



RICK SNYDER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF NATURAL RESOURCES & ENVIRONMENT
LANSING



February 24, 2011

Mr. Ernest Elliot, Superintendent
Betsie Lake Utilities Authority
P.O.Box 248
Frankfort, Michigan 49635

Dear Mr. Elliot:

SUBJECT: Betsie Lake Utilities Authority; Wastewater Treatment Plant and Septage Waste Receiving Facility; Septage Waste Receiving Facility Operating Plan Approval

Review of the Betsie Lake Utilities Authority (BLUA) Wastewater Treatment Plant and Septage Waste Receiving Facility (SWRF) operating plan by the Department of Natural Resources and Environment (DNRE) is complete. The operating plan is approved and meets the requirements outlined in Section 11715b of Part 117, Septage Waste Servicers, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. The plan will be posted on the Septage Waste Program website at www.michigan.gov/deqseptage.

The receiving facility must operate in accordance with the approved operating plan. If a change in operations, fee pricing or other conditions is anticipated, please file an amendment to the plan at least 30 days prior to the proposed date for implementation.

If you have any questions, please contact me via telephone; chinneryj@michigan.gov; or DNRE, P.O. Box 30241, Lansing, Michigan 48909-7741.

Sincerely,

Jon D. Chinnery
Septage Waste Program
Onsite Wastewater Unit
Solid Waste and Land Application Section
Environmental Resource Management Division
517-451-1452

cc: Mr. Doug Coates, PE – Gosling Czubak Engineering Sciences, Inc.
Ms. Sy Paulik, DNRE - Cadillac
Mr. Brian Jankowski, DNRE - Cadillac

December 30, 2010

Mr. Matthew Campbell
Michigan Department of Natural Resources and Environment
via email

Subject: Betsie Lake Utilities Authority - Septage and Holding Tank Receiving Plan

Dear Mr. Campbell:

The Betsie Lake Utilities Authority has asked Gosling Czubak to assist them in responding to your review comments regarding their Septage Receiving Plan. Several items are included with this submittal to respond to your October 27, 2010 deficiencies letter and your emails to BLUA dated November 22, 2010 and December 22, 2010.

1. Updated Operating Plan

The proposed operating plan has been revised to incorporate your comments. A copy of the revised plan dated December 28, 2010 is attached. Revisions to the plan include:

- Added an opening paragraph to state the purpose of the plan
- Added a statement clarifying that the facility currently accepts septage and holding tank waste
- Revised the assumed BOD₅ concentration for HTW and Septage to 220 mg/l and 7,000 mg/l respectively as you suggested
- Revised the stated BOD₅ capacity of the treatment plant

2. BOD₅ Treatment Capacity

I have reviewed the Basis of Design with Brian Jankowski, MDNRE Cadillac, and have revised the BOD₅ capacity of the treatment plant stated in the operating plan. All of the key treatment process units (oxidation ditch, aerators, final clarifiers, and sludge storage) have a design capacity of 1,600 # BOD₅/day.

In a previous memo, I had de-rated the BOD₅ treatment capacity to 1,003#/day based on a limitation of the return activated sludge (RAS) system, but this was an error. The RAS system meets all 10 States Standards for a design flow of 0.575 MDG average daily flow.

3. Mailing List

A copy of the updated operating plan was mailed to all the municipalities and Health Departments within the proposed service area on December 30, 2010. The mailing list is attached.

Mr. Matthew Campbell

Page 2 of 2

December 28, 2010

4. Public Notice

Because of changes to the operating plan, a new public notice has been submitted to the local weekly paper for publication on January 5, 2011. A copy of the notice will be forwarded to you after publication. The notice includes the addition of a request for a public comment period of not less than 30 days. The BLUA does not maintain a website.

5. Flow Diagram and Process Description

Septage and Holding Tank Waste is received at the BLUA plant at a dedicated receiving station. The receiving station includes preliminary treatment with a rock trap, grinder, and automatic bar screen. The system features an automated keypad entry system and flow meter to record the volume delivered. Septage is then pumped to the headworks of the BLUA plant for grit removal. Treatment of septage and HTW is provided in the extended aeration oxidation ditch process. A complete process flow diagram is attached for reference.

6. Septage Data

You requested sample data for the past 12 months and septage volume records since 2005. Lab testing data for BOD₅ is not available since testing was done in 2006 and 2007 and the records have been discarded. However, BLUA will implement random testing and will begin to compile additional data. Combined septage and HTW volumes are summarized in the attached table.

I believe this additional information has addressed all of your concerns. If you need anything else, please contact me. This facility has a proven track record of treating high strength waste to a level that greatly exceeds the NPDES permit requirements. Please approve BLUA's septage receiving facility operating plan.

Sincerely,

GOSLING CZUBAK

Douglas A. Coates, P.E.
Manager of Civil Engineering Services

Cc: BLUA
Brian Jankowski, MDNRE - Cadillac

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Betsie Lake Utilities Authority
P.O. Box 248
Frankfort, Mi. 49635
231-352-9804

Betsie Lake Utilities Authority

December 28, 2010.

Betsie Lake Utilities Authority-Septage and Holding Tank Receiving Plan

The Betsie Lake Utilities Authority would like to announce that the Septage and Holding Tank Receiving Plan has been changed to increase our coverage area according to new regulations starting on October 1, 2010. The new Plan is available for public inspection at the following place and time. Public comments will be received until February 9, 2010 at the address below.

Location of Facility: Betsie Lake Utilities Authority
181 Lake Street
P.O. Box 248
Frankfort, MI 49635
231-352-9804

Operating Hours: Plant Personnel hours are 7:00 A.M. to 4:00 P.M. Monday through Friday, Weekends as needed.

Type of Material accepted at Facility: The facility currently accepts Septage and Holding Tank waste, Septage Tank waste from domestic homes, waste from Portable Toilets and similar treatment systems of storage devices.

Rates of Fee: The Fee for disposal is set by the Authority at a per gallon charge of 4 cents per gallon for metered gallons received at the septage station. The Authority will review the rate as to the most current information available, as to the cost of operating the septage station and the fees collected by the Authority. The rate charged will be reviewed at least once per Fiscal year.

Service Area: The service area of the Betsie Lake Utilities Authority will cover 15 Road miles for the Wastewater Treatment Plant at 181 Lake Street Frankfort Michigan. This Area to increase to 25 Mile radius on October 1, 2010.

Rule's for Hauler's using the Septage Receiving Station:

The Betsie Lake Utilities Authority will require that all Haulers register with the Authority Office and receive an Identification card to operate the equipment at the Septage Receiving Station.

All registered Haulers shall submit to random sampling of their loads as requested by the Authority. Any problems detected by sampling may result in the Hauler losing his ability to dispose of Septage or Holding Tank waste at the Facility.

Any registered Hauler that is found disposing of any substance other than Septage or Holding Tank Waste shall lose his or her right to use the Septage Receiving Facility.

Any operating problems with the Septage Receiving Station shall be reported to the Authority Office at the time of the problem if possible, or as soon as someone is available to notify. There will be a list of contacts posted at the Septage Station. In the event of a spill the Hauler shall remain at the Station until the Authority has been notified and possible cleanup is completed.



Failure to comply with this condition may result in the Hauler losing his or her right to dispose of Septage or Holding Tank waste at the Septage Facility.

Plant Loading:

The Authority reserves the right to limit the amount of gallons of Septage and Holding Tank waste that are delivered to the Receiving Station for treatment by the Authority. The receiving of Septage and Holding Tank waste shall be governed by the Authority as to the ability of the plant to treat and dispose of the Biosolids generated by the receiving of Septage and Holding Tank waste. Current loading of the plant is 30 percent of the rated capacity; the remaining can be used to treat Septage Holding Tank waste. The Septage and Holding Tank waste will be monitored and regulated by the Authority according to the rated capacity of the plant's ability to treat Septage and Holding Tank waste and to keep the plant at peak operating performance.

Based on the plant improvements that have been made to the plant in past years of 2003 and 2007 the following is our current loading rating from our plant Engineering firm Gosling Czubak Engineering Sciences Inc.

Plant Capacity Flow	GPD= 575,000	BOD(#/day)= 1,600
Current Loading	GPD = 226,000	" 366
Available Capacity	GPD= 349,000	" 1,234
Holding Tank*	GPD= 22,000	" 40
Septage**	GPD= 20,000	" 1,168

*Based on BOD Holding Tank = 220 mg/l from sampling records.

** Based on BOD Septage= 7,000 mg/l from sampling records.

This table based on an assumed ratio of Septage and Holding Tank waste. The facility will limit the BOD received to 1,234 #/day from both waste streams combined.

The Betsie Lake Utilities Authority has no Wet Weather conditions that effect the plant operation of the Septage Receiving Station.

Billing Procedure.

All billing is due with in 30 days from billing date. Any Septage Hauler that is past the 30 days billing cycle will be subject to additional charges and possible shutoff of the use of the Septage Station if bill remains unpaid.

Superintendent:

Ernest Elliott.

BETSIE LAKE UTILITIES AUTHORITY – SEPTAGE OPERATING PLAN

NOTICE MAILING LIST

Benzie County Administrator
Government Center
448 Court Place
Beulah, MI 49617

Benzie-Leelanau District
Health Dept.
6051 Frankfort Hwy
Ste. 100
Benzonia, MI 49616

City of Frankfort
Josh Mills
412 Main Street
Frankfort, MI 49635

Village of Benzonia
P.O. Box 224
Benzonia, MI 49616-0224

Village of Beulah
P.O. Box 326
Beulah, MI 49617-0326

Village of Elberta
151 Pearson St.
Elberta, MI 49628

Village of Honor
10922 Platte Street
P.O. Box 95
Honor, Michigan
49640-0095

Village of Thompsonville
PO Box 184
Lake Ann, Michigan 49650-
0061

Almira Township
7276 Ole White Dr.
Lake Ann, MI 49650-9617

Benzonia Township
PO Box 224
Benzonia, MI 49616-0224

Blaine Township
6352 Putney Rd.
Arcadia, MI 49613-9606

Colfax Township
PO Box 68
Thompsonville, MI 49683-
0068

Crystal Lake Township
PO Box 2129
Frankfort, MI 49635-2129

Gilmore Township
PO Box 247
Elberta, MI 49628-0247

Homestead Township
PO Box 315
Honor, MI 49640-0315

Inland Township
19668 Honor Hwy.
Interlochen, MI 49643-9208

Joyfield Township
6393 Joyfield Rd.
Frankfort, MI 49635-9723

Lake Township
5153 Scenic Hwy.
Honor, MI 49640-9510

Platte Township
6821 Indian Hill Rd.
Honor, MI 49640

Weldon Township
PO Box 570
Thompsonville, MI 49683-
0570

Grand Traverse County
Administrator
400 Boardman Avenue,
Traverse City, MI 49684

Long Lake Township
8870 North Long Lake Rd.
Traverse City, MI 49684-9622

Green Lake Township
PO Box 157
Interlochen, MI 49643-0157

Grant Township
8986 Davis Rd.
Buckley, MI 49620

Wexford County
Administrator
437 E. Division Street
Cadillac, Michigan 49601

District #10 Health
Department
521 Cobb Street # A
Cadillac, MI 49601-2599

Wexford Township
6941 W. 6 Rd.
Mesick, MI 49668

Springville Township
PO Box 323
Mesick, MI 49668-0323

Manistee County
Administrator
415 Third Street
Manistee, Michigan 49660

Village of Bear Lake
PO Box 175
Bear Lake, MI 49614-0175

Village of Copemish
P.O. Box 207
Copemish, MI 49625-0207

Village of Kaleva
9219 Aura Street
Kaleva, MI 49645-5105

BETSIE LAKE UTILITIES AUTHORITY – SEPTAGE OPERATING PLAN

NOTICE MAILING LIST

Village of Onekama
5283 Main Street
Onekama, MI 49675

Cleon Township
16505 Imhoff Dr.
Copemish, MI 49625-9519

Marilla Township
11982 Marilla Rd.
Copemish, MI 49625-9784

Maple Grove Township
PO Box 48
9213 Aura St.
Kaleva, MI 49645-0048

Brown Township
9763 Coates Hwy.
Manistee, MI 49660-9689

Dickson Township
PO Box 39
Brethren, MI 49619-0039

Manistee Township
410 Holden St.
Manistee, MI 49660-1100

Bear Lake Township
PO Box 187
Bear Lake, MI 49614-0187

Onekama Township
PO Box 458
Onekama, MI 49675-0458

Arcadia Township
PO Box 318
Arcadia, MI 49613-0318

Pleasanton Township
PO Box 145
Bear Lake, MI 49614

Springdale Township
16600 Henry Rd.
Thompsonville, MI 49683

Leelanau County
Administrator
8527 E. Government Center
Dr.
Suttons Bay MI 49682

Village of Empire
PO Box 253 Empire, MI
49630

Empire Township
PO Box 234
Empire, MI 49630-0234

Glen Arbor Township
PO Box 276
Glen Arbor, MI 49636-0276

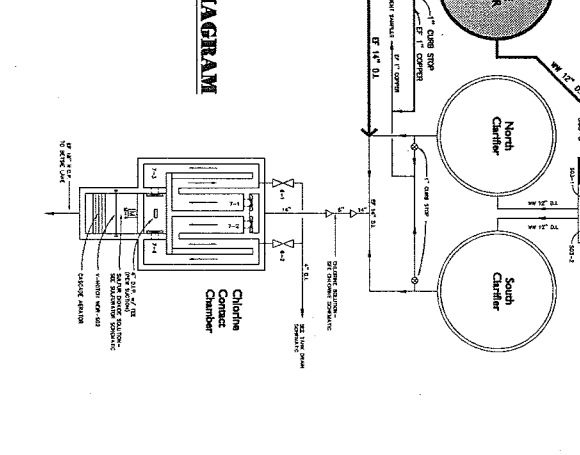
Cleveland Township
6800 S. Bohemian Rd.
Maple City, MI 49664-8760

Kasson Township
PO Box 62
Maple City, MI 49664-0062

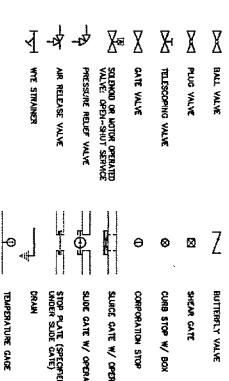
Solon Township
PO Box 253
Cedar, MI 49621-0253

WASTEWATER FLOW DIAGRAM

NO SCALE



- PIPE ABBREVIATIONS**
- DL - DUCTILE IRON PIPE
 - CMF - COMPACTED METAL PIPE
 - PVC - POLYVINYL CHLORIDE PIPE
 - CL - TRIP 'K' COPPER PIPE
 - CS - GALVANIZED STEEL PIPE
- Pipe Contents:**
- RW - RAWWATER
 - SW - SERVICE WATER
 - FEW - PLANT EFFLUENT WATER
 - RS - RETURN ACTIVATED SLUDGE
 - LP - LOW PRESSURE AIR
 - D - TANK DRAINS
 - HW - WASTEWATER
 - DF - INFLUENT EFFLUENT
 - DS - CHLORINE SOLUTION LINE
 - SOT - SULPHUR DIOXIDE SOLUTION LINE
 - FSO - FRESH CHLORINE SOLUTION LINE
 - PLV - PRELIMINARY LINE
 - S - SLUDGE
 - HW - HOLDING TANK WASTE WATER



- SLUDGE FLOW DIAGRAM**
- NO SCALE

- LEGEND**
- THREE-WAY FLUID VALVE
 - BALL VALVE
 - FLUID VALVE
 - TELESCOPING VALVE
 - GATE VALVE
 - SLUICED OR RETURN ORNAMENT
 - PRESSURE RELIEF VALVE
 - AIR RELEASE VALVE
 - WYE STRAINER
 - ORIGIN VALVE
 - BUTTERFLY VALVE
 - SEAM GATE
 - COAG STOP W/ BOX
 - COMPARISON STOP
 - SLUICED GATE W/ OPERATION
 - SLUICED GATE W/ OPERATION
 - STOP PLATE OPERATED UNDER SLUICED GATE
 - DRUM
 - TEMPERATURE GAUGE
 - BAROMETRIC VALVE
 - FLOW METER
 - BACKFLOW PREVENTER
 - VAPOUR TRAP
 - FLOW DIRECTION
 - PRESSURE GAUGE W/ VALVE
 - UNION
 - SHORT GAUGE
 - FLUID GAUGE

PROCESS SCHEMATIC
BLUA Sludge Storage

Location: PART OF SECTION 27, T. 26 N. R. 15 W., CRITICAL LINKS TOWNSHIP, SENECA COUNTY, MICHIGAN

Date: 04-02-77
Scale: 1" = 20'

Drawn By: BLS/BR
Checked By: DAC

No. Date: 44-07
Service: Pond Rebuild

By: [Signature]

Gosling Crubak
Engineering & Architecture
1000 Lakeshore Drive
Ann Arbor, Michigan 48106
Tel: 313-963-1000

Engineers
Surveyors
Planners
Environmental Services
Landscape Architecture