IREDELL COUNTY HEALTH DEPARTMENT

Statesville Office (704) 878-5305 Mooresville Office (704) 660-3625

IMPROVEMENT PERMIT / AUTHORIZATION TO CONSTRUCT / OPERATION PERMIT / EXISTING SYSTEM

PERMIT # REPAIR

PIN # 4757-20-1334.162

APPLICANT: IREDELL COUNTY JAIL ANNEX APPLICANT ADDRESS: 162 TRANSPORTATION LANE. STATESVILLE, NC 28625

SITE ADDRESS: SAME PHONE: 704 876 3452 ALT. PHONE: 704 876 3451

SITE DIRECTIONS: 21 N - TR PRISON CAMP - ON RT

SUBDIVISION: — SECTION: — LOT # — LOT AREA: — DESIGN FLOW: EXISTING L.T.A.R.: —

Septic Tank SEE BELOW (gal) STB Date

Pump Tank (gal) PT Date

Pump Make Model Serial #

Nitrification Fields — # Lines — Linear Ft: —

Trench Width — Max. Trench Bottom Depth — Gravel Depth —

☐ New System ☑ Repair ☐ Expansion System Type: I II III IV V VI

~~System Description:~~ PUMP & HAUL - ADDING TANKS

Repair System Description:

Maintenance Agreement Required: ☐ YES ☑ NO

☐ GRAVITY ☐ PRESSURE

☐ Residence ☐ Business ☑ Other ☐ Slab ☐ Basement w/plumbing

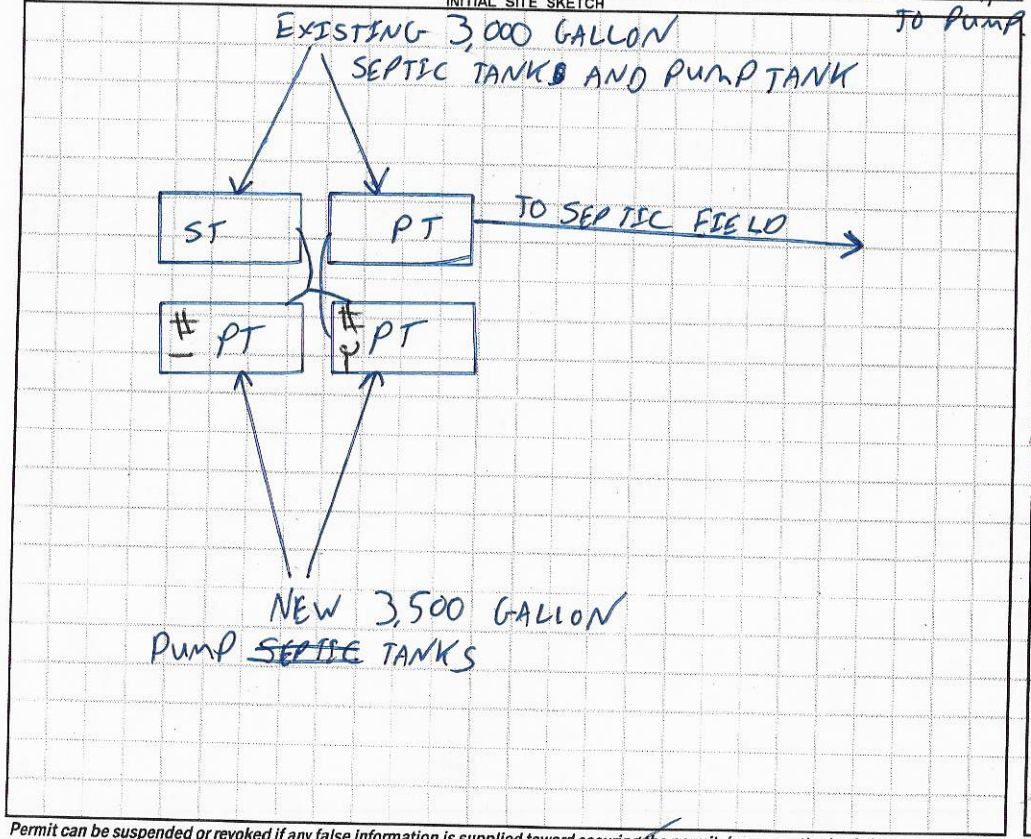
No. Bedrooms No. Persons No. Employees ☐ Crawl Space

Water Supply: ☐ Private ☑ Public ☐ Community

☐ Basement w/o plumbing

Comments / Conditions: (1) NEW PUMP TANKS TO BE ON SAME ELEVATION AS OUTLET OF EXISTING SEPTIC TANK TO ACHIEVE MAXIMUM STORAGE. (2) PANEL TO BE INSTALLED TO ALERT PUMP CONTRACTOR AND ENVIRONMENTAL HEALTH WHEN TO PUMP (3) PUMP TO BE ON MANUAL PUMP ONLY. (4) CONTRACT WITH PUMPER AND IREDELL COUNTY TO BE ESTABLISHED. (5) PERMIT FOR PUMP AND HAUL ONLY.

INITIAL SITE SKETCH



AS BUILT SKETCH

~~STB~~ PT - #1 - DATE - 8/7/12 # 1193

PT - #2 - DATE - 7/31/18 # 1193

01-30-2020

Lenty Wastewater is currently still providing Pump + Haul at this sit.

Per Lenty 1st pump + haul was done 01/13/12.

Permit can be suspended or revoked if any false information is supplied toward securing the permit / any unauthorized changes are made to the site / any unauthorized changes are made in the installation of the system. **CONTACT A LOCATOR SERVICE PRIOR TO ANY EXCAVATION**

☐ **IMPROVEMENT PERMIT** *with plat* valid without expiration. ☑ **IMPROVEMENT PERMIT** *with site plan* valid for 60 mos. ☑ **AUTHORIZATION TO CONSTRUCT** valid for period equal to IMPROVEMENT PERMIT--not to exceed 60 mo.

Owner / Applicant Signature: Captain Barker Date: Installed by:

IMPROVEMENT PERMIT by: C. Reeves Date: 5/20/13 OPERATION PERMIT by: Date:

AUTHORIZATION TO CONSTRUCT by: C. Reeves Date: 5/20/13 Existing System Inspected by: Date:

Health Dept. Copy - WHITE Applicant (Final Approval) - YELLOW Applicant (Conditional Approval) - PINK

IREDELL WATER

Customer Transactions

Account: 113304 JAIL, IREDELL COUNTY
Billing Cycle: Cycle 1
From 1/1/2011 12:00:00 AM To 4/21/2013 11:59:59 PM

Location Number	Service Address
31-746500000	154 PRISON CAMP RD STATESVILLE, NC 28625

Account Number	Transaction Type	Date Posted	Amount	Due/Applied	Reference	Previous Reading	Present Reading	Usage	Location	Balance
113304	Payment Check : 01	01/11/2013	-$375.68	-$375.68	00428851	4586			31-746500000	$0.00
113304	WATER	01/24/2013	$382.40	$0.00	Charges	7282600	7395600	133,000	31-746500000	$382.40
113304	Payment Check : 02	02/11/2013	-$382.40	-$382.40	00429830	5,072			31-746500000	$0.00
113304	WATER	02/26/2013	$478.72	$0.00	Charges	7395600	7563000	167,400	31-746500000	$478.72
113304	Payment Check : als	03/11/2013	-$478.72	-$478.72	00430811				31-746500000	$0.00
113304	WATER	03/26/2013	$366.44	$0.00	Charges	7563000	7690300	127,300	31-746500000	$366.44
113304	Payment Check : 04	04/11/2013	-$366.44	-$366.44	00431724	4800	4546		31-746500000	$0.00

Total Transactions: 56 Total Amount: $0.00 Total Usage: 4,190,700

Month of Jan - 4586 per day
" of Feb - 5,072 " "
March - 4,546 per day

B
B
B
B

* Indicates Charges that are not finalized

Pump at Work $200-300

- REMSYS - control panel - (as needed basis)
  $3-5 monthly service
- 5-7 days of storage
  = monthly readings?
- call shaft driller - stay right cost
- Tower than more
- H_2O tested -
- prob. not drain-field for a while
-

= core

1998
Broadbill
- 2005 pool
- Blueridge Pool's
- (Repair in back)

lot 44

Country Charter
- charter -

463-951-4494

Beds = ~~3,040~~ 4560
4 staff = ~~100~~ + 100
~~3,140~~ 4660
9,120 gallons

Brady Freeman

From: Bert Connolly
Sent: Wednesday, April 24, 2013 9:20 AM
To: Brady Freeman; Ron Smith; Kim Mecimore; David R. Hinson
Subject: RE: Pump and Haul

76 Permanent Beds + 3 Fulltime Staff + 1 Nurse Mon-thru-Friday 8a-4p = 80

From: Brady Freeman
Sent: Wednesday, April 24, 2013 8:30 AM
To: Ron Smith; Kim Mecimore; David R. Hinson; Bert Connolly
Subject: FW: Pump and Haul

Below is a response from the state engineer I think should make things a little less expensive for the county. Since we already have two 3,000 gallon tanks we are almost where we need to be according to the state engineer. I will follow up with Gayla Wetz from RMSYS Inc. pertaining to the telemetry control panel that is needed if you would like.

Also attached are the official requirements for the pump and haul. We will need to work together to get a total number of beds plus a total number of employees and temporary prison cells to figure the correct flow. Bert has sent me water records for the facility back to January 2011 and because of the water leak history it is very hard to determine the actual water usage. I have figured anywhere from 4200 gallons per day (which I think is pretty accurate) to 7800 gallons per day during the leak.

Brady Freeman

From: Angoli, Trish [mailto:trish.angoli@dhhs.nc.gov]
Sent: Tuesday, April 23, 2013 6:02 PM
To: Brady Freeman
Cc: Neal, Kevin
Subject: Pump and Haul

Brady,

Attached is the pump and haul guidance document that is on the webpage.

Based on the document, they need to have five days worth of tankage plus two days worth of emergency storage. If it is a non-residential facility, they can request a reduction in the requirement for five days worth of storage (not the two days). No matter what, the amount of tankage cannot be reduced to less than the minimum tank volume required by rule for the septic tank and pump tank.

If they have 75 beds and at 60 gpd/bed, the design flow is equal to 4,500 gpd. The minimum septic tank capacity is 4,500 gallons and the minimum pump tank capacity would be 4,500 gallons also, so their tank capacity could not be less than 9,000 gallons total.

Telemetry is also required for the system. Below is the information for RMSYS, the telemetry option we discussed yesterday.

Gayla Wetz
RMSYS Inc.
832-390-9336
gayla@rmsysinc.com

If you have any other questions for me, just let me know.

Trish

Patricia Angoli, PE
NC Department of Health and Human Services
Environmental Engineer, On-Site Water Protection, Division of Public Health
5605 Six Forks Rd
1642 Mail Service Center
Raleigh, NC 27699-1642
919-707-5878 (Office)
919-845-3973 (Fax)
trish.angoli@dhhs.nc.gov
http://publichealth.nc.gov/

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STANDARD OPERATING

PROCEDURES

AND

DESIGN GUIDELINES

PUMP AND HAUL ACTIVITIES FOR NON-REPAIRABLE SUBSURFACE WASTEWATER SYSTEMS

NCDENR

North Carolina Department of Environment and Natural Resources

August 2003

TABLE OF CONTENTS

SECTION 1 – PURPOSE OF THIS DOCUMENT

SECTION 2 – SEPTEMBER 6, 2000 DEH/DWQ MEMO ESTABLISHING S.O.P. FOR PUMP AND HAUL ACTIVITIES

SECTION 3 – SUMMARY OF THE SOP FOR PUMP AND HAUL ACTIVITIES

SECTION 4 – SAMPLE AUTHORIZATION LETTER FOR LOCALLY PERMITEED PUMP AND HAUL ACTIVITIES

SECTION 5 – PUMP AND HAUL DESIGN GUIDELINES

SECTION 1

PURPOSE OF

THIS DOCUMENT

Purpose:

This document serves as a reference for Local Health Departments when utilizing Pump and Haul Systems as a permanent repair option for otherwise non-repairable onsite wastewater systems. It contains two Division of Environmental Health memos from September and December of 2000 along with newly developed Design Guidelines for these permanent Pump and Haul systems.

SECTION 2

SEPTEMBER 6, 2000

DEH/DWQ MEMO

ESTABLISHING S.O.P.

FOR

PUMP AND HAUL

ACTIVITIES

1961

NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT AND NATURAL RESOURCES

NCDENR

JAMES B. HUNT JR.
GOVERNOR

BILL HOLMAN
SECRETARY

September 6, 2000

MEMORANDUM:

To: Bill Jeter, Chief
On-Site Wastewater Section
Division of Environmental Health

Coleen Sullins, Chief
Water Quality Section
Division of Water Quality

From: Linda Sewall, Director
Division of Environmental Health

Tommy Stevens, Director
Division of Water Quality

Subject: Standard Operating Procedures
Pump and Haul Activities for
Wastewater Systems

Over the past years there have been numerous occasions when questions have been raised regarding procedures to be followed when a facility needs an immediate solution for a failing wastewater treatment system, and for pump and haul to serve new facilities. These same questions relate to facilities permitted under the authority of both the Commission for Health Services and the Environmental Management Commission. While pump and haul activities are not considered by either of our Divisions to be preferred long term methods for handing wastewater, they are often the most appropriate short term solution for a failing system.

The same pump and haul questions are frequently raised by the regulated public and staff of local health departments, DWQ and DEH. In order to answer these questions and resolve this uncertainty, please find below procedures to be followed by both our Divisions. This guidance will also be distributed to all local health departments and other affected parties.

1. The responsibility for issuing a pump and haul document (requirement for local health department authorization or permit for DWQ) lies solely with the agency that has permit authority for the failing or inadequate wastewater treatment system.

1601 MAIL SERVICE CENTER, RALEIGH, NORTH CAROLINA 27699-1501
PHONE 919-733-4984 FAX 919-715-3060 WWW.ENR.STATE.NC.US/ENR/
AN EQUAL OPPORTUNITY / AFFIRMATIVE ACTION EMPLOYER - 50% RECYCLED/10% POST-CONSUMER PAPER

2. The wastewater from a failing facility under the authority of either of our Divisions can be pumped and hauled to a facility under the authority of the other Division as long as prior approval is obtained from the facility receiving the wastewater and the additional wastewater does not result in an exceedance of the treatment capacity of the receiving systems.

3. Any questions regarding a facility's ability to adequately treat the wastewater that will be pump and hauled to that facility and associated compliance issues must be directed to the receiving facility's permitting authority.

4. In addition to failing treatment systems, both of our Divisions occasionally receive requests for pump and haul authorizations for new or proposed facilities.

   While not considered an acceptable long term treatment alternative, DWQ can issue pump and haul permits for new facilities but only under unique circumstances and when the facility's permanent wastewater treatment system when completed will be under the permitting authority of DWQ.

   The DEH Rules do not allow DEH to issue pump and haul permits for new construction.

   Considering these limitations and in order to minimize confusion in the regulated community, DWQ staff, DEH staff and the staff of the local health departments must not refer new or proposed facilities whose treatment systems when completed will be under their own authority to the other regulatory agencies for pump and haul authorizations. These other agencies do not have the authority to issue pump and haul authorizations to these facilities.

5. Pump and Haul Authorizations for temporary food establishments (serving County Fairs, Church functions, etc.) will be issued when appropriate by the Local Health Departments.

We greatly appreciate your assistance in this matter. If there is a need for any additional information or clarification, please do not hesitate to contact us.

Cc: Local Health Departments

SECTION 3

SUMMARY OF THE SOP FOR PUMP AND HAUL ACTIVITIES

SUMMARY
Of the
SOP for PUMP and HAUL ACTIVITIES for WASTEWATER SYSTEMS

1. For failing wastewater treatment and disposal systems that discharge to the subsurface (septic tank systems and the like) the responsibility for issuing pump and haul (P&H) authorizations lies with the local health department (LHD).

2. Wastewater from a failing system permitted by a LHD can be pumped and hauled to a facility under the authority of the Division of Water Quality (DWQ) as long as prior approval is obtained from the facility receiving the wastewater **and** the additional wastewater does not result in an exceedance of the treatment capacity of the receiving system(s).

3. If there are any questions about a facility's ability to adequately treat the wastewater received or about compliance issues associated with a facility permitted by DWQ , the facility must be directed by DWQ.

4. For **NEW CONSTRUCTION** (including expansion of existing systems) or proposed systems:
   A. DWQ can issue P&H permits but only under unique circumstances **and** the facility's permanent system will be permitted by DWQ;

   B. The .1900 Rules do not allow LHDs (or OSWS) to issue P&H authorizations for new construction (including expansion of existing systems) of systems; and

   C. LHDs (or OSWS) must not refer new or proposed systems that will be permitted under the .1900 rules to the DWQ for a P&H permit because we are not allowed to issue P&H authorizations for new construction and DWQ can't issue P&H permits for new systems that are or are to be permitted under the .1900 Rules..

5. When appropriate (and within the guidelines), a LHD can issue an authorization to P&H to a facility permitted by DWQ for wastewater originating from a temporary food stand (serving street fairs, church functions, etc.).

SECTION 4

SAMPLE AUTHORIZATION LETTER

FOR

LOCALLY PERMITTED

PUMP AND HAUL

ACTIVITIES

December 1, 2000

MEMORANDUM:

To: Local Health Department
On-Site Wastewater Program

From: Bill Jeter, Chief
On-Site Wastewater Section
Division of Environmental Health

Subject: Sample Authorization Letter
for Locally Permitted Pump and Haul Activities
for Wastewater Systems

You recently received a memorandum concerning SOP's for Pump and Haul Activities for wastewater systems. As stated in that memo, for failing wastewater treatment and disposal systems that discharge to the subsurface (septic tank systems and the like) the responsibility for issuing pump and haul authorizations lies with the local health department. Attached is a sample Pump & Haul Authorization that you may want to use in your On-Site program. This Authorization is intended for use **only** for residential and commercial systems less than 3000 gpd and that are not classified as industrial process wastewater (IPWW).

If you need any additional information or clarification, please contact us.

PUMP AND HAUL AUTHORIZATION

AUTHORIZATION IS HEREBY GRANTED TO

IREDELL COUNTY
(Name of Applicant)

FOR THE

operation of a 4785 gallon (shall not exceed liquid capacity of tank) pump and haul activity for pumping wastewater from Iredell County Jail Annex (facility) located at 162 TRANSPORTATION LANE (address) and hauling it to HARMONY TOWN SEWER (treatment facility) with no discharge of wastes to surface water.

This Authorization shall be effective from the date of issuance until New facility is built (date) and shall be subject to the following specified conditions and limitations:

1. This Authorization shall become revoked unless the subject pum p and haul activities are carried out in a manner that has been approved by the IREDELL County Health Department.
2. The permitted facility shall be properly maintained and operated at all times to comply with all the provisions of Rule .1961.
3. This Authorization is not transferable.
4. No type of wastewater other than that from Iredell County Jail Annex (facility) noted above shall be included in the pump and haul activities.
5. This Authorization shall be revoked unless the Harmony Sewer (treatment facility) remains fully capable of treating the wastes generated by the permitted facility.
6. Iredell County Jail Annex (applicant) is liable for any damage caused by a spill or failure of the pump and haul operation.
7. Any employee or representative of the Iredell County Health Department or the Division of Environmental Health, DENR, may, upon presentation of credentials, enter and inspect any property, premises, or place on or related to the pump and haul collection facilities at any reasonable time for the purpose of determining compliance with this Authorization, may inspect or copy any record that must be kept under the terms and conditions of this Authorization; and may obtain samples.
8. An accurate record of the pump and haul activities must be maintained by Iredell (applicant) County Jail, indicating:

a) Date wastewater is removed from the facility.
b) Name of facility from which wastewater is rem oved.
c) Name of facility receiving wastewater.
d) Volume of wastewater removed.

Invoices marked paid containing the required information will be considered as acceptable records.

9. Failure to abide by the conditions and limitations contained in this Authorizati on may subject Iredell County (applicant) to an enforcement action by the Iredell County Health Department or the Division of Environmental Health, DENR, in accordance with North Carolina General Sta tutes 130A-18, 130A-22c, 130A-23 or 130A-25.

10. The issuance of this Authorization does not preclude Iredell County (applicant) from complying with any and all statutes, rules, regulations, or ordinances which may be imposed by other government agencies (local, state, federal) which may have jurisdiction.

11. **Noncompliance Notification:**
Iredell County (applicant) shall report by telephone to the Iredell County Health Department, phone number 704-664-3703, as soon as possible, but in no case more than 24 hours or on the next working day following the occurrence of first knowledge of any failure to meet the requirements of Rule .1961 by the permitted facility OR the failure of the receiving facility to receive and properly treat the delivered effluent.

Persons reporting such occurrences by telephone shall file a written report in letter form within 15 days following first knowledge of the occurrence. This report must outline the ac tions taken or proposed to ensure that the problem does not recur.

Authorization issued this the 23 day of May 2013

C. Brady Freeman C. Brady Freeman REHS
EHS, RS

Iredell County Health Department

SECTION 5

PUMP AND HAUL

DESIGN GUIDELINES

PUMP AND HAUL DESIGN GUIDELINES

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

DESIGN GUIDELINES FOR PUMP AND HAUL SYSTEMS USED AS A PERMANENT REPAIR OPTION FOR NONREPAIRABLE ONSITE WASTEWATER SYSTEMS WITH A DESIGN DAILY FLOW OF LESS THAN 3000 GALLONS PER DAY SERVING OWNER OR RENTER OCCUPIED PRIMARY RESIDENCES OR OTHER NON-INDUSTRIAL PROCESS WASTEWATER GENERATING FACILIITES. THIS INCLUDES MULTI-FAMILY RESIDENCES.

Purpose:

To set minimum design guidelines for permitting systems using a pump and haul tank system permanently to repair existing malfunctioning systems only. Pump and haul systems are not to be used for new construction. These guidelines cover systems of 3000 g.p.d. or less design flow and include residential rental property used by the renter as a primary residence, residential rental property not used as a primary residence (e.g. vacation/resort rental property), and other non-residential, non-industrial wastewater facilities.

Design Guidelines

1. Application

a. An application shall be completed and submitted to the local health department by the owner of the residence or facility. The application shall include the information required on the applications for Improvement Permit and Construction Authorization. It shall also include the number of people living in the residence. For non-residential facilities, information about water usage amounts and patterns shall be required.

2. Tankage

a. The system shall maintain a minimum of 5 days of storage capacity plus 2 days of emergency storage capacity. Each system shall use a single tank or multiple tanks in tandem (second and subsequent tanks may have no baffle walls; there shall be no bottom connection between tanks) to achieve 5 day minimum storage capacity equal to 5 day design flow (design daily flow shall be 60 gallons per person per day) plus two days of emergency storage volume. (Ex: 3 people in the home: 3 people X 60 gpd/person = 180 gpd X 7 days = 1260 gallon capacity tank required).

b. Applicants can request larger tankage on the application, for instance if they wish to have the time frame between pumping the tank increased. The tankage multiplier shall be increased from the 5-day minimum to the number of days requested by the applicant.

c. Applicants of non-residential facilities may request a reduction in the 5-day storage requirement (not the 2-day emergency storage requirement) if they have

ownership/control of approved sewage hauling equipment, or can otherwise provide documentation of the availability of hauler services to remove the design daily flow at any given time within 24 hours of notice. Under no circumstances shall the total storage capacity be less than the minimum required septic tank plus pump capacity for the facility per Rules .1952(b) and (c).

d. High water alarms shall be set to provide 2 days of emergency storage and shall include an auto dial telemetry device with battery backup to notify the contracted pumper that service is needed. If rental property, the primary owner(s) of the residence/property shall also be notified by the auto dial telemetry device.

e. All tank compartments shall contain approved risers constructed at or above finished grade.

f. There shall be no overflows, bypasses, or connections to unapproved systems from the pump and haul tank(s). Discharge piping to any abandoned subsurface system shall be physically disconnected.

3. Operation and Maintenance

a. The system is classified as a type V system under rule .1961 and shall require a Certified Operator to make monthly inspections (every 30-days) and submit reports to the LHD within 10 days of last inspection. The LHD shall conduct an inspection at least annually.

b. A record shall be maintained by the facility owner of all wastewater removed from the facility. The record shall include the name of the hauler, receipt or other documentation from the treatment facility agreeing to accept the wastewater, date the wastewater was pumped and hauled, and volume of the wastewater removed. This record shall be made available to the local health department upon request, and summarized in the inspection reports submitted by the Operator.

4. Permitting

a. A Construction Authorization shall be issued by an Authorized Agent upon a finding that:

1. There are NO on-site options to affect a repair,

2. Connection to a publicly owned treatment works is not possible,

3. Sewage collection, retention, and alarm system is designed in accordance with the requirements in Section 2,

4. Approval is received in writing from the facility receiving the wastewater and the additional wastewater does not result in exceeding the treatment capacity of the receiving system(s). Pump and haul sewage is not to be disposed to septage fields,

5. A proposed or draft contract with a licensed hauler for sewage disposal at an approved wastewater system is acceptable, and

6. Other requirements deemed necessary are met.

b. A non-transferable Operation Permit valid for a period not to exceed five years shall be issued to the system owner upon a finding that:

1. Installed system meets the CA requirements,

2. An appropriate contract between the system owner and sewage hauler is executed with a copy on file with the local health department,

3. An appropriate contract has been executed between the system owner and the Operator in Responsible Charge with a copy on file with the local health department, and

4. Other necessary requirements are met.

c. Permit conditions shall include the requirements that there be no additions, expansions, or alterations to the facilities served by the pump and haul system until a permanent approved wastewater system repair/replacement is available and permitted.

d. Failure to maintain the contracts/agreements with the sewage hauler, treatment facility and Operator shall render the permit/authorization null and void.