____

A.M. & Associates, Inc.:

Name: **MICHAEL D. O'KEEFFE** (please print) _____ (signature) Date: 7-27-05

A. M. & Associates, Inc.
29465 442ND LANE
Palisade, MN 56469
(218) 768-4430

Michael D. O'Keeffe
Annette M. O'Keeffe
SEPTIC SYSTEMS
DESIGNS * INSPECTIONS * MAINTENANCE
MPCA #1357

MAINTENANCE, MONITORING AND INSPECTION REPORT

FOR INDIVIDUAL SEWAGE TREATMENT SYSTEM

1ST YEAR SERVICE
2004

Property Owner(s):	**RICHARD VIGSTOL**		
Home Address:	**49610 HWY 65**	Site Address:	**SAME**
	McGREGOR, MN 55760		**BIG SANDY LAKE**
Phone:	**(218) 426-4268**		
		Township:	**SHAMROCK**
Parcel Code:	**29-0-035100**		

DESCRIPTION OF INDIVIDUAL SEWAGE TREATMENT SYSTEM

3 BEDROOM OSI SANDFILTER TIME DOSED INTO A 2½ BEDROOM 1 FOOT SANDBASE MOUND

This ISTS is to have the wastewater gravity from the proposed house into a new 1960 combination tank. From there, the liquids are pumped into an 12' x 30' OSI Sand Filter. An OSI Pump Vault placed inside the Sand Filter will pump the treated liquids, Timed Dosed at a maximum of 375 gpd, into a downsized 2 ½ Bedroom 1 foot sandbase Mound with a 10' x 32' Rockbed.
2 ½ Bedrooms, 375 gpd (max), 11,250 gallons per month.

Installation Date: **06/01/2004** Installer: **Ernie Darlow** Phone#: **(218) 426-4320**

2004 MAINTENANCE & MONITORING RESULTS

Date Maintained: 07/21/2005

CONTROL/ALARM PANEL	RESULTS
1. Check pump operations in manual mode	**Good**
2. Check timer settings	**Good**
3. Record elapsed time meter and counter readings.	**ST ETM = 903 min CNT = 1475** **SF ETM = 1155 min CNT = 1303**
4. Confirm operation of audible and visual alarms	**Good**
5. Test Pump Amperage	**Not Checked at This Time**

LIFT PUMPING STATION	RESULTS
1. Verify no leaks in riser	**Good**
2. Inspect splice box for moisture and secure connections	**Drilled Drainage Hole (Dry)**
3. Verify condition of and correct operation of all floats	**Good**
4. Verify neat wrap of float cords	**Good**
5. Pull pump and clean intake screen if necessary	**Cleaned**
6. Check general appearance	**Good**

EFFLUENT FILTERS/PUMP SCREENS	RESULTS
1. Check effluent filter for buildup of biomat growth.	**Good**
2. Clean (if needed)	**Cleaned**

2004 MAINTENANCE & MONITORING RESULTS

SEPTIC TANK	RESULTS
1. Measure sludge and scum level	**Sludge level = 8" Scum level = 0" (No Clear Zone)**
2. Tank(s) should be pumped if the sludge layer is closer than 12" to the bottom of the inlet baffel or whenever the scum is closer than 3" to the bottom of the outlet baffel.	**Not Necessary at this time**
3. Check general appearance	**Good**

PRETREATMENT DEVICE	RESULTS
1. Inspect for ponding; assess character and color of biomat	**Good**
2. Test pressurization of laterals (squirt test)	**Good -height = approx 3 ½ ft**
3. Verify proper orifice position, equal spray under orifices no clogged orifices	**Good**
4. Check for odors: adjust recirculating time (if necessary)	**Good**
5. Clean and flush manifold (if necessary)	**Good**
6. Re-check squirt height (if necessary)	**Not necessary at this time.**
7. Inspect the appearance of the wastewater inside the unit for color and turbidity.	**Effluent Clear**

DISPERSAL FIELD	RESULTS
1. Inspect for visible signs of failure (surface discharge, soggy ground, wet spots, settling, etc.)	**No signs of failure.**
2. Check for required separation	**Good**

MISCELLANEOUS	RESULTS	
1. Review water usage from water meter records.	**Date**	**Gallons Used**
	06/28/04	**2860**
	07/06/04	**750**
	07/24/04	**1240**
	08/09/04	**1630**
	09/06/04	**2020**
	10/06/04	**1160**
	11/02/04	**1450**
	12/01/04	**1740**
	12/22/04	**970**
	01/20/05	**4530**
	02/10/05	**940**
	02/25/05	**780**
	03/15/05	**1390**
	04/03/05	**500**
	05/25/05	**1980**
	06/01/05	**1070**
	06/29/05	**840**
	07/05/05	**1010**
	07/21/05	**110**

COMMENTS: **ALL COMPONENTS LOOK GOOD.**

Drainfield is sized for 2 ½ Bedrooms, 375 gpd, 11,250 gallons per month. Water usage is well within limitations.

AITKIN COUNTY ENVIRONMENTAL SERVICES

OPERATING PERMIT FOR WASTEWATER TREATMENT AND DISPERSAL

OPERATING PERMIT #: 117 **FEE:** $50.00

PERMITTEE: Richard Vigstol **PHONE:** (218) 426-4268

ADDRESS: 49610 Hwy 65
McGregor, MN 55760-

ZONING PERMIT # 30601 **PARCEL #:** 29-0-035100

LEGALDESCRIPTION: part of Govt Lot 5 in NE SW in Doc 275216

ISSUE DATE 5/31/2006 **EXPIRATION DATE** 5/31/2007

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.

Richard Vigstol
Signature of Permittee

05-09-06
Date

W. Kingsley
Signature of Permitting Authority

5/9/06
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.

Pd Receipt #19904 5/9/06

A. DESCRIPTION OF WASTEWATER TREATMENT AND DISPERSAL SYSTEM

This ISTS will gravity from the proposed house into a new 1960 combination tank. From there the liquids are pumped into a 12X30 OSI Sand filter. AN OSI pump vault placed in the sand filter will pump the treated liquids. Treated liquids will be dosed at a maximum of 375 gpd, into a downsized 2.5 bedroom 1-foot sandbase mound with a 10X32 rockbed. System construction $12,000 +, Operation $10/mo, $150 /year

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
Flow	450 gpd	Water Meter	MONTHLY	Record on Log Sheet	ANNUALLY
Separation	1 foot	Dispersal System	ANNUALLY	Measure in Field	ANNUALLY

C. MAINTENANCE REQUIREMENTS:

PARAMETER	LOCATION	FREQUENCY
Flow	Water Meter	MONTHLY
Pressurization of Laterals	Sand Filter	ANNUAL
Pumps, Floats & Alarms	Pump Chamber	ANNUAL
Solids Removal & Water Tightness	Septic tank(s)	ANNUAL
Surface Discharge	Dispersal System	ANNUAL
Vegetative Cover	Dispersal System	ANNUAL

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 responibility of the Permittee.

Monitoring will be done by A.M. & Associates I

E. MITIGATION PLAN:

1) If weeping occurss; lower dosing rate, lower water usage, increase distribution and absorption area. 2) If OSI Sand Filter experiences problems, fix, or repair at recommendations of Manufacter, or replace. 3) A diferent or another Performance or Other System may be installed at the owner's expense. 4) 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:

* A WATER METER MUST BE INSTALLED BEFORE COMPLIANCE CERTIFICATE CAN BE ISSUED **

A. M. & Associates, Inc.
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Palisade, MN 56469
(218) 768-4430

Michael D. O'Keeffe
Annette M. O'Keeffe
SEPTIC SYSTEMS
DESIGNS * INSPECTIONS * MAINTENANCE
MPCA #1357

MAINTENANCE, MONITORING AND INSPECTION REPORT

FOR INDIVIDUAL SEWAGE TREATMENT SYSTEM

2nd YEAR SERVICE
June 1, 2005 thru May 31, 2006

Property Owner(s):	**RICHARD VIGSTOL**		
Home Address:	**49610 HWY 65** **McGREGOR, MN 55760**	Site Address:	**SAME** **BIG SANDY LAKE**
Phone:	**(218) 426-4268**		
		Township:	**SHAMROCK**
Parcel Code:	**29-0-035100**		

DESCRIPTION OF INDIVIDUAL SEWAGE TREATMENT SYSTEM

3 BEDROOM OSI SANDFILTER TIME DOSED INTO A 2½ BEDROOM 1 FOOT SANDBASE MOUND

This ISTS is to have the wastewater gravity from the proposed house into a new 1960 combination tank. From there, the liquids are pumped into an 12' x 30' OSI Sand Filter. An OSI Pump Vault placed inside the Sand Filter will pump the treated liquids, Timed Dosed at a maximum of 375 gpd, into a downsized 2 ½ Bedroom 1 foot sandbase Mound with a 10' x 32' Rockbed.
2 ½ Bedrooms, 375 gpd (max), 11,250 gallons per month.

Installation Date: **06/01/2004** Installer: **Ernie Darlow** Phone#: **(218) 426-4320**

JUNE 2005 THRU MAY 2006 MAINTENANCE & MONITORING RESULTS

Date Maintained: 07/21/2005

CONTROL/ALARM PANEL	RESULTS
1. Check pump operations in manual mode	**Good**
2. Check timer settings	**Good**
3. Record elapsed time meter and counter readings.	**ST ETM = 903 min CNT = 1475** **SF ETM = 1155 min CNT = 1303**
4. Confirm operation of audible and visual alarms	**Good**
5. Test Pump Amperage	**Not Checked at This Time**

LIFT PUMPING STATION	RESULTS
1. Verify no leaks in riser	**Good**
2. Inspect splice box for moisture and secure connections	**Drilled Drainage Hole (Dry)**
3. Verify condition of and correct operation of all floats	**Good**
4. Verify neat wrap of float cords	**Good**
5. Pull pump and clean intake screen if necessary	**Cleaned**
6. Check general appearance	**Good**

EFFLUENT FILTERS/PUMP SCREENS	RESULTS
1. Check effluent filter for buildup of biomat growth.	**Good**
2. Clean (if needed)	**Cleaned**

JUNE 2005 THRU MAY 2006 MAINTENANCE & MONITORING RESULTS

SEPTIC TANK	RESULTS
1. Measure sludge and scum level	**Sludge level = 8" Scum level = 0" (No Clear Zone)**
2. Tank(s) should be pumped if the sludge layer is closer than 12" to the bottom of the inlet baffel or whenever the scum is closer than 3" to the bottom of the outlet baffel.	**Not Necessary at this time**
3. Check general appearance	**Good**

PRETREATMENT DEVICE	RESULTS
1. Inspect for ponding; assess character and color of biomat	**Good**
2. Test pressurization of laterals (squirt test)	**Good -height = approx 3 ½ ft**
3. Verify proper orifice position, equal spray under orifices no clogged orifices	**Good**
4. Check for odors: adjust recirculating time (if necessary)	**Good**
5. Clean and flush manifold (if necessary)	**Good**
6. Re-check squirt height (if necessary)	**Not necessary at this time.**
7. Inspect the appearance of the wastewater inside the unit for color and turbidity.	**Effluent Clear**

DISPERSAL FIELD	RESULTS
1. Inspect for visible signs of failure (surface discharge, soggy ground, wet spots, settling, etc.)	**No signs of failure.**
2. Check for required separation	**Good**

JUNE 2005 THRU MAY 2006 MAINTENANCE & MONITORING RESULTS

MISCELLANEOUS	RESULTS	
1. Review water usage from water meter records.	Date	Gallons Used
	06/28/04	2860
	07/06/04	750
	07/24/04	1240
	08/09/04	1630
	09/06/04	2020
	10/06/04	1160
	11/02/04	1450
	12/01/04	1740
	12/22/04	970
	01/20/05	4530
	02/10/05	940
	02/25/05	780
	03/15/05	1390
	04/03/05	500
	05/25/05	1980
	06/01/05	1070
	06/29/05	840
	07/05/05	1010
	07/21/05	110
	08/03/05	930
	09/02/05	1560
	09/06/05	1010
	09/19/05	1490
	12/01/05	3700
	01/04/06	3860
	02/05/06	2030
	02/13/06	1730
	03/07/06	2910
	03/31/06	1030
	04/06/06	440

COMMENTS: **ALL COMPONENTS LOOK GOOD.**

Drainfield is sized for 2 ½ Bedrooms, 375 gpd, 11,250 gallons per month. Water usage is well within limitations.

4/30/2006

A. M. & Associates, Inc.
29465 442ND LANE
Palisade, MN 56469
(218) 768-4430

Michael D. O'Keeffe
Annette M. O'Keeffe
SEPTIC SYSTEMS
DESIGNS * INSPECTIONS * MAINTENANCE
MPCA #1357

ONE YEAR
MAINTENANCE, MONITORING AND INSPECTION SERVICE CONTRACT
FOR INDIVIDUAL SEWAGE TREATMENT SYSTEM
FOR June 1st 2006 thru May 31st 2007

It is hereby agreed this 6th day of April, 20 06 by and between A.M. & Associates, Inc. and

Property Owner(s):	**RICHARD VIGSTOL**	Parcel Code:	**29-0-035100**
Home Address:	**49610 HWY 65** **McGREGOR, MN 55760**	Site Address:	**SAME**
Phone (home)	**(218) 426-4268**	Township	**SHAMROCK**
(cell)	**(612) 991-1532**	Phone:	**(218) 426-4268**
(fax)			

DESCRIPTION OF INDIVIDUAL SEWAGE TREATMENT SYSTEM

3 BEDROOM OSI SANDFILTER TIME DOSED INTO A 2½ BEDROOM 1 FOOT SANDBASE MOUND

This ISTS is to have the wastewater gravity from the proposed house into a new 1960 combination tank. From there, the liquids are pumped into an 12' x 30' OSI Sand Filter. An OSI Pump Vault placed inside the Sand Filter will pump the treated liquids, Timed Dosed at a maximum of 375 gpd, into a downsized 2 ½ Bedroom 1 foot sandbase Mound with a 10' x 32' Rockbed.

Installation Date: **06/01/2004** Installer: **Ernie Darlow** Phone#: **(218) 426-4320**

That A.M. & Associates, Inc. will provide the services to perform Preventative Maintenance, Monitoring and Inspection of the parameters and frequency described herein as your Operating Permit requires for your Individual Sewage Treatment System (ISTS).

Each inspection includes an examination of the ISTS followed by a written report to the Property Owner. This inspection report shall contain recommendations for operation and maintenance for failure-preventative measures, if any are deemed appropriate by the inspector, and a list of recommended corrective measures or replacement parts. A.M. & Associates, Inc. is authorized to submit a copy of the report to the pertaining County's Environmental Services Department.

PRETREATMENT DEVICE ***(Annually)***

X 1. Inspect for ponding; assess character and color of biomat
X 2. Test pressurization of laterals (squirt test)
X 3. Verify proper orifice position, equal spray under orifices, no clogged orifices
X 4. Check for odors: adjust recirculating time (if necessary)
X 5. Clean and flush manifold (if necessary)
X 6. Re-check squirt height (if necessary)
X 7. Inspect the appearance of the wastewater inside the unit for color and turbidity.

DISPERSAL FIELD ***(Annually)***

X 1. Inspect for visible signs of failure (surface discharge, soggy ground, wet spots, settling, etc.)
X 2. If liquid level monitors are installed, levels will be observed and recorded.
___ 3. Flush filters and clean cartridges, if applicable
___ 4. Check field control unit solenoid operations or manual control, if applicable
X 5. Check for required separation

SAMPLING ***(As Deemed Necessary)***

___ 1. Aquire and deliver samples for analysis of BODs, TSS, Fats Oils and Grease, and Fecal Coliform (cost of sampling analysis plus delivery charges is the responsibility of the Property Owner. If more than one analysis is recommended and required within the duration of this contract, the additional labor costs aquired by A.M. & Associates, Inc. along with sampling analysis fees and delivery charges is the responsibility of the Property Owner).

MISCELLANEOUS ***(Annually)***

X 1. Review water usage from water meter records kept by the Property Owner.

***** PROPERTY OWNER'S RESPONSIBILITIES** ***(Monthly and/or as Required)***

During the term hereof, I/we as the current Property Owner(s) understand that I/we;

1. Will provide A.M. & Associates, Inc. with access to the System. Access includes electrical controls & disconnects, hose hookup water supply and sufficient workspace to perform the necessary maintenance services
2. Will be responsible for recording water meter readings on a *monthly* basis.
3. Must *notify* A.M. & Associates, Inc. *immediately* when signs of weeping problems, sewage smell or any other indication that the system may not be functioning properly.
4. Will provide A.M. & Associates, Inc. copies of the water meter records, upon request.
5. Must aquire pre-authorization from A.M. & Associates, Inc., *prior* to the Property Owner or any other individual performing or attempts to:
    a. make alterations or modifications to the System, or
    b. misuse the System, or
    c. attach devices to it , or
    d. execute any type of Maintenance services to the system or any portion thereof
6. Will notify A.M. & Associates, Inc. of new ownership of property if within the duration of this contract.
7. Will accept all responsibility and risks involved with the installation and hydraulic performance of this Septic System and hold A.M. & Associates, Inc. harmless from all liability for this Sewage Treatment System whatsoever.
8. May be required to perform additional maintenance responsibilities as deemed necessary by A.M. & Associates, Inc.

This contract shall remain in force for a period of one year, beginning **June 1st 2006** and ending **May 31st 2007.**

FEES

Maintenance, Monitoring & Inspection Service Contract		**$150.00**	**Due at time of signing contract**
Sample Analysis Fees & Supplies	**(approx)**	**N/A**	**Due at time of sampling**
***Time & Mileage to Deliver Samples for Analysis**		**N/A**	**Due at time of sampling**

NOTE: SAMPLING OF FECAL COLIFORM, BOD, TSS, AND FATS OIL AND GREASE IS *NOT* REQUIRED AT THIS TIME. IF SAMPLING IS FOUND TO BE NECESSARY DURING THE DURATION OF THE USE OF THIS SEPTC SYSTEM, THE PROPERTY OWNER(S) IS RESPONSIBLE FOR *ALL* COSTS INVOLVED, AND IS DUE AT TIME THE SAMPLES ARE TO BE TAKEN.

*If at time of sampling, the Property Owner(s) wishes to transport the samples to Brainerd himself for analysis, within the *required time limit*, A.M. & Associates, Inc. will wave the time, mileage delivery fees of $100.00.

A.M. & Associates, Inc. agrees to provide inspection, monitoring and routine maintenance service only under this contract.

I hereby certify with my signature as the Property Owner(s) that I understand the provisions, requirements and responsibilities of this Maintenance, Monitoring and Inspection Service Contract. I also understand failure to comply with the requirements outlined in my Operating Permit, this Contract, along with any future requirements that may arise, set forth by Aitkin County Environmental Services, Orenco Systems, Inc. (OSI) or A.M. & Associates, Inc., could result in the condemning of my septic system, removal of the use of the drainfield, and require the use of Holding Tanks with a pumping Contract.

Property Owner(s):

Name: **RICHARD VIGSTOL** (please print) Richard Vigstol (signature) Date: 04-06-06

Spouse: _____ (please print) _____ (signature) Date: _____

A.M. & Associates, Inc.:

Name: **MICHAEL D. O'KEEFFE** (please print) Michael D O'Keeffe (signature) Date: 5-3-06

AITKIN COUNTY
ENVIRONMENTAL SERVICES

209 SECOND STREET NW
AITKIN, MN 56431
218-927-7250

Wednesday, March 15, 2006

Richard Vigstol
49610 Hwy 65
McGregor, MN 55760-

Re: Operating Permit #: 117
Parcel Identification #: 29-0-035100

Dear Resident:

This letter is to remind you that the Operating Permit for the septic system on the above listed parcel of land will expire on May 31, 2006. The operating permit (OP) was issued as a MN Pollution Control Agency requirement to allow the installation of your septic system and must be renewed annually until the County and your Compliance Inspector agree that the system is being properly maintained and is operating appropriately. As a condition of the OP, your septic system must be monitored for the following performance standards:

PARAMETER	COMPLIANCE LIMIT	SAMPLE LOCATION	SAMPLE FREQUENCY	SAMPLE TYPE	REPORTING FREQUENCY
FLOW	450 GPD	WATER METER	MONTHLY	RECORD ON LOG SHEET	ANNUALLY
SEPARATION	1 FOOT	DISPERSAL SYSTEM	ANNUALLY	MEASURE IN FIELD	ANNUALLY

In addition, the following maintenance practices must be performed:

PARAMETER	LOCATION	FREQUENCY
Flow	Water Meter	MONTHLY
Pressurization of Laterals	Sand Filter	ANNUAL
Pumps, Floats & Alarms	Pump Chamber	ANNUAL
Solids Removal & Water Tightness	Septic tank(s)	ANNUAL
Surface Discharge	Dispersal System	ANNUAL
Vegetative Cover	Dispersal System	ANNUAL

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 high performance of the system. Failure to perform the monitoring and maintenance of this system could cause costly repairs or replacement and is a violation of the Aitkin County Individual Sewage Treatment System and Wastewater Ordinance.

A copy of this letter will be sent to A.M. & Associates Inc.

A. M. & Associates, Inc.

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

Michael D. O'Keeffe
Annette M. O'Keeffe
SEPTIC SYSTEMS
DESIGNS * INSPECTIONS * MAINTENANCE
MPCA #1357

March 17, 2006

Richard Vigstol
49610 Hwy 65
McGregor, MN 55760
Parcel# 29-0-035100

Dear Richard,

You may have recently received a notice from Aitkin County stating that your Operating Permit for your Septic System is up for renewal by May 31, 2006. This is for June 1, 2006 thru May 31, 2007.

In order for me to complete the Maintenance and Monitoring Report for 2005, (June 1, 2005 thru May 31, 2006), I will need to have your water meter readings from July 21, 2005 through now.

Also, in order for you to renew your Operating Permit with Aitkin County, they will require a copy of a signed Maintenance & Monitoring Contract between you and A.M. & Associates, Inc. Enclosed, you will find 2 copies of a new 1 year Service Contract for the year 2006 which begins June 1st 2006 and ends May 31st 2007. Please *read and sign* page 4 of both copies. Mail "both" copies back to me along with a pre-paid annual service fee of $150.00.

Once I have received your current water meter readings, the signed contracts along with your check, I will complete the required paperwork and mail the packets to you for you to submit to Aitkin County.

If you have any questions, please feel free to give me a call (after 6:00pm).

Annette O'Keeffe

Annette O'Keeffe
(218) 768-4430

JUL 17 2009

AITKIN COUNTY ENVIRONMENTAL SERVICES

OPERATING PERMIT FOR WASTEWATER TREATMENT AND DISPERSAL

OPERATING PERMIT #: 117 **FEE:** 100

PERMITTEE: Richard Vigstol **PHONE:** (218) 426-4268

ADDRESS: 49610 Hwy 65
McGregor, MN 55760-

ZONING PERMIT # 30601 **PARCEL #:** 29-0-035100

ISSUE DATE: 5/31/2009 **RENEW DATE:** 5/31/2010

LEGALDESCRIPTION: part of Govt Lot 5 in NE SW in Doc 275216

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.

Richard Vigstol

Signature of Permittee **Date** 07-16-09

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. M. & Associates, Inc.
29465 442nd Lane
Palisade, MN 56469
(218) 768-4430

Michael D. O'Keeffe
SEPTIC SYSTEMS
DESIGNS * INSPECTIONS * MAINTENANCE
MPCA #1357

June 26, 2009

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

r.e. Richard Vigstal Maintenance & Monitoring
Parcel # 29-0-035100
49610 Hwy 65
McGregor, MN 55760

All components of Richard's Septic System is performing as designed. Therefore we are recommending to Aitkin County that your Operating Permit be renewed every 5 years instead of annually. This means the Operating Permit Richard is about to renew will be good until May 31st 2014. The Operating Permit fee of $100.00, required by Aitkin County should cover all 5 years.

Sincerely,

Michael D. O'Keeffe
Septic Systems Designer/Inspector
MPCA #1357

A. M. & Associates, Inc.
29465 442ND LANE
Palisade, MN 56469
(218) 768-4430

Michael D. O'Keeffe
SEPTIC SYSTEMS
DESIGNS * INSPECTIONS * MAINTENANCE
MPCA #1357

MAINTENANCE, MONITORING AND INSPECTION REPORT

FOR INDIVIDUAL SEWAGE TREATMENT SYSTEM

June 1, 2006 thru May 31, 2009

Property Owner(s):	**RICHARD VIGSTOL**		
Home Address:	**49610 HWY 65** **McGREGOR, MN 55760**	Site Address:	**SAME** **BIG SANDY LAKE**
Phone:	**(218) 426-4268**		
		Township:	**SHAMROCK**
Parcel Code:	**29-0-035100**		

DESCRIPTION OF INDIVIDUAL SEWAGE TREATMENT SYSTEM

3 BEDROOM OSI SANDFILTER TIME DOSED INTO A 2½ BEDROOM 1 FOOT SANDBASE MOUND

This ISTS is to have the wastewater gravity from the proposed house into a new 1960 combination tank. From there, the liquids are pumped into an 12' x 30' OSI Sand Filter. An OSI Pump Vault placed inside the Sand Filter will pump the treated liquids, Timed Dosed at a maximum of 375 gpd, into a downsized
2 ½ Bedroom 1 foot sandbase Mound with a 10' x 32' Rockbed.
2 ½ Bedrooms, 375 gpd (max), 11,250 gallons per month.

Installation Date: **06/01/2004** Installer: **Ernie Darlow** Phone#: **(218) 426-4320**

JUNE 2006 THRU MAY 2009 MAINTENANCE & MONITORING RESULTS

Date Maintained: 09/22/2008

CONTROL/ALARM PANEL	RESULTS
1. Check pump operations in manual mode	**Good**
2. Check timer settings	**Good**
3. Record elapsed time meter and counter readings.	**ST ETM = 6165 min CNT = 3806** **SF ETM = 4788 min CNT = 4734**
4. Confirm operation of audible and visual alarms	**Good**
5. Test Pump Amperage	**Not Checked at This Time**

LIFT PUMPING STATION	RESULTS
1. Verify no leaks in riser	**Good**
2. Inspect splice box for moisture and secure connections	**Good**
3. Verify condition of and correct operation of all floats	**Good**
4. Verify neat wrap of float cords	**Good**
5. Pull pump and clean intake screen if necessary	**Owner needs to make Accessable – too deep**
6. Check general appearance	**Good**

EFFLUENT FILTERS/PUMP SCREENS	RESULTS
1. Check effluent filter for buildup of biomat growth.	**Good**
2. Clean (if needed)	**Cleaned**

JUNE 2006 THRU MAY 2009 MAINTENANCE & MONITORING RESULTS

SEPTIC TANK	RESULTS
1. Measure sludge and scum level	**Sludge level = 14" Scum level = 4-6" (No Clear Zone)**
2. Tank(s) should be pumped if the sludge layer is closer than 12" to the bottom of the inlet baffel or whenever the scum is closer than 3" to the bottom of the outlet baffel.	**Not Necessary at this time**
3. Check general appearance	**Good**

PRETREATMENT DEVICE	RESULTS
1. Inspect for ponding; assess character and color of biomat	**Good**
2. Test pressurization of laterals (squirt test)	**Good -height = approx 3 ft**
3. Verify proper orifice position, equal spray under orifices no clogged orifices	**Good**
4. Check for odors: adjust recirculating time (if necessary)	**Good**
5. Clean and flush manifold (if necessary)	**Good**
6. Re-check squirt height (if necessary)	**Not necessary at this time.**
7. Inspect the appearance of the wastewater inside the unit for color and turbidity.	**Effluent Clear**

DISPERSAL FIELD	RESULTS
1. Inspect for visible signs of failure (surface discharge, soggy ground, wet spots, settling, etc.)	**No signs of failure.**
2. Check for required separation	**Good**

JUNE 2006 THRU MAY 2009 MAINTENANCE & MONITORING RESULTS

MISCELLANEOUS	RESULTS	
1. Review water usage from water meter records.	Date	Gallons Used
	06/28/04	2860
	07/06/04	750
	07/24/04	1240
	08/09/04	1630
	09/06/04	2020
	10/06/04	1160
	11/02/04	1450
	12/01/04	1740
	12/22/04	970
	01/20/05	4530
	02/10/05	940
	02/25/05	780
	03/15/05	1390
	04/03/05	500
	05/25/05	1980
	06/01/05	1070
	06/29/05	840
	07/05/05	1010
	07/21/05	110
	08/03/05	930
	09/02/05	1560
	09/06/05	1010
	09/19/05	1490
	12/01/05	3700
	01/04/06	3860
	02/05/06	2030
	02/13/06	1730
	03/07/06	2910
	03/31/06	1030
	04/06/06	440
	04/28/06	670
	06/30/06	6040
	07/04/06	1110
	07/30/06	2040
	08/27/06	3340
	09/29/06	3070
	10/31/06	2720
	12/17/06	2620
	01/31/07	3810
	03/01/07	1910
	04/12/07	3660
	04/27/07	940
	05/30/07	2820
	06/26/07	2930
	07/21/07	2300
	08/13/07	2150
	09/04/07	2320
	10/04/07	2050
	11/14/07	2890

CONTINUED

JUNE 2006 THRU MAY 2009 MAINTENANCE & MONITORING RESULTS

MISCELLANEOUS	RESULTS	
2. Review water usage from water meter records. **CONTINUED**	**Date**	**Gallons Used**
	12/23/07	2320
	01/02/08	2230
	02/06/08	3010
	03/25/08	2270
	05/06/08	2690
	05/23/08	1230
17 People from 5/23/08 to 5/28/08	05/28/08	1100
	07/04/08	3040
	08/01/08	2560
	08/27/08	1310
	09/22/08	1600
	11/02/08	2950
	12/06/08	1610
	01/20/09	1990
	02/02/09	660
	03/09/09	1340
	04/14/09	1350
	05/04/09	1400
	05/21/09	420

COMMENTS: **ALL COMPONENTS LOOK GOOD.**

Pump is too deep to reach. Owner needs to make it accessable.

Drainfield is sized for 2 ½ Bedrooms, 375 gpd, 11,250 gallons per month. Water usage is well within limitations.

A.M. & ASSOCIATES RECOMMENDS THE OPERATING PERMIT BE CHANGED TO EVERY 5 YEARS.

THEREFORE, THE OPERATING PERMIT RENEWAL DUE MAY 31, 2009 SHOULD BE GOOD FOR JUNE 1, 2009 THRU MAY 31, 2014.

A.M. & ASSOCIATES ALSO RECOMMENDS MAINTENANCE BE PERFORMED EVERY OTHER YEAR. THE NEXT MAINTENANCE WILL BE PERFORMED DURING THE SUMMER OF 2010.

6/26/2009

A. M. & Associates, Inc.
29465 442nd Lane
Palisade, MN 56469
(218) 768-4430

Michael D. O'Keeffe
SEPTIC SYSTEMS
DESIGNS * INSPECTIONS * MAINTENANCE
MPCA #1357

FIVE YEAR
MAINTENANCE, MONITORING AND INSPECTION SERVICE CONTRACT
FOR INDIVIDUAL SEWAGE TREATMENT SYSTEM
FOR June 1st 2009 thru May 31st 2014

It is hereby agreed this **26th** day of **June**, 20 **09** by and between A.M. & Associates, Inc. and

Property Owner(s):	**RICHARD VIGSTOL**	Parcel Code:	**29-0-035100**
Home Address:	**49610 HWY 65** **McGREGOR, MN 55760**	Site Address:	**SAME**
Phone (home)	**(218) 426-4268**	Township	**SHAMROCK**
(cell)	**(612) 991-1532**	Phone:	**(218) 426-4268**
(fax)			

DESCRIPTION OF INDIVIDUAL SEWAGE TREATMENT SYSTEM

3 BEDROOM OSI SANDFILTER TIME DOSED INTO A 2½ BEDROOM 1 FOOT SANDBASE MOUND

This ISTS is to have the wastewater gravity from the proposed house into a new 1960 combination tank. From there, the liquids are pumped into an 12' x 30' OSI Sand Filter. An OSI Pump Vault placed inside the Sand Filter will pump the treated liquids, Timed Dosed at a maximum of 375 gpd, into a downsized 2 ½ Bedroom 1 foot sandbase Mound with a 10' x 32' Rockbed.

Installation Date: **06/01/2004** Installer: **Ernie Darlow** Phone#: **(218) 426-4320**

That A.M. & Associates, Inc. will provide the services to perform Preventative Maintenance, Monitoring and Inspection of the parameters and frequency described herein as your Operating Permit requires for your Individual Sewage Treatment System (ISTS).

Each inspection includes an examination of the ISTS followed by a written report to the Property Owner. This inspection report shall contain recommendations for operation and maintenance for failure-preventative measures, if any are deemed appropriate by the inspector, and a list of recommended corrective measures or replacement parts. A.M. & Associates, Inc. is authorized to submit a copy of the report to the pertaining County's Environmental Services Department.

This contract does not assume any responsibilities or obligations, which are normally the responsibilities of the Property Owner, or as related to parts or labor and does not extend to cover any costs that may be associated with any recommendations made under this contract.

A.M. & Associates, Inc. can only contract or subcontract for parts or labor after authorization by you. Billings for service calls shall be made on a case by case basis. This contract **only** covers maintenance, monitoring and inspection services per current pertaining County Operating Permit and **does not** cover alarm calls of any kind.

On-site Service Calls cost of a minimum of $50.00 plus $50.00 per hour for time and labor required from A.M. & Associates, due to alarms, misuse or abuse of any portion of this System, is the responsibility of the Property Owner(s), payable at time of Service. Minnesota Onsite Specialties fees for Service calls are separate.

All cost for parts time and labor, required to analyze, fix or replace any portion of this system, for damages caused by winter freezing, is the responsibility of the Property Owner(s).

All additional cost, time and labor required from A.M. & Associates, Inc. and/or Minnesota Onsite Speciaties due to modifications made by the pertaining County's Environmental Services Department, is the responsibility of the Property Owner(s), and is payable within 20 days of billing.

In no event shall A.M. & Associates, Inc., Minnesota Onsite Specialties, or the Inspector be responsible for special or consequential damages, including but not limited to, loss of time, injury to personal property or any other consequential damages or incidental or economic loss due to equipment failure or for any other reason.

A.M. & Associates, Inc. shall be provided access to the site and the system in order to perform the following services that are marked:

CONTROL/ALARM PANEL ***(Annually)***

- X 1. Check pump operations in manual mode
- X 2. Check timer settings
- X 3. Record elapsed time meter and counter readings
- X 4. Confirm operation of audible and visual alarms

LIFT PUMPING STATION ***(Annually)***

- X 1. Verify no leaks in riser
- X 2. Inspect splice box for moisture and secure connections
- X 3. Verify condition of and correct operation of all floats
- X 4. Verify neat wrap of float cords
- X 5. Visually inspect recirculating splitter valve (if applicable) and liquid level
- X 6. Check general appearance

EFFLUENT FILTERS/PUMP SCREENS ***(Annually)***

- X 1. Check effluent filter for buildup of biomat growth
- X 2. Clean (if needed)

SEPTIC TANK ***(Annually)***

- X 1. Measure sludge and scum level
- X 2. Tank(s) should be pumped if the sludge layer is closer than 12" to the bottom of the inlet baffel or whenever the scum is closer than 3" to the bottom of the outlet baffel
  - * (If the test results determine a need for solids removal, the Property Owner will bear the cost and responsibility for doing so)
- X 3. Check general appearance

PRETREATMENT DEVICE *(Annually)*

X 1. Inspect for ponding; assess character and color of biomat
X 2. Test pressurization of laterals (squirt test)
X 3. Verify proper orifice position, equal spray under orifices, no clogged orifices
X 4. Check for odors: adjust recirculating time (if necessary)
X 5. Clean and flush manifold (if necessary)
X 6. Re-check squirt height (if necessary)
X 7. Inspect the appearance of the wastewater inside the unit for color and turbidity.

DISPERSAL FIELD *(Annually)*

X 1. Inspect for visible signs of failure (surface discharge, soggy ground, wet spots, settling, etc.)
X 2. If liquid level monitors are installed, levels will be observed and recorded.
___ 3. Flush filters and clean cartridges, if applicable
___ 4. Check field control unit solenoid operations or manual control, if applicable
X 5. Check for required separation

SAMPLING *(As Deemed Necessary)*

___ 1. Aquire and deliver samples for analysis of BODs, TSS, Fats Oils and Grease, and Fecal Coliform (cost of sampling analysis plus delivery charges is the responsibility of the Property Owner. If more than one analysis is recommended and required within the duration of this contract, the additional labor costs aquired by A.M. & Associates, Inc. along with sampling analysis fees and delivery charges is the responsibility of the Property Owner).

MISCELLANEOUS *(Annually)*

X 1. Review water usage from water meter records kept by the Property Owner.

*** **PROPERTY OWNER'S RESPONSIBILITIES** *(Monthly and/or as Required)*

During the term hereof, I/we as the current Property Owner(s) understand that I/we;

1. Will provide A.M. & Associates, Inc. with access to the System. Access includes electrical controls & disconnects, hose hookup water supply and sufficient workspace to perform the necessary maintenance services
2. Will be responsible for recording water meter readings on a *monthly* basis.
3. Must *notify* A.M. & Associates, Inc. *immediately* when signs of weeping problems, sewage smell or any other indication that the system may not be functioning properly.
4. Will provide A.M. & Associates, Inc. copies of the water meter records, upon request.
5. Must aquire pre-authorization from A.M. & Associates, Inc., *prior* to the Property Owner or any other individual performing or attempts to:
    a. make alterations or modifications to the System, or
    b. misuse the System, or
    c. attach devices to it , or
    d. execute any type of Maintenance services to the system or any portion thereof
6. Will notify A.M. & Associates, Inc. of new ownership of property if within the duration of this contract.
7. Will accept all responsibility and risks involved with the installation and hydraulic performance of this Septic System and hold A.M. & Associates, Inc. harmless from all liability for this Sewage Treatment System whatsoever.
8. May be required to perform additional maintenance responsibilities as deemed necessary by A.M. & Associates, Inc.

This contract shall remain in force for a period of 5 years, beginning **June 1st 2009** and ending **May 31st 2014.**

FEES

Maintenance, Monitoring & Inspection Service Contract		**$150.00**	**Due at time of Service is performed**
Sample Analysis Fees & Supplies	(approx)	**N/A**	**Due at time of sampling**
***Time & Mileage to Deliver Samples for Analysis**		**N/A**	**Due at time of sampling**

NOTE: SAMPLING OF FECAL COLIFORM, BOD, TSS, AND FATS OIL AND GREASE IS *NOT* REQUIRED AT THIS TIME. IF SAMPLING IS FOUND TO BE NECESSARY DURING THE DURATION OF THE USE OF THIS SEPTC SYSTEM, THE PROPERTY OWNER(S) IS RESPONSIBLE FOR *ALL* COSTS INVOLVED, AND IS DUE AT TIME THE SAMPLES ARE TO BE TAKEN.

*If at time of sampling, the Property Owner(s) wishes to transport the samples to Brainerd himself for analysis, within the *required time limit*, A.M. & Associates, Inc. will wave the time, mileage delivery fees of $100.00.

A.M. & Associates, Inc. agrees to provide inspection, monitoring and routine maintenance service only under this contract.

I hereby certify with my signature as the Property Owner(s) that I understand the provisions, requirements and responsibilities of this Maintenance, Monitoring and Inspection Service Contract. I also understand failure to comply with the requirements outlined in my Operating Permit, this Contract, along with any future requirements that may arise, set forth by Aitkin County Environmental Services, Orenco Systems, Inc. (OSI) or A.M. & Associates, Inc., could result in the condemning of my septic system, removal of the use of the drainfield, and require the use of Holding Tanks with a pumping Contract.

Property Owner(s):

Name: **RICHARD VIGSTOL** (please print) * Richard Vigstol (signature) Date: 07-16-09

Spouse: _____ (please print) _____ (signature) Date: _____

A.M. & Associates, Inc.:

Name: **MICHAEL D. O'KEEFFE** (please print) Michael D O'Keeffe (signature) Date: **06/26/2009**

AITKIN COUNTY ENVIRONMENTAL SERVICES-PLANNING & ZONING

209 Second Street, NW
Aitkin, Minnesota 56431

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

August 26, 2009

RE: Renewed Operating Permit

Dear Richard Vigstol,

This letter is to inform you that your Operating Permit (No. 117) has been renewed until May 31, 2014. You should note that all renewal dates that were formerly on December 31 have been moved forward to allow your Operation and Maintenance provider suitable time to complete the monitoring report.

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,

Pete Gansen

Pete Gansen
Aitkin County Planning & Zoning and
Environmental Services

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

ISSUANCE DATE: 5 /31/2014
RENEWAL PERIOD: ~~ANNUALLY~~ 5-Year

OPERATING PERMIT #: 117
ZONING PERMIT #: 30601
PARCEL #: 29-0-035100

PERMITTEE: Richard Vigstol

TELEPHONE: (218) 426-4268

MAILING ADDRESS:
49610 Hwy 65
McGregor, MN 55760-

PROPERTY ADDRESS:
49610 State Hwy 65
McGregor, MN 55760

LEGAL DESCRIPTION: part of Govt Lot 5 in NE SW in Doc 275216

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.

Richard Vigstol
Signature of Permittee

05-28-14
Date

K. Kunz
Signature of Permitting Authority

5-28-14
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.

CK# 9276, receipt # 199228 $100 5/28/14

A. DESCRIPTION OF WASTEWATER TREATMENT AND DISPERSAL SYSTEM

This ISTS will gravity from the proposed house into a new 1960 combination tank. From there the liquids are pumped into a 12X30 OSI Sand filter. AN OSI pump vault placed in the sand filter will pump the treated liquids. Treated liquids will be dosed at a maximum of 375 gpd, into a downsized 2.5 bedroom 1-foot sandbase mound with a 10X32 rockbed. System construction $12,000 +, Operation $10/mo, $150 /year

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
Separation	1 foot	Dispersal System	ANNUALLY	Measure in Field	ANNUALLY
Flow	450 gpd	Water Meter	MONTHLY	Record on Log Sheet	ANNUALLY

C. MAINTENANCE REQUIREMENTS:

PARAMETER	LOCATION	FREQUENCY
Flow	Water Meter	MONTHLY
Pressurization of Laterals	Sand Filter	ANNUAL
Pumps, Floats & Alarms	Pump Chamber	ANNUAL
Solids Removal & Water Tightness	Septic tank(s)	ANNUAL
Surface Discharge	Dispersal System	ANNUAL
Vegetative Cover	Dispersal System	ANNUAL

John Walsh

Form 5.2 Operational Checklist: SEPTIC, TRASH, AND PROCESSING TANKS (STPT)

Service provided on: Date: _____ Time: _____ Reference #: _____
Service provided by: Company: _____ Employee: _____
Date of last service: Vista! By: ☐ You ☐ Other: _____
Date of last inspection: _____

5 year O&M permit (3 year Service)

1 Type:
☑ Septic tank ☐ Trash tank ☐ Pump vault present
☐ Processing tank

2 Conditions at the tank
a. Evaluate presence of odor within 10 ft of perimeter of system:
☑ None ☐ Mild ☐ Strong ☐ Chemical ☐ Sour
b. Source of odor, if present: _____

3 Tank description
a. Material: ☑ Concrete ☐ Fiberglass ☐ Plastic
b. Capacity: 1500 gal
c. Compartmented? Yes ~~No~~ No
d. Capacities for compartmented system: 1) _____ gal 2) _____ gal

4 Tank access
a. Access location: ☑ Inlet ☐ Outlet ☐ Center
b. Located at grade? Yes ✓ No ____
c. If 'No', how deep is lid buried? _____
d. Risers on tank? Yes ✓ No ____
e. Evidence of infiltration in risers? Yes ____ No ✓
f. Lids securely fastened? Yes ✓ No ____
g. Lid in operable condition? Yes ✓ No ____

5 Alarm(s)
a. Alarm(s) present? Yes ✓ No ____
b. Audio alarm operational? N.A. ____ Yes ✓ No ____
c. Visual alarm operational? N.A. ____ Yes ✓ No ____
d. Remote telemetry operational? N.A. ✓ Yes ____ No ____
e. Electronic monitoring operational? N.A. ____ Yes ____ No ____

6 Current tank operating conditions
a. Liquid level relative to outlet: 0" in
☑ At ☐ Above ☐ Below
b. Maximum liquid level of tank (invert of inlet pipe): ____ in
c. Height at which alarm is activated as measured from invert of inlet: ____ in
d. Evidence liquid level has been higher? Yes ____ No ✓
e. Evidence liquid level dropped without pumping? Yes ____ No ✓
f. Evidence of continuous inflow? Yes ____ No ✓
g. Date of last pumpout: ____
h. Presence of flocculant in clear zone? Yes ____ No ✓
i. Evaluation of layers in tank:

Compartment Number	Scum (in)		Clear Zone (in)		Sludge (in)		Odor	Other
	Depth	Color*	Depth	Color	Depth	Color		
1	4				4			
2	0				3			

ST pump

*Color Choices: ☐ Clear ☐ Flocced ☐ Milky ☐ Muddy ☐ Grainy ☐ Black ☐ Brown ☐ Mustard ☐ Gray ☐ White

7 Septic tank pumping recommended? Yes ____ No ✓

NOTES

2. ☑ Acceptable ☐ Unacceptable

4. ☑ Acceptable ☐ Unacceptable

5. ☑ Acceptable ☐ Unacceptable

6. ☑ Acceptable ☐ Unacceptable

System Ok!

Reference #: _____

8. ☐ Acceptable ☐ Unacceptable

7. Baffles currently structurally sound? Yes ✓ No ___
   a. Inlet baffle in place? Yes ✓ No ___
   b. Outlet baffle in place? Yes ✓ No ___
   c. Compartment baffle in place? N.A. ___ Yes ✓ No ___
   d. Effluent screen? Yes ___ No ___
      Manufacturer: ___ Model: ___
   e. Is screen accessible from ground surface? Yes ✓ No ___
   f. If screened, percent plugged: 10 %
   g. Was screen cleaned? Yes ✓ No ___

9. Tank structural condition (evaluate if tank pumped): N.A. ✓

9. ☐ Acceptable ☐ Unacceptable

   a. Appears to be watertight (no visual leaks)? Yes ✓ No ___
   b. Rebar exposed? Yes ___ No ✓
   c. Corrosion present? Yes ___ No ✓
   d. Spaulling present? Yes ___ No ✓
   e. Cracks present? Yes ___ No ✓
   f. Root intrusion? Yes ___ No ✓

10. Contractor responsible for pumping: ___
    a. Gal removed: ___ Date: ___

11. Lab samples collected for monitoring? Yes ___ No ___
    Types of analysis: ___

Form 7.1 Operational Checklist: MEDIA FILTER (MF)

Service provided on Date: _____ Time: _____ Reference #: _____
Service provided by Company _____ Employee: _____
Date of last service _____ By: ☐ You ☐ Other: _____
Date of last inspection _____

1 Type of media filter

Single-pass	☑ Sand	☐ Foam	☐ Peat	Other: _____
Recirculating	☐ Sand/gravel	☐ Foam	☐ Textile	Other: _____
Trickling filter	☐ Gravel	☐ Plastic	☐ Textile	Other: _____
Upflow filter	☐ Gravel	☐ Plastic	☐ Textile	Other: _____

a Manufacturer _____ Model #: _____
b ☐ Surface application method ☐ Pressure distribution ☐ Gravity distribution

2 Conditions at media filter
a. Evaluate presence of odor within 10 ft of perimeter of system:
☑ None ☐ Mild ☐ Strong ☐ Chemical ☐ Sour
b Source of odor, if present: _____

3 Cover
a. Type of cover ☐ Free access ☑ Buried ☐ Lid
b Filter cover intact? Yes___ No___
c Method of securing cover _____
d Distribution component accessible? Yes___ No___
e. Surface water/infiltration into components? Yes___ No___

4 Venting/Air supply ☑ Passive ☐ Active ☐ Not present
a Supply ☐ Aspirator ☐ Compressor ☐ Blower ☐ Free air (go to 4.g)
b Operation ☐ Continuous ☐ Timed (On _____ min., Off _____ min)
c. Air supply unit operating properly? Yes___ No___
d. Pressure at air supply unit: _____ psi
e. Air flow at air supply unit: _____ cfm
f Air filter/screen: ☐ Cleaned ☐ Replaced
g. Venting appears operable? Yes ___ No___

5 Media surface
a. Biomat on surface? Yes___ No✓
b. Uniform gravity distribution? N.A.✓ Yes___ No___
c Uniform spray pattern? N.A.✓ Yes___ No___
d. Ponding in/on media? Yes___ No✓
e Plugging/clogging of distribution components? Yes___ No✓
f Media appears to be settling? Yes___ No✓
g Appropriate maintenance performed? Yes✓ No___
h. Animal activity at surface? Yes___ No✓

6 Effluent quality
a. Turbidity clear ___ NTU
b Oily film on the surface of effluent? Yes___ No✓
c. DO at outlet: ___ mg/L
d. pH at outlet: ___
e. Temperature at outlet: ___
f. Bypass or overflow noticed? Yes___ No✓
g. Effluent odor after passing through media filter:
☑ None ☐ Mild ☐ Strong
h Effluent color after passing through media filter:
☑ Clear ☐ Brown ☐ Black

NOTES

2. ☑ Acceptable ☐ Unacceptable
3. ☑ Acceptable ☐ Unacceptable
4. ☑ Acceptable ☐ Unacceptable
5. ☑ Acceptable ☐ Unacceptable
6. ☑ Acceptable ☐ Unacceptable

Reference #: _____

7. Pressure distribution: N.A. ____
   a. Distal head before cleaning
      i) Equal height? Yes ✓ No ____
      ii) Height (inches): 60 in
   b. Lateral condition
      i) Laterals in need of cleaning? Yes ✓ No ____
      ii) Laterals cleaned? Yes ✓ No ____
      iii) Method for cleaning laterals: flushing
   c. Distal head after cleaning
      i) Equal height? Yes ✓ No ____
      ii) Height (inches) 60 in

7. ☐ Acceptable ☐ Unacceptable

8. Gravity distribution: N.A. ✓
   a. Device: ____
   b. Uniform distrubtion? Yes ____ No ____
   c. Operating properly? Yes ____ No ____

8. ☐ Acceptable ☐ Unacceptable

9. Filter drainage systems
   a. Ponding in media filter sump? Yes ____ No ✓
   b. Gravity drainage operational? N.A. ____ Yes ✓ No ____
   c. Solids buildup in sump area? N.A. ____ Yes ____ No ✓
   d. Underdrain vents present? Yes ____ No ✓
   e. Underdrain vents appear operable? Yes ✓ No ____

9. ☐ Acceptable ☐ Unacceptable

10. Additional tasks for recirculating filters ✓
    a. DO in recirculation tank: ____ mg/L
    b. Inspected recirculating device? N.A. ____ Yes ____ No ____
    c. Cleaned recirculating device? N.A. ____ Yes ____ No ____
    d. Design recirculation ratio: ____ : ____
    e. Actual recirculation ratio: ____ : ____
    f. Recirculation changed to: ____ : ____
    *If dam configuration, recirculation device cannot be inspected or cleaned

10. ☑ Acceptable ☐ Unacceptable

11. Additional tasks for trickling filters —
    11.1 Clarification chamber
    a. Solids blanket below recirculation pump inlet? Yes ____ No ____ *
    *If no, was system pumped out? Yes ____ No ____
    b. If screened inlet, was screen cleaned? Yes ____ No ____
    11.2 Sludge return
    a. Solids blanket slightly above return pump? Yes ____ No ____
    b. Changed solids return rate? Yes ____ No ____
    i) Pump: ☐ Off ☐ On
    ii) Changed from ____ min to ____ min

11.1 ☐ Acceptable ☐ Unacceptable

11.2 ☐ Acceptable ☐ Unacceptable

12. Manufacturer's required maintenance performed? Yes ____ No ____
    (If 'Yes', attach Manufacturer Inspection form to this report, if supplied)
13. Lab samples collected for monitoring? Yes ____ No ____
    Types of analysis: _____

ST CT - 11988
ETM - 7364

ST aT - 10865
ETM - 10092.

Septic Tank Water Usage

06/01/04 Timer Set
06/28/04-02860
07/24/04-04850
08/09/04-06480
09/06/04-09300
10/06/04-10460
11/02/04-11910
12/01/04-13650
12/22/04-14620
01/20/05-19150
02/10/05-02090
03/15/05-22260
04/03/05-22760
05/25/05-24740
06/01/05-25810
06/29/05-26650
07/05/05-27660
07/21/05-27770
08/03/05-28700
09/06/05-31270
09/19/05-32760
12/02/05-36460
01/04/06-40320
02/05/06-42350
02/13/06-44080
03/07/06-46990
03/31/06-48020
04/06/06-48460
04/28/06-49130
06/30/06-55170
07/04/06-56280
07/30/06-58320
08/16/06-60850
08/27/06-61660
09/29/06-64730
10/31/06-67450
12/17/06-70070
01/06/07-72910
01/17/07-73350
01/31/07-73880
03/01/07-75790
04/12/07-79450
04/27/07-80390
05/30/07-83210
06/26/07-86140
07/21/07-88440
08/14/0789590
09/04/07-92910
10/04/07-94360
11/14/07-97850
12/23/07-100170
01/02/08-102400
02/06/08-105410
03/25/08-107680
05/06/08-110370
05/23/08-111600
05/28/08-112700
07/05/08-115740
07/07/08-117160
08/01/08-118300
08/27/08-119610
09/22/08-121210
09/22/08-system check
11/02/08-124160
12/06/08-125770
12/13/08-126130
01/20/09-127760
02/02/09-128420
03/09/09-129760
04/14/09-131110
05/04/09-132510
05/21/09-132930
05/27/09-134850
07/03/09-136040
07/06/09-137450
08/12/09-138380
09/04/09-139600
09/24/09-141470
10/29/09-143060
12/10/09-144310
12/26/09-145530
02/06/10-146850
03/02/10-148350
05/02/10-151300
07/06/10-155810
08/04/10-158160
09/02/10-159940
12/12/10-164750
01/02/11-165850
01/31/11-167500
03/15/11-171230
04/01/11-171750
05/14/11-173540
06/01/11-175490
07/03/11-177380
08/01/11-179200
09/01/11-181030
09/30/11-182800
11/07/11-184910
12/02/11-185920
12/27/11-187080
02/05/12-189150
05/04//12-193550
06/21/21-194710
08/18/12-198540
installed water filter
09/04/12-201530
09/10/12-201970
09/11/12-system check
09/12/12-202010
tank pumped
kangas /$155.00
10/27/12-204560
11/28/12-205330
01/04/13-207290
01/28/13-208690
03/07/13-209050
04/05/13-210310
05/02/13-211840
06/01/13-213900
07/01/13-215600
07/07/13-217070
08/04/13-218280
09/15/13-221710
10/07/13-222330
11/10/13-224340
12/05/13-225590
01/12/14-227680
02/02/14-228550
filter change
03/10/14-230330
03/31/14-231340
05/05/14-233280

AITKIN COUNTY ENVIRONMENTAL SERVICES-PLANNING & ZONING
209 Second Street, NW Room# 100
Aitkin, Minnesota 56431
PH: (218) 927-7342
FX: (218) 927-4372

5/28/2014

Richard Vigstol
49610 Hwy 65
McGregor, MN 55760-

Re: Operating Permit # 117
Zoning Permit # 30601
Parcel # 29-0-035100

Dear Permittee:

This letter is to inform you that your Operating Permit has been renewed until 5/31/2019 .

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

5/9/2019

Richard Vigstol
49610 State Hwy 65
McGregor, MN 55760

Re: Operating Permit # 117
Zoning Permit #30601
Parcel ID#29-0-035100

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:

- ☒ the signed Operating Permit Contract
- ☒ $100 permit renewal fee ($150 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

Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194

Compliance Inspection Form

Existing Subsurface Sewage Treatment Systems (SSTS)

Doc Type: Compliance and Enforcement

Inspection results based on Minnesota Pollution Control Agency (MPCA) requirements and attached forms – additional local requirements may also apply.

Submit completed form to Local Unit of Government (LUG) and system owner within 15 days

For local tracking purposes:

System Status

System status on date (mm/dd/yyyy): 5/22/2019

☒ **Compliant – Certificate of Compliance**
(Valid for 3 years from report date, unless shorter time frame outlined in Local Ordinance.)

☐ **Noncompliant – Notice of Noncompliance**
(See Upgrade Requirements on page 3.)

Reason(s) for noncompliance *(check all applicable)*

- ☐ Impact on Public Health *(Compliance Component #1) – Imminent threat to public health and safety*
- ☐ Other Compliance Conditions *(Compliance Component #3) – Imminent threat to public health and safety*
- ☐ Tank Integrity *(Compliance Component #2) – Failing to protect groundwater*
- ☐ Other Compliance Conditions *(Compliance Component #3) – Failing to protect groundwater*
- ☐ Soil Separation *(Compliance Component #4) – Failing to protect groundwater*
- ☐ Operating permit/monitoring plan requirements *(Compliance Component #5) – Noncompliant*

Property Information

Parcel ID# or Sec/Twp/Range: 29-0-0351000

Property address: 49610 St Hwy 65 McGregor MN 55760
Reason for inspection: Operating permit

Property owner: Richard Vigstol
Owner's phone: 426-4268

or

Owner's representative:
Representative phone:

Local regulatory authority: Aitkin County
Regulatory authority phone:

Brief system description: Precast tank , Single pass sand filter, and mound

Comments or recommendations:

Certification

I hereby certify that all the necessary information has been gathered to determine the compliance status of this system. No determination of future system performance has been nor can be made due to unknown conditions during system construction, possible abuse of the system, inadequate maintenance, or future water usage.

Inspector name: Ron Myers
Certification number: 697

Business name: Ron-ex
License number: 697

Inspector signature: Ron Myers
Phone number: 259-9273

Necessary or Locally Required Attachments

☐ Soil boring logs ☒ System/As-built drawing ☐ Forms per local ordinance

☐ Other information (list):

Property address: 49610 St Hwy 65 McGregor MN 55760 Inspector initials/Date: DM 5/22/2019 (mm/dd/yyyy)

1. Impact on Public Health – Compliance component #1 of 5

Compliance criteria:

System discharges sewage to the ground surface.	☐ Yes ☒ No
System discharges sewage to drain tile or surface waters.	☐ Yes ☒ No
System causes sewage backup into dwelling or establishment.	☐ Yes ☒ No

Any "yes" answer above indicates the system is an imminent threat to public health and safety.

Comments/Explanation:

Verification method(s):

- ☒ Searched for surface outlet
- ☒ Searched for seeping in yard/backup in home
- ☒ Excessive ponding in soil system/D-boxes
- ☐ Homeowner testimony *(See Comments/Explanation)*
- ☐ "Black soil" above soil dispersal system
- ☐ System requires "emergency" pumping
- ☐ Performed dye test
- ☐ Unable to verify *(See Comments/Explanation)*
- ☐ Other methods not listed *(See Comments/Explanation)*

2. Tank Integrity – Compliance component #2 of 5

Compliance criteria:

System consists of a seepage pit, cesspool, drywell, or leaching pit. *Seepage pits meeting 7080.2550 may be compliant if allowed in local ordinance.*	☐ Yes ☒ No
Sewage tank(s) leak below their designed operating depth. If yes, which sewage tank(s) leaks:	☐ Yes ☒ No

Any "yes" answer above indicates the system is failing to protect groundwater.

Comments/Explanation:

tank will be pumped

Verification method(s):

- ☒ Probed tank(s) bottom
- ☒ Examined construction records
- ☐ Examined Tank Integrity Form *(Attach)*
- ☐ Observed liquid level below operating depth
- ☐ Examined empty (pumped) tanks(s)
- ☐ Probed outside tank(s) for "black soil"
- ☐ Unable to verify *(See Comments/Explanation)*
- ☐ Other methods not listed *(See Comments/Explanation)*

3. Other Compliance Conditions – Compliance component #3 of 5

a. Maintenance hole covers are damaged, cracked, unsecured, or appear to be structurally unsound. ☐ Yes* ☒ No ☐ Unknown

b. Other issues *(electrical hazards, etc.)* to immediately and adversely impact public health or safety. ☐ Yes* ☒ No ☐ Unknown
System is an imminent threat to public health and safety.

Explain:

c. System is non-protective of ground water for other conditions as determined by inspector . ☐ Yes* ☒ No
System is failing to protect groundwater.

Explain:

Property address: 49610 St Hwy 65 McGregor MN 55760 Inspector initials/Date: RM 5/22/2019 (mm/dd/yyyy)

4. Soil Separation – Compliance component #4 of 5

Date of installation: 7/8/2004 (mm/dd/yyyy) ☐ Unknown

Shoreland/Wellhead protection/Food beverage lodging? ☒ Yes ☐ No

Compliance criteria:

For systems built prior to April 1, 1996, and not located in Shoreland or Wellhead Protection Area or not serving a food, beverage or lodging establishment: Drainfield has at least a two-foot vertical separation distance from periodically saturated soil or bedrock.	☐ Yes ☐ No
Non-performance systems built April 1, 1996, or later or for non-performance systems located in Shoreland or Wellhead Protection Areas or serving a food, beverage, or lodging establishment: Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.*	☒ Yes ☐ No
"Experimental", "Other", or "Performance" systems built under pre-2008 Rules; Type IV or V systems built under 2008 Rules (7080. 2350 or 7080.2400 (Advanced Inspector License required) Drainfield meets the designed vertical separation distance from periodically saturated soil or bedrock.	☐ Yes ☐ No

Any "no" answer above indicates the system is failing to protect groundwater.

Verification method(s):

Soil observation does not expire. Previous soil observations by two independent parties are sufficient, unless site conditions have been altered or local requirements differ.

☐ Conducted soil observation(s) *(Attach boring logs)*
☒ Two previous verifications (Attach boring logs)
☐ Not applicable *(Holding tank(s), no drainfield)*
☐ Unable to verify *(See Comments/Explanation)*
☐ Other *(See Comments/Explanation)*

Comments/Explanation:

Indicate depths or elevations

A. Bottom of distribution media	
B. Periodically saturated soil/bedrock	
C. System separation	
D. Required compliance separation*	

*May be reduced up to 15 percent if allowed by Local Ordinance.

5. Operating Permit and Nitrogen BMP* – Compliance component #5 of 5 ☐ Not applicable

Is the system operated under an Operating Permit? ☒ Yes ☐ No **If "yes", A below is required**

Is the system required to employ a Nitrogen BMP? ☐ Yes ☒ No **If "yes", B below is required**

BMP = Best Management Practice(s) specified in the system design

If the answer to both questions is "no", this section does not need to be completed.

Compliance criteria

a. Operating Permit number: 117 Have the Operating Permit requirements been met?	☒ Yes ☐ No
b. Is the required nitrogen BMP in place and properly functioning?	☐ Yes ☐ No

Any "no" answer indicates Noncompliance.

Upgrade Requirements *(Minn. Stat. § 115.55) An imminent threat to public health and safety (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 is failing to protect ground water, the system must be upgraded, replaced, or its use discontinued within the time required by 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 provision 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.*

Water usage

05/04/2012—193550

06/21/2012—194710

08/18/2012—198540

09/04/2012—201530

09/12/2012—201970

Tanks pumped

09/12/2012—202010

10/27/2012—204560

11/28/2012—205330

01/04/2013—207290

01/28/2013—208690

03/07/2013—209050

04/05/2013—210310

05/02/2013—211840

06/01/2013—213900

07/01/2013—215600

07/07/2013—217070

08/04/2013—218280

09/15/2013—221710

10/07/2013—222330

11/10/2013—224340

12/05/2013—225590

01/12/2014227680

02/02/2014—228550

Filter change

03/10/2014—230330

03/31/2014—231340

05/05/2014—233280

06/04/2014—236140

07/02/2014—236610

08/04/2014—238840

09/03/2014—224470

10/03/2014—245450

11/08/2014—247690

12/08/2014—249890

Filter change

01/01//2015—250880

02/01/2015—251860

03/04/2015—253620

03/24/2015—254170

Kangas pumped tank/mound frozen/shut off breaker

04/16/2015

Turned back on

05/07/2015—256190

06/02/2015—257620

07/04/2015—259850

09/15/2015—263100

10/02/2015—264930

12/05/2015—268710

01/04/2016—269990

02/15/2016—273820

03/07/2016—276510

04/21/2016—277500

05/06/2016—279960

05/26/2016—279960

Filter change

06/04/2016—281380

07/04/2016—284260

08/03/2016—286460

10/05/2016—291630

11/05/2016—293170

12/01/2016—294140

01/06/2017—296200

02/05/2017—298900

03/01/2017—300200

05/20/2017—303010

06/09/2017—305370

07/11/2017—309100

08/01/2017—310460

10/06/2017—315420

11/03/2017—316570

12/10/2017—318440

01/16/2018—320550

02/05/2018—321810

04/02/2018—323060

05/09/2018—325520

06/03/2018—326420

07/06/2018—329560

08/04/2018—331940

09/04/2018—334140

10/02/2018—335970

10/30/2018—338120

12/02/2018—339750

01/05/2019—342010

02/18/2019—354620

03/14/2019—347610

03/31/2019—348880

05/07/2019—350360

Fliter change

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

ISSUANCE DATE: 5 /31/2019
RENEWAL PERIOD: 5 YEAR

OPERATING PERMIT #: 117
ZONING PERMIT #: 30601
PARCEL #: 29-0-035100

PERMITTEE: Richard Vigstol

TELEPHONE: (218) 426-4268

MAILING ADDRESS:
49610 State Hwy 65
McGregor, MN 55760

PROPERTY ADDRESS:
49610 State Hwy 65
McGregor, MN 55760

LEGAL DESCRIPTION: Part of Govt Lot 5 in NE SW in Doc 275216

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.

Richard Vigstol
Signature of Permittee

05-20-19
Date

Shannon W.
Signature of Permitting Authority

5-22-2019
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.

Invoice #47824 (05/29/2019)

2. Zoning/Land Use Permit Applications Misc. (OFFICE USE ONLY) App. # App-2019-004539, UID # 197862

Richard & Valerie Vigstol

(218) 927-7342

49610 HWY 65, McGregor, MN 55760

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 05/29/2019 2:16 PM $100	$100.00	x 1	$100.00	
Grand Total				
			Total	**$100.00**

Payment #45131

Method:	Check		9449
Date:	05/29/2019	**Note:**	49610 HWY 65, McGregor, MN 55760
Made By:	Richard & Valerie Vigstol		
Confirmed By:	Jan Yearneau		

AITKIN COUNTY ENVIRONMENTAL SERVICES-PLANNING & ZONING
209 Second Street, NW Room# 100
Aitkin, Minnesota 56431
PH: (218) 927-7342
FX: (218) 927-4372

5/30/2019

Richard Vigstol
49610 State Hwy 65
McGregor, MN 55760

Re: Operating Permit # 117
Zoning Permit #30601
Parcel # 29-0-035100

Dear Permittee:

This letter is to inform you that your Operating Permit has been renewed until 5/31/2024 .

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