George - Here is a case in point of soil from 2 sites w/same owner wanting to go to one Land app. site. What do you think?

They still need to supply some extra into but I wanted to discuss it whyon first.

Ribyn

SPPROVE AT
ZOO YARDS ACRE TIMENES

Wandled - They

don't have knough

land after all.

Oth plane on

Donelling

More

M

#### APPLICATION TO AND APPLY PETROLEUM CONTAMINATE SOIL

### Minnesota Pollution Control Agency Tanks and Spills Section April 25, 1990



MPCA, HAZARDOUS

Refer to the Minnesota Pollution Control Agency (MPCA) document "Land Application of Petroleum Contaminated Soil: Single Application Sites" for specific information on acceptable soil and site criteria.

L. BACKGROUND INFORMATTO	ND INFORMATION
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A.	Tank	owner/	operator	mailing	address:	
----	------	--------	----------	---------	----------	--

Contact: Mr. Jerry Scott

Company name: Hallock School District 351

Street/Box: P.O. Box 670

City, Zip: Hallock, MN 56728

**Telephone:** (218) 843-3682

C. Address or legal descripton of land spreading site:

Contact: Henry P. Noel

Street:

City, Zip:

**Telephone:** (218) 843-2737

Site from which contaminated soil originated:

Company name: Hallock High School

Street: 47 North Ash Street City, Zip: Hallock, MN 56728

County: Kittson

D. Consultant (or other) preparing this form:

Contact: Craig F. Diekvoss

Company name: Midwest EnvironmentalControl Street/Box: 3901 University Ave. NE Corp.

City, Zip: Minneapolis, MN 55421

**Telephone:** (612) 781–1647

NE 1/4 of SW 1/4 of Section 13 , Township 161N, Range 40W Township Name Hallock

- MPCA Site ID#: LEAKOOOO 1318
- F. Volume of soil to be land applied (cubic yards): 400 cubic yards
- Projected date of application of soil: before June 15, 1990
- Have there been past waste disposal activities at the proposed site? No X Yes , please explain.

## II. SITE AND SOIL CHARACTERISTICS

- Site slope (percent): 1-2%
- Distance to surface vater (feet or miles): 1,000 ft.
- C. Distance to nearest building or residence (feet): 250 ft.
- Depth to seasonal high water table (feet): >15 ft. Depth to field tile lines (feet): If bedrock exists at 8 feet or less, indicate depth (feet):
- Area of land to be used (square feet or acres): 1 acre /
- Spreading thickness (inches): 3-4 in.

#### III. SOIL SAMPLING RESULTS

c fame?

A. If soil nutrient tests were conducted, list the results below:

Number	Matter, Percent	Phosphorus, pp
H <u>a11_13</u> -1	6.1%	32 <u>1b./acre</u>
-	-	

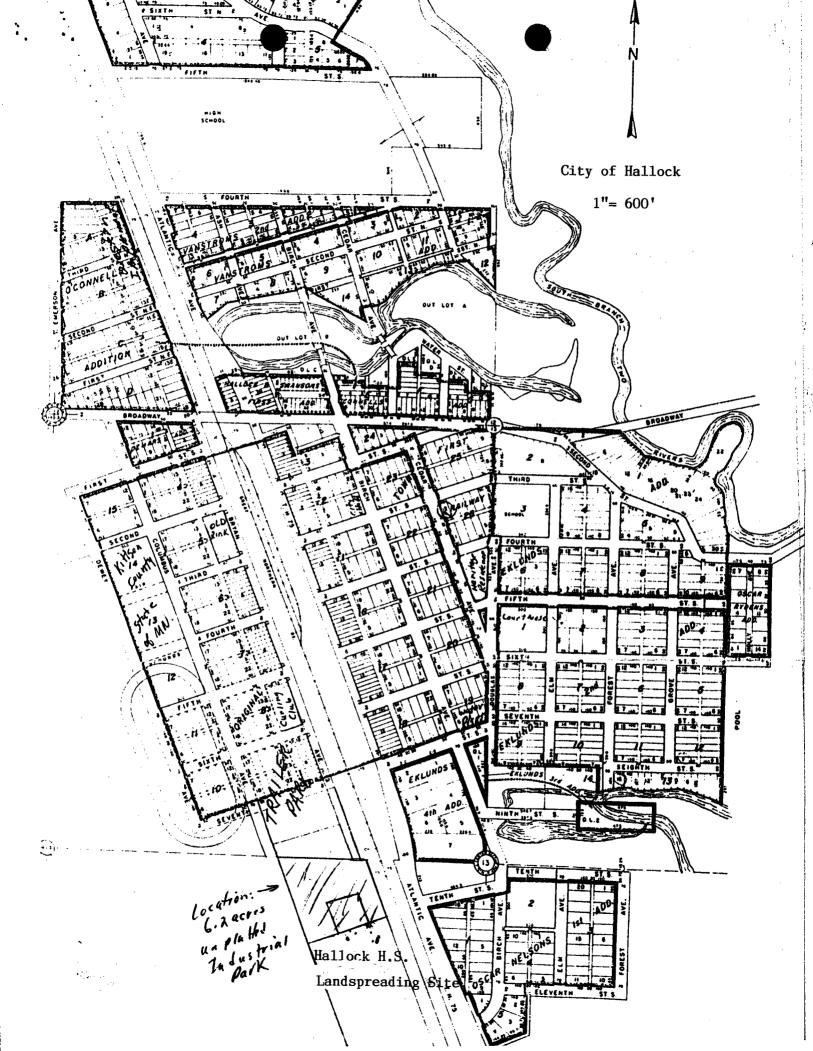
Application	to	Land	Apply	Petreum	Contaminated	Soil
Page 2						
April 25, 19	990			. —		

Mail

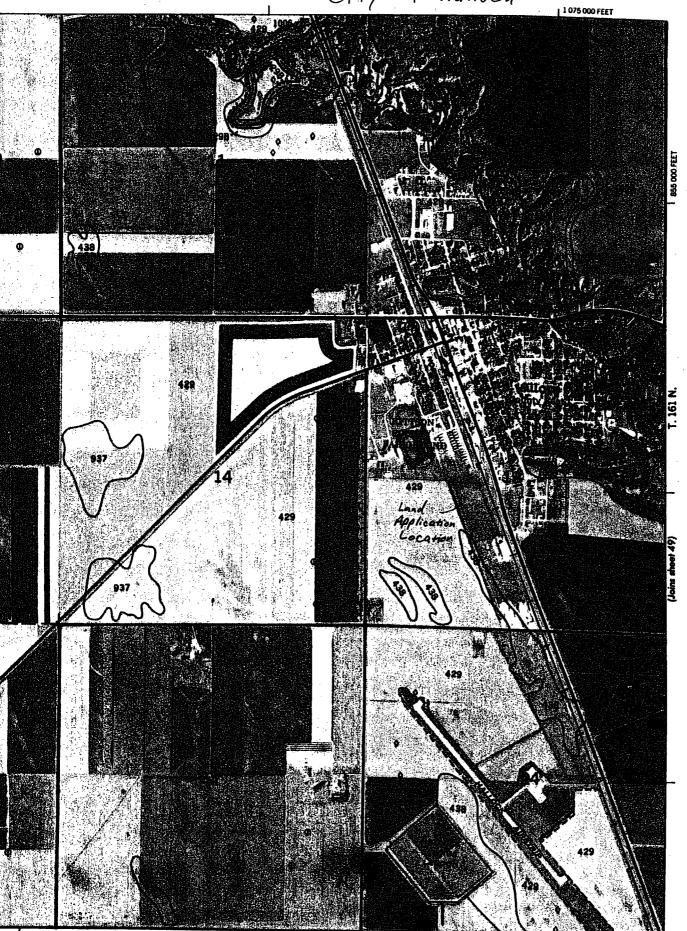
В.	Circ dies List cont Anal	lbs. nitrest le the type el fuel the appropaminated so	(s) of pet 2 fuel o riate soil il (refer roleum Rel	roleum con il) waste sample an to the MPC ease Sites	tamination oil, other alytical radical	e, unlead (please esults fr	lbs. sul ed gas, specify) om the e: d Ground	regular gas
Sam Num	ple	uel oil att THC as gas or FO ppm	Benzene	rate table Ethyl- benzene ppm	Toluene ppm	Xylene ppm	MTBE ppm	Lead ppm
SP-1		∨ 8.3 ppm	<u> </u>	0.014	<u>&lt;0.005</u>	0.022		
SP-2	·	56 ppm	0.062	0.012	0.063	0.57	<del></del>	
			*******************					
<del> </del>	<del></del>			-				
				· · · · · · · · · · · · · · · · · · ·				
	SURES	TACH COPIES			TS AND CHA	AIN OF CUS	TODY FOR	HS
E	co Si Sh	py of count pies of the te location ould be app	e interpret map with proximately	ation tab] exact app] one inch	es or inte ication lo = 50 feet)	rpretatio cation ma	n sheets rked (sc	ale
		*****						
Signatur	e and	Title of M	PCA Staff	Inspector	(or other	authorize	d inspec	tor):
					Date Insp			
		Title of C						
Signatur	e and	Title of C	ity/Townsh:	ip Officia	1:			<del></del>
*****	****	*****	*****	*****	******	*****	*****	*****
Mail to:				Pollution	n Control	Agency		

see report for laboreport

Attention: (Project Manager) Hazardous Waste Division Tanks and Spills Section 520 Lafayette Road St. Paul, Minnesota 55155



City of Hallock



#### SOIL LEGEND

Symbols consist of numbers or a combination of numbers and letters, for example 61, 157, 1578, or 1002. The 1, 2, 3, or 4 digit number designates the kind of soil or land type. A capital letter B following a number indicates the class of slope. Symbols without a slope letter usually are nearly level.

SYMBOL	NAME
45	Maddock soils, 0 to 2 percent slopes
46	Borup team
47 50	Colvin sifty clay loam
50 52	Cashel clay Augsburg soils
59	Grimstad soils, 0 to 2 percent slopes
60	Glyndon soils, 0 to 2 percent slopes
61	Arveson soits
63	Rockwell solfs
64 65	Ulen soils, 0 to 2 percent slopes
67	Foxhome soils, 0 to 2 percent slopes Bearden silt loam, 0 to 2 percent slopes
77	Garnes soils, 0 to 2 percent slopes
93	Bearden silty clay Idam, 0 to 2 percent slopes
938	Bearden silty clay loam, 2 to 6 percent slopes
111 116	Harighard soils
117	Redby soils, 0 to 2 percent slopes Coment soils
145	Enstrom loamy fine sand, 0 to 2 percent slopes
148	Poppleton soils, 0 to 2 percent slopes
157	Wahpeton silly clay, 0 to 2 percent slopes
157B	Wahpeton silty clay, 2 to 6 percent slopes
187 205	Harg muck
242	Karisted soils, 0 to 2 percent slopes Marquette soils, 0 to 2 percent slopes
245	Lohnes soils, 8 to 6 percent slopes
280	Pelan soils, 0 to 2 percent slopes
296	Fram soils, 0 to 2 percent slopes
343	Wheatville soils, 0 to 2 percent slopes
379 383	Percy bouldery soils Percy soils, calcareous surface
384	Percy soils, depressional
403	Viking soils
412	Mavie soils
424 425	Augsburg solls, depressional
425	Donaldson soils, 0 to 2 percent slopes Foldahl soils, 0 to 2 percent slopes
427	Fram soils, leached, 0 to 3 percent slopes
429	Northcote clay, 0 to 2 percent slopes
429B	Northcote clay, 2 to 6 percent slopes
430	Noves soils
432 433	Strandquist soils Syrene soils, very wet
435	Syrane soils
438	Northcote clay, depressional
482	Grygia soils
543	Markey muck
544 547	Cathro muck Deerwood muck
581	Percy soils
582	Rollss soils
583	Nereson soils, 0 to 2 percent slopes
908	Bearden-Fargo complex
937 991	Hegne-Northcate complex
993	Northcote and Wahpeton soils Arveson and Comant soils, depressional
994	Rockwell and Grygla soils, depressional
1002	Alluvial land, frequently flooded
1006	Breaks and Alluvial land
1025 1053	Dune land
7022	Marsh



### **CULTURAL FEATU**

#### **BOUNDARIES**

National, state or province

County or parish

Minor civil division

Reservation (national forest or park, state forest or park, and large airport)

Land grant

Limit of soil survey (label)

Field sheet matchline & nestline

AD HOC BOUNDARY (label)

Small airport, airfield, park oilfield, cemetery, or flood pool STATE COORDINATE TICK

LAND DIVISION CORNERS (sections and land grants)

ROADS

Divided (median shown if scale permits) Other roads

**ROAD EMBLEMS & DESIGNATIONS** 

Interstate

Federal

State

County, farm or ranch

RAILROAD

POWER TRANSMISSION LINE (normally not shown) PIPE LINE (normally not shown)

\*\*\*

FENCE (normally not shown)

LEVEES

Without road

With road

With railroad

DAMS

Large (to scale)

Medium or small

PITS

**Gravel** pit

Mine or quarry

# CONVENTIONAL AND SPECIAL SYMBOLS LEGEND

CULTURAL FEAT	<b>JRES</b>			SPECIAL SYMBOLS SOIL SURVEY -	FOR
BOUNDARIES		MISCELLANEOUS CULTURAL FEATU	RES	SOIL DELINEATIONS AND SYMBOLS _	93 4298
National, state or province		Farmstead, house (omit in urban areas)	•	ESCARPMENTS	
County or parish		Church	i	Bedrock « (points down slope)	***************************************
Minor civil division		School	£ Indian	Other than bedrock (points down slope)	*****************
Reservation (national forest or park,		Indian mound (label)	Indian Mound	SHORT STEEP SLOPE .	•••••
state forest or park, and large airport)		Located object (label)	Tower O	GULLY	······
Land grant		Tank (label)	GAS •	DEPRESSION OR SINK	<b>•</b>
Limit of soil survey (label)		Wells, oil or gas	. 4 <sup>5</sup>	SOIL SAMPLE SITE (normally not shown)	<b>S</b>
Field sheet matchline & neatline		Windmill	8	MISCELLANEOUS	
ND HOC BOUNDARY (label)		Kitchen midden	~	Blowout	·
Small airport, airlield, park, oilfield, cemetery, or flood pool	Devis Airstrip			Clay spot	*
STATE COORDINATE TICK				Gravelly spot	*
AND DIVISION CORNERS (sections and land grants)				Gumbo, slick or scabby spot (sodic)	ø
ROADS		WATER FEATU	RES	Dumps and other similar non soil areas	=
Divided (median shown if scale permits)		DRAINAGE		Prominent hill or peak	
Other roads	<del>&lt;</del>	Perennial, double line		Rock outcrop (includes sandstone and shale)	•
Trail		Perennial, single line		Salme spot	+
ROAD EMBLEMS & DESIGNATIONS		Intermittent		Sandy spot	×
Interstate	<b>☞</b>	Drainage end	/	Severely eroded spot	÷
Federal	<b>119</b>	Canals or ditches		Slide or slip (tips point upslope)	3)
State	9	Double-line (label)	GAMAL	Stony spot, very stony spot	0 00
County, farm or ranch	(P)	Drainage and/or irrigation		Detrimental deposit,  5 acres or less	*
RAILROAD	<del></del>	LAKES, PONDS AND RESERVOIRS		High lime soil, 2 acres or less	Ф
POWER TRANSMISSION LINE normally not shown)	4×4×- 30 52-200-205522	Perennial		Better drained soil in poorly draine area, 2 acres or less	d <b>‡</b>
PIPE LINE (normally not shown)		Intermittent		Borrow pit	B. P.
ENCE (normally not shown)		MISCELLANEOUS WATER FEATURES	s		
EVEES		Marsh or swamp	*		
Without road	*******************************	Spring	o~		
With road		Well, artesian	•		
With railroad	***************************************	Well, irrigation	•		
DAMS		Wet spot	•		
Large (to scale)	$\stackrel{-}{\longleftrightarrow}$				
56 - Al					

\*

Mine or quarry



# City of Hallock

163 South Chird

Hallock, Minnesota 56728

(139)

MAYOR Harian T. Charon

COUNCIL MEMBERS
Paul Clay .
Tom Guetafson
Edmund Johnson
Shirley Rydberd

CITY CLERK ADM Henry P. Noel (218) 843-2737

February 6, 1990

Jerry Scott
Hallock High School
Box 670
Hallock, MN 56728

Dear Jerry:

The Council has voted to allow the school to place the contaminated fill on our property in the industrial park. This would be conditional on the school hiring a qualified engineer to prepare the "Land Application and Treatment" form needed by MPCA. I expressed some of the Council's concerns with her. She says that we would have nothing to worry about if a qualified firm were retained by you.

She was confident that Midwest Environment could provide all of the services necessary to complete the job. Once the fill is removed to the approved site, it would be up to the school district to have the area tilled in the Spring, Summer and Fall. After one or two summers, the job would apparently complete.

The Council has not asked for any specific agreement to be drafted. They are confident in the comments of Linda Tanner and Craig Diekvoss. You may proceed.

Sincerely

Henry P. Noel

HPN: ro



for office use only DATE ORDERED: \_\_\_\_

SAMPLE DATE: \_\_\_\_\_\_ BY:\_\_\_\_

177953 LAB USE ONLY

ВІЦІ ТО		`
GROWER -	Ind So hool	Distint=351
ADDRESS _	Hallock	
	MD.	7195678

Crop Choice	Yield Goal		K app Bdcst.	
1st				
2nd	<u> </u>		_	
3rd		Ξ	Ξ	

County Kitson Field Hall 13-1

Township Hallock Acres 6

Section 13 Previous Crop:

Quarter \_\_\_\_\_\_

		١	1	 1
W			-	_
1	₹		S MILE <del></del> Jais 640 ac	

	SOIL ANALYSIS	
SUGGESTE	D OPTION BY CROP CHOICE:	
SMALL GRAIN - ROW CROP -	Nitrogen, Phosphorus, Potassium, pH. Saits, Sulfur. Chloride. (beans, corn, flax, sunflowers) Nitrogen, Phosphorus, Potassium, pH. Saits, Sulfur, Zinc, Copper, 2% Organic Matter.	ROW CROP
POTATO - SUGAR BEET - ALFALFA -	Nitrogen, Phosphorus, Potassium, pH, Saits, Sulfur, Zinc, Copper. Boron, % Organic Matter	SUGAR BEET
OPTION B - NITE OPTION C - Pho OPTION D - Pho	ELEMENT OPTIONS:  rogen, Phosphorus, Potassium, pH, Salts, Sulfur, Zinc, % Organic Matter.  rogen, Phosphorus, Potassium, pH, Salts.  rosphorus, Potassium, pH, Salts, % Organic Matter.  rosphorus, Potassium, pH.  rosphorus, Potassium, pH.  roganic Matter, Phosphorus, Potassium, Calcium, Magnesium, pH,	c
OPTION F - Con Mar	C. Lime, % Base Saturation	F
SOIL/HERBICIDE	E COMPATIBILITY TEST - CEC, pH, % Organic Matter, Textural Analysis	

Í	Depth of Test	
	0-6", 6-24" 0-6", 6-24" 0-24" 24"-48" 24-36", 36-48" Other	<u>×</u> – <u>×</u>
	PARTIAL	
1	EVUIVE	
	Nitrogen	
	Nitrogen	
	Nitrogen Organic Matter	
	Nitrogen Organic Matter Boron	
	Nitrogen Organic Matter Boron Texture (%sand, silt, clay)	

LABORATORY

Box 510 Hwy. 15 Northwood, ND 58267 (701) 587-6010 FIELD OFFICE 1514 Central Ave. NE East Grand Forks, MN 56721 (218) 773-3298 LABORATORY
Box 187 902 13th Street N.
Benson, MN 56215
(612) 843-4109



# **Soil Test Report**

BOX 510

NORTHWOOD ND 58267

(701) 587-6010

Bob Deutche

Narate 124

0 - 24

24- 36

NaHCO3 Phosphorus

Potassium

Magnesium

Calcium

Chloride

Sulfyr 24

iron 💮

Manganese

Copper

Boron

HALLDEK HIN

SUBMITTED BY

HALLOCK AGSCO

P.O. BOX 57

HALLOCK MN

5672B

DATE RECEIVED 3 / 29 / 90 DATE REPORTED 4 / 3 / 90

LAB NO. 371 177953 REF

FIELD NO. HALL 13-1

Nutrient In The Soil

lable peep N = 0

20

56728

CO. KITTSON

TWP.

HALLDCK

SEC.

13 QTR.

ACRES &

Matter	Ď.
Soil pH	7.
uffer pH	

oil 1b/ac	v. Low		uretat MED			1st Choice					2 ROP	nd Choic	ce MA		3rd Chaice					% Organic Matter	6.1
lb/ac lb/ac	<b>311</b>				Y	eld oai	Harrington Harrington			Yield Goal			1	Yie	ild			$\dashv \bot$	Soil pH	7.7	
lb/ac lb/ac					SUGGESTED GUIDELINES					-	SUGGESTED GUIDELINES			#	SUGGESTED GUIDELINES					Suffer pH	
					N N	CRE	APP	LICATION	DN	N LB	ACRE	APPLICATION		<u> </u>	LB/ACRE N		APPLICATION			Soluble Salts (mmhos/cm)	0.54
ib/ac	****	****	****	S V	P <sub>2</sub> O <sub>2</sub>					P <sub>2</sub> O <sub>5</sub>					P <sub>2</sub> O <sub>5</sub>	e j				6 - 24	0.64
lb/ac	****				K₂O		2 11			K <sub>2</sub> O					K <sub>2</sub> O				10	CEC	
					Mg	: : ,				Mg		ani Neferi			Mg	i a . Aya				Actual % Calcium	Suggested Calcium
Yarri A	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				Ca					Ca	a. Taka ,		14	$\prod$	Ca						65 - 75
					CI		4. 5.			CI					CI					Actual % Magnesium	Suggested Magnesium
					В	4.				В					В		Service 1			10 m 12 g	15 - 20
ppa ppa	83883 83333		1	1 10 26 10 10 10	S					s					s				1 1	Actual % Potassium	Suggested Potassium
ppe	<b>88888</b> - 4476-24	****	****	1111	Zn					Zn		E E			Zn						1-7
					Fe					Fo		ing to			Fe					Actual % Sodium	Suggested Sodium
					Mn					Ma					Mn						0.5
				ress.	Cu	1				C		<u>U</u>			CJ				- CB 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Actual % Hydrogen	Suggested Hydrogen
				變			ישיע		<b>S</b> ]		A	X)					17 T		基		0-5

Sodium NOTES: