State of North Carolina
Department of Environment
and Natural Resources
Division of Environmental Health

James B. Hunt, Governor
Bill Holman, Secretary
Linda Sewall, Director

NCDENR
North Carolina Department of Environment and Natural Resources

July 10, 2000

Mr. Wesley Sparks
Iredell County Health Department
412 E. Center St.
Mooresville, NC 28115

Mr. Sparks ,

The Mike Skrabacy, owner and applicant, site is UNSUITABLE for a ground absorption wastewater treatment and disposal system under current laws and rules 15NCAC 18A .1900. No wastewater (septic tank) system to serve a three bedroom residence can be permitted on this site. It might be possible to permit a two bedroom residence with strict conditions.

This report lists the findings, conclusions and recommendations for the property. If you have any questions or if I can be of assistance, contact me at (828) 397-5152 or by E-mail at joe.lynn@ncmail.net.

Sincerely,
Joe Lynn
Joe Lynn
Regional Soil Specialist

## INTRODUCTION

COUNTY: Iredell
OWNER/APPLICANT: Mike Skrabacy
LOCATION: Bayview Estates Lot # 26
TYPE OF FACILITY: residence
DESIGN UNIT: 360 gpd
WATER SUPPLY: on-site well
EVALUATED BY: Joe Lynn assisted by Wesley Sparks, using hand augers
DATE OF EVALUATION: 6-7-2000
OTHERS PRESENT: N/A

## SITE INFORMATION

AREA/USE: about 20,000 sq. ft./ woods
TOPOGRAPHY: 2 to 10 percent slope
LANDSCAPE POSITION: ridge & linear slopes
SITE LIMITATIONS: Wells and wastewater systems on adjoining lots & farm terraces

## SOIL INFORMATION

TEXTURE: surface: sandy clay loam, clay loam, sandy clay
subsurface: clay and sandy clay
STRUCTURE: blocky
CLAY MINERALOGY: expansive clay in the saprolite
DEPTH to rock or parent material - inches; saprolite 5 to 41 inches
WETNESS: no chromas of two or less
RESTRICTIVE HORIZONS: none
AVAILABLE SPACE: about 1,200 sq. ft.

## CONCLUSIONS

This site is unsuitable for the installation of a conventional wastewater system (septic tank) Rule .1955 due to:

1. Rule .1941 Unsuitable Soil Characteristics
   Expansive clay mineralogy
2. Rule .1943 Insufficient Soil Depth
   Soil Depths less than 36 inches
3. Rule .1945 Insufficient Available Space
   Not enough area for the initial wastewater system and a repair if needed.

The site is Unsuitable under Rule .1956 Modifications to Septic Systems:

1. Shallow conventional system-NO.
2. Large Diameter Pipe system-NO

3. Prefabricated Porous Block Panel system-NO
4. Drainage will not be sufficient to reclassify the site to Provisionally Suitable.
5. The saprolite is Unsuitable.

The site is Unsuitable under Rule .1957 Alternative Sewage Systems:
1. Low Pressure Pipe system-NO
2. Fill system-NO
3. Aerobic Treatment system-NO

The site is Unsuitable under Rule .1969 Experimental and Innovative Systems, Components, or Devices:
1. Chamber system-NO
2. Houch Drainage system-NO
3. Perc-Rite Subsurface Drip system-NO
4. Sand Filter Pretreatment system-Maybe
5. Peat Filter (Puraflo) Pretreatment system-Maybe

## RECOMMENDATIONS

The owner has the following options that might allow the property to be used as desired:
1. The applicant may purchase Provisionally Suitable property to place the wastewater system on.
2. The applicant may obtain an easement on a Provisionally Suitable property to place the wastewater system on.
3. A wastewater system can be pursued under Rule .1948 (d). Written documentation must be submitted to your office showing that the proposed wastewater system can be expected to function properly. The data must contain the following:
   A. The effluent must be non-pathogenic, non-infectious, non-toxic, and non-hazardous.
   B. The effluent must not contaminate the ground water and surface water.
   C. The effluent must not be exposed to the ground surface or discharged to surface waters where it could come into contact with people, animals, or vectors.
4. The Division of Water Quality in Mooresville, NC at (704) 663-1699 may be contacted about securing a discharge permit. The applicant is strongly advised to contact someone with knowledge of discharge systems to evaluate the site before contacting this office.
5. The applicant or the owner may have the site evaluated by a Licensed Soil Scientist for a pretreatment system.
6. The applicant may chose to reapply for a two bedroom residence. If the daily flow is 240 then a PPBPS can be permitted for the right rear portion of the lot. The site will require soil to be brought in to cap the system. The house must be as close to the front property line as possible. The well will be between the house and the street. The house footprint will be limited to 30 or so feet wide. A foundation drain will not be possible, so the house plans will have to take this into consideration. **There will be no repair area.**