35A

SCHREIBER GRANA & YONLEY INCORPORATED
ENVIRONMENTAL ENGINEERS

271 Wolfner Drive ▪ Saint Louis, Missouri 63026
314/349-8399 ▪ Fax 314/349-8384

RECEIVED
SEP 26 1994
RCOM SECTION

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

September 22, 1994

Mr. Robert Morrison, P.E.
Missouri Department of Natural Resources
Department of Environmental Quality, Hazardous Waste Program
P.O. Box 176
Jefferson City, Missouri 65102-0176

R00000637
RCRA Records Center

Re: Knapheide Mfg. Co. Closure Plan:
Waste Paint Filters and Over Spray Paper Storage Unit and Brule Incinerator Unit
West Quincy, Missouri

Dear Mr. Morrison:

On behalf of The Knapheide Mfg. Co. (Knapheide), Schreiber, Grana & Yonley, Inc. submits this correspondence describing changes to the revised closure plan for the Waste Paint Filters and Over Spray Paper Storage Unit and the Brule Incinerator Unit at The Knapheide Mfg. Co. facility located in West Quincy, Missouri. This correspondence has been prepared to address the modifications contained in the MDNR correspondence dated August 22, 1994. As discussed in the MDNR correspondence, the closure plan modifications will be implemented as a part of the overall closure process. Several of the modifications (Items 2, 3, 4, 5, 6, 7, 8, 9, and 10) require the re-submittal of portions of the revised closure plan. Tables 1, 2, 3 and 4, and Figure 3 are enclosed herein, as well as a revised cost estimate. The following text provides explanation to each item/re-submittals.

Items 2, 3 and 9 - As required by these items, two (2) additional soil samples will be collected from within the Waste Paint Filters and Over Spray Paper Storage Unit. These are labelled KNAP 09 and KNAP 10. Additionally, sample ID KNAP 05 has been redesignated for the collection of a soil sample from 0"-6" below grade. A new sample ID, KNAP 5A, has been designated for the soil sample to be collected from a depth of two (2) feet below grade. These locations, as well as renumbered sample locations for the Brule Incinerator unit (KNAP 12, KNAP 13, and KNAP 14), are depicted on Figure 3. The sample ID changes are also presented on Tables 1 and 4.

RCRA FILE COPY
MOD000766998
DOCUMENT # 35A

Items 4, 5, and 6 - This item involves the sample protocol for the Brule Incinerator Unit. As required by the MDNR, the Brule incinerator unit will be sampled via a rinsate method. Schreiber, Grana & Yonley, Inc. will collect these samples prior to the dismantling of the unit. Representative samples of the refractory brick, metal stack, and concrete pad will be obtained, placed in a storage container, and sprayed with a pressurized sprayer. A portion of the rinsate collected for each sample will then be placed into laboratory-prepared containers for subsequent analysis. Remaining rinsate will then be placed into a 55-gallon, DOT-approved, steel drum for proper storage and subsequent disposal.

As required, an equipment blank will also be obtained from the pressurized sprayer and submitted for identical analyses. Table 3 presents all modifications as described above. This revised sampling plan should adequately characterize the Brule Incinerator Unit for proper disposal.

Items 7 and 8 - This item involves the analytical methods and Practical Quantitation Limits (PQLs) as listed on Table 2. As required by the MDNR, Table 2 has been revised, listing the correct analytical methods and PQLs.

Item 10 - This item involves the preparation and submittal of a revised cost estimate which reflects the MDNR modifications as described in the MDNR August 22, 1994 correspondence, and further described in this correspondence. This revised cost estimate is presented below:

CLOSURE COST ESTIMATE

	TASK	TOTAL
1.	Waste Paint Filters and Over Spray Paper Storage Unit Surface/Subsurface Investigation	$6,520.00
2.	Brule Incinerator Unit Characterization	$4,370.00
3.	Brule Incinerator Unit Disposal/Subsurface Investigation	$15,250.00
4.	Closure Certification Report (assumes no subsurface remediation activities)	$3,780.00
TOTAL		**$29,920.00**

This correspondence also provides the MDNR with the required 45-day advance notice of the impending closure activities. It is also intended to provide the required 15-day notification of the impending sampling activities. Sampling will involve the Waste Paint Filters and Over Spray Paper Storage Unit surface/subsurface investigation (Item 1 of the above cost estimate), and the Brule Incinerator Unit characterization activities, (Item 2 of the above cost estimate). This sampling is scheduled to occur on October 6, 1994. If any changes occur with this schedule, involved parties will be immediately informed of such changes.

If you have any questions regarding any of the material presented, please contact Mr. Allen L. Steinkamp of my staff at (314)349-8399. We appreciate your time and cooperation in this matter.

Sincerely,

Robert J. Schreiber, Jr., P.E.
President

RJS/als/ccp

Enclosures

cc: Ms. Sandra L. Oberkfell - Rudnick & Wolfe
Mr. Gary Korb - The Knapheide Mfg. Co.
Mr. Ruben McCullers - USEPA

knap07/revclo.ltr

TABLE 1
SAMPLE LOG
WASTE PAINT FILTERS AND OVER SPRAY PAPER STORAGE UNIT

Sample ID No.	Matrix	Depth	Analysis*	Description
KNAP 01	Soil	0-6"	Total Metals	Surface Water Runoff Pathway Sample
KNAP 02	Soil	0-6"	Total Metals	Background Sample
KNAP 03	Soil	0-6"	Total Metals	Background Sample
KNAP 04	Soil	0-6"	Total Metals	Storage Unit Sample
KNAP05	Soil	0-6"	Totals Metals	Storage Unit Sample
KNAP 05A	Soil	2'	Total Metals	Storage Unit Sample
KNAP 06	Soil	0-6"	Total Metals, VOA, BNA	Storage Unit Sample
KNAP 07	Soil	3-4"	TPH, VOA, BNA	Oily Layer Sample
KNAP 08	Soil	0-6"	Total Metals, VOA, BNA	Duplicate Soil Sample (KNAP 05)
KNAP09	Soil	0-6"	Total Metals, VOA, BNA	Storage Unit Sample
KNAP10	Soil	0-6"	Total Metals, VOA, BNA	Storage Unit Sample
KNAP 11	Water	---	VOA, BNA, TPH	Decontamination Blank

*Total Metals = SW 846 EPA Approved Methods
VOA - Volatile Organic Analysis - SW 846 Method 8240
BNA - Base Natural Acids - SW 846 Method 8270
TPH - Total Petroleum Hydrocarbons SW 846 Method 418.1

TABLE 2
ANALYTICAL DETECTION LIMITS

			Practical Quantitation Limit	
Analytical Suite	Parameters	Method	Soil	Water
Metals	Arsenic	SW 846 6010	0.5 mg/kg	0.050 mg/L
	Barium	SW 846 6010	2.0 mg/kg	0.005 mg/L
	Cadmium	SW 846 6010	0.1 mg/kg	0.003 mg/L
	Chromium	SW 846 6010	0.5 mg/kg	0.005 mg/L
	Lead	SW 846 6010	0.15 mg/kg	0.050 mg/L
	Mercury	SW 846 7470	0.04 mg/kg	0.002 mg/L
	Selenium	SW 846 6010	0.25 mg/kg	0.100 mg/L
	Silver	SW 846 6010	0.5 mg/kg	0.010 mg/L
Volatiles	Chloromethane	SW 846 8240	10 μg/kg	10 μg/L
	Bromomethane	SW 846 8240	10 μg/kg	10 μg/L
	Vinyl Chloride	SW 846 8240	10 μg/kg	10 μg/L
	Chloroethane	SW 846 8240	10 μg/kg	10 μg/L
	Methylene Chloride	SW 846 8240	5 μg/kg	5 μg/L
	Acrolein	SW 846 8240	100 μg/kg	100 μg/L
	Acrylonitrile	SW 846 8240	100 μg/kg	100 μg/L
	Trichlorofluoromethane	SW 846 8240	10 μg/kg	10 μg/L
	Acetone	SW 846 8240	100 μg/kg	100 μg/L
	Carbon Disulfide	SW 846 8240	5 μg/kg	5 μg/L
	1,1-Dichloroethene	SW 846 8240	5 μg/kg	5 μg/L
	1,1-Dichloroethane	SW 846 8240	5 μg/kg	5 μg/L
	1,2-Dichloroethene (Total)	SW 846 8240	5 μg/kg	5 μg/L
	Chloroform	SW 846 8240	5 μg/kg	5 μg/L
	1,2-Dichloroethane	SW 846 8240	5 μg/kg	5 μg/L
	2-Butanone	SW 846 8240	100 μg/kg	100 μg/L
	1,1,1-Trichloroethane	SW 846 8240	5 μg/kg	5 μg/L
	Carbon Tetrachloride	SW 846 8240	5 μg/kg	5 μg/L
	Vinyl Acetate	SW 846 8240	50 μg/kg	50 μg/L
	Bromodichloromethane	SW 846 8240	5 μg/kg	5 μg/L
	1,2-Dichloropropane	SW 846 8240	5 μg/kg	5 μg/L
	cis-1,3-Dichloropropene	SW 846 8240	5 μg/kg	5 μg/L
	Trichloroethene	SW 846 8240	5 μg/kg	5 μg/L
	Dibromochloromethane	SW 846 8240	5 μg/kg	5 μg/L
	1,1,2-Trichloroethane	SW 846 8240	5 μg/kg	5 μg/L
	Benzene	SW 846 8240	5 μg/kg	5 μg/L
	trans-1,3-Dichloropropene	SW 846 8240	5 μg/kg	5 μg/L
	Bromoform	SW 846 8240	5 μg/kg	5 μg/L
	4-Methyl-2-Pentanone	SW 846 8240	5 μg/kg	50 μg/L
	2-Hexanone	SW 846 8240	50 μg/kg	50 μg/L
	Tetrachloroethene	SW 846 8240	5 μg/kg	5 μg/L
	1,1,2,2-Tetrachloroethane	SW 846 8240	5 μg/kg	5 μg/L
	Toluene	SW 846 8240	5 μg/kg	5 μg/L
	Chlorobenzene	SW 846 8240	5 μg/kg	5 μg/L
	Ethylbenzene	SW 846 8240	5 μg/kg	5 μg/L
	Styrene	SW 846 8240	5 μg/kg	5 μg/L
	Xylene (Total)	SW 846 8240	5 μg/kg	5 μg/L

TABLE 2
ANALYTICAL DETECTION LIMITS (continued)

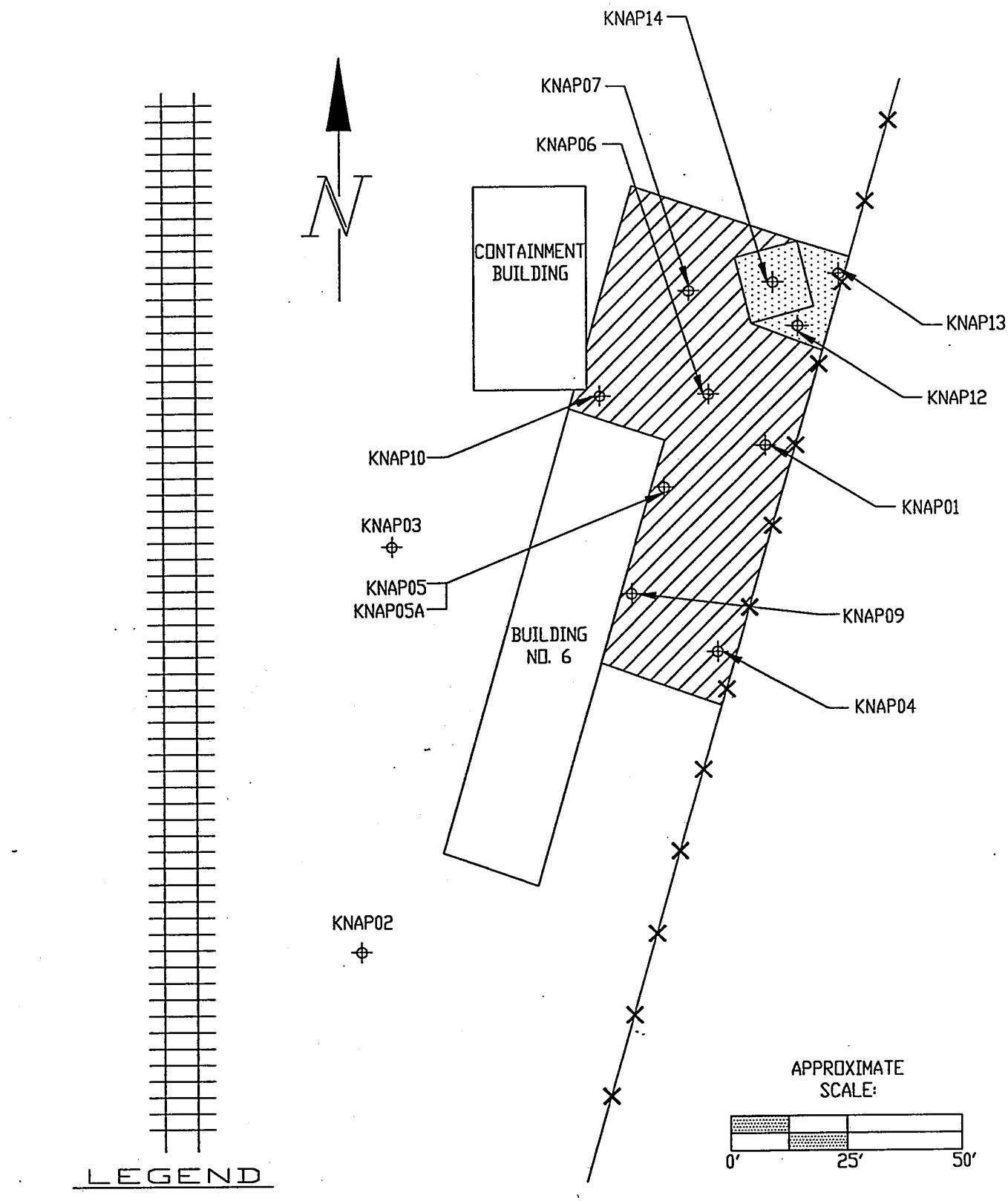
			Practical Quantitation Limit	
Analytical Suite	Parameters	Method	Soil	Water
Base Neutral Acids	Pyridine	SW 846 8270	330 µg/kg	10 µg/L
	N-Nitrosodimethylamine	SW 846 8270	330 µg/kg	10 µg/L
	Phenol	SW 846 8270	330 µg/kg	10 µg/L
	bis(2-chloroethyl)Ether	SW 846 8270	330 µg/kg	10 µg/L
	2-Chlorophenol	SW 846 8270	330 µg/kg	10 µg/L
	1,3-Dichlorobenzene	SW 846 8270	330 µg/kg	10 µg/L
	1,4-Dichlorobenzene	SW 846 8270	330 µg/kg	10 µg/L
	Benzyl Alcohol	SW 846 8270	330 µg/kg	10 µg/L
	1,2-Dichlorobenzene	SW 846 8270	330 µg/kg	10 µg/L
	o-Cresol	SW 846 8270	330 µg/kg	10 µg/L
	bis-(2-Chloro2propyl)Ether	SW 846 8270	330 µg/kg	10 µg/L
	m & p-Cresol	SW 846 8270	330 µg/kg	10 µg/L
	N-Nitroso-Di-n-propoylamine	SW 846 8270	330 µg/kg	10 µg/L
	Hexachloroethane	SW 846 8270	330 µg/kg	10 µg/L
	Nitrobenzene	SW 846 8270	330 µg/kg	10 µg/L
	Isophorone	SW 846 8270	330 µg/kg	10 µg/L
	2-Nitrophenol	SW 846 8270	330 µg/kg	10 µg/L
	2,4-Dimethylphenol	SW 846 8270	330 µg/kg	10 µg/L
	Benzoic Acid	SW 846 8270	1,700 µg/kg	50 µg/L
	bis(2-Chloroethoxy)methane	SW 846 8270	330 µg/kg	10 µg/L
	2,4-Dichlorophenol	SW 846 8270	330 µg/kg	10 µg/L
	1,2,4-Trichlorobenzene	SW 846 8270	330 µg/kg	10 µg/L
	Naphthalene	SW 846 8270	330 µg/kg	10 µg/L
	4-Chloroaniline	SW 846 8270	330 µg/kg	10 µg/L
	Hexachlorobutadiene	SW 846 8270	330 µg/kg	10 µg/L
	4-Chloro-3-methylphenol	SW 846 8270	330 µg/kg	10 µg/L
	2-Methylnaphthalene	SW 846 8270	330 µg/kg	10 µg/L
	Hexachlorocyclopentadiene	SW 846 8270	330 µg/kg	10 µg/L
	2,4,6-Trichlorophenol	SW 846 8270	330 µg/kg	10 µg/L
	2,4,5-Trichlorophenol	SW 846 8270	0.660 µg/kg	0.010 µg/L
	2-Chloronaphthalene	SW 846 8270	330 µg/kg	10 µg/L
	2-Nitroaniline	SW 846 8270	330 µg/kg	10 µg/L
	Dimethylphthalate	SW 846 8270	330 µg/kg	10 µg/L
	Azobenzene	SW 846 8270	330 µg/kg	10 µg/L
	Acenaphthylene	SW 846 8270	330 µg/kg	10 µg/L
	2,6-Dinitrotoluene	SW 846 8270	330 µg/kg	10 µg/L
	3-Nitroaniline	SW 846 8270	1,700 µg/kg	10 µg/L
	Acenaphthene	SW 846 8270	330 µg/kg	10 µg/L
	2,4-Dinitrophenol	SW 846 8270	1,700 µg/kg	50 µg/L
	4-Nitrophenol	SW 846 8270	1,700 µg/kg	50 µg/L
	Dibenzofuran	SW 846 8270	330 µg/kg	10 µg/L
	2,4-Dinitrotoluene	SW 846 8270	330 µg/kg	10 µg/L
	Diethylphthalate	SW 846 8270	330 µg/kg	10 µg/L
	4-Chlorophenol phenyl ether	SW 846 8270	330 µg/kg	10 µg/L
	Fluorene	SW 846 8270	330 µg/kg	10 µg/L
	4-Nitroaniline	SW 846 8270	1,700 µg/kg	50 µg/L
	4,6-Dinitro-2-methylphenol	SW 846 8270	1,700 µg/kg	50 µg/L
	N-Nitrosodiphenylamine	SW 846 8270	330 µg/kg	10 µg/L
	4-Bromophenyl phenyl ether	SW 846 8270	330 µg/kg	10 µg/L
	Hexachlorobenzene	SW 846 8270	330 µg/kg	10 µg/L
	Pentachlorophenol	SW 846 8270	1,700 µg/kg	50 µg/L
	Phenanthrene	SW 846 8270	330 µg/kg	10 µg/L
	Anthracene	SW 846 8270	330 µg/kg	10 µg/L
	Carbazole	SW 846 8270	330 µg/kg	10 µg/L
	Di-n-butylphthalate	SW 846 8270	330 µg/kg	10 µg/L
	Fluoranthene	SW 846 8270	330 µg/kg	10 µg/L
	Benzidine	SW 846 8270	330 µg/kg	10 µg/L
	Pyrene	SW 846 8270	330 µg/kg	10 µg/L
	Butylbenzylphthalate	SW 846 8270	330 µg/kg	10 µg/L
	3,3'-Dichlorobenzidine	SW 846 8270	330 µg/kg	10 µg/L
	Benzo(a)anthracene	SW 846 8270	330 µg/kg	10 µg/L
	Chyrsene	SW 846 8270	330 µg/kg	10 µg/L
	bis-(2-Ethylhexyl)phthalate	SW 846 8270	330 µg/kg	10 µg/L
	Di-n-octylphthalate	SW 846 8270	330 µg/kg	10 µg/L
	Benzo(b)fluoranthene	SW 846 8270	330 µg/kg	10 µg/L
	Benzo(k)fluoranthene	SW 846 8270	330 µg/kg	10 µg/L
	Benzo(a)pyrene	SW 846 8270	330 µg/kg	10 µg/L
	Indeno(1,2,3-cd)pyrene	SW 846 8270	330 µg/kg	10 µg/L
	Dibenzo (a,h)anthracene	SW 846 8270	330 µg/kg	10 µg/L
	Benzo(g,h,i)perylene	SW 846 8270	330 µg/kg	10 µg/L
Total Petroleum Hydrocarbons		SW 846 418.1	10 mg/kg	10 mg/L

TABLE 3
SAMPLE LOG
BRULE INCINERATOR UNIT

Sample ID No.	Matrix	Depth	Analysis	Description
BRULE 01	Water	Surface	Total Metals, VOA, BNA	Refractory Brick
BRULE 02	Water	Surface	Total Metals, VOA, BNA	Metal Stack
BRULE 03	Water	Surface	Total Metals, VOA, BNA	Concrete Pad
BRULE 04	Water	--	Total Metals, VOA, BNA	Equipment Blank

TABLE 4
SAMPLE LOG
BRULE INCINERATOR UNIT AREA

Sample ID No.	Matrix	Depth	Analysis	Description
KNAP 12	Soil	0-6"	Total Metals, VOA, BNA	Material transport pathway sample
KNAP 13	Soil	0-6"	Total Metals	Surface water runoff pathway sample
KNAP 14	Soil	0-6"	Total Metals	Sample underneath concrete pad
KNAP 15	Water	--	Total Metals, VOA, BNA	Decontamination blank



LEGEND

FENCE/PROPERTY LINE

BRULE INCINERATOR UNIT AREA

WASTE PAINT FILTER AND OVERSPRAY PAPER STORAGE AREA

SAMPLE LOCATION

SAMPLE LOCATION DIAGRAM KNAPHEIDE MANUFACTURING COMPANY WEST QUINCY, MISSOURI	FIGURE 3 DATE: 5-3-94 DWG.# KNAP06-1	SCHREIBER & GRANA YONLEY INCORPORATED ENVIRONMENTAL ENGINEERS