TA-57

Los Alamos
NATIONAL LABORATORY

Los Alamos National Laboratory
Los Alamos, New Mexico 87545

Date: April 7, 1998
In Reply Refer To: ESH-18/WQ&H:98-0120
Mail Stop: K497
Telephone: (505) 667-7969

RECEIVED APR 7 1998

Mr. John Keiling
Hazardous and Radioactive Materials Bureau
New Mexico Environment Department
1190 St. Francis Drive
Santa Fe, New Mexico 87502

SUBJECT: **NOTICE OF INTENT TO DISCHARGE, MILAGRO PROJECT AT FENTON HILL, LOS ALAMOS NATIONAL LABORATORY**

Dear Mr. Keiling:

Ms. Phyllis Bustamante (NMED/GWQB) has asked me to provide you with a copy of Los Alamos National Laboratory's Notice of Intent (NOI) to discharge for the Milagro Project at Fenton Hill. Please find the enclosed NOI, site map, and analytical data. This NOI was submitted for the proposed land application of approximately 2.5 million gallons of purified water from the Milagro Project's five-million gallon pond. The water will be land applied to Forest Service land by a temporary sprinkler irrigation system. This is a one-time discharge.

Please call me at 667-7969 if you need additional information on this NOI.

Sincerely,

Robert Beers
Water Quality and Hydrology Group

RB/em

Cy: B. Hoditschek, NMED/SWQB, Santa Fe, New Mexico, w/o enc.
P. Bustamante, NMED/GWQB, Santa Fe, New Mexico, w/o enc.
S. Rae, ESH-18, w/o enc., MS K497
G. Sinnis, P-23, w/o enc., MS H803
B. Koch, DOE/LAAO, w/o enc., MS A316
N. Williams, ESH-18, w/o enc., MS K497
WQ&H File, w/o enc., MS K497
CIC-10, w/o enc., MS A150

RECEIVED APR 7 1998

3715

Los Alamos
NATIONAL LABORATORY

Los Alamos National Laboratory
Los Alamos, New Mexico 87545

Date: January 27, 1998
In Reply Refer To: ESH-18/WQ&H:98-0008
Mail Stop: K497
Telephone: (505) 665-1859

Mr. Glenn Saums
Surface Water Quality Bureau
New Mexico Environment Department
1190 St. Francis Drive
P.O. Box 26110
Santa Fe, New Mexico 87502

Ms. Dale Doremus
Ground Water Quality Bureau
New Mexico Environment Department
1190 St. Francis Drive
P.O. Box 26110
Santa Fe, New Mexico 87502

SUBJECT: LOS ALAMOS NATIONAL LABORATORY, NOTICE OF INTENT TO DISCHARGE, MILAGRO PROJECT AT FENTON HILL

Dear Mr. Saums and Ms. Doremus:

Enclosed is a Notice of Intent to Discharge (NOI) for the Milagro Project at Fenton Hill. This NOI is being submitted for the proposed land application of approximately 2.5 million gallons of purified water from the Milagro Project's five-million gallon pond. The water will be land applied to Forest Service land by a temporary sprinkler irrigation system. This will be a one-time discharge. Please see the attached NOI, site map, and analytical data for further information.

Please call Bob Beers at 667-7969 if you need additional information regarding this NOI.

Sincerely,

Steven Rae
Group Leader
Water Quality and Hydrology Group

SR:RB/rj

Enclosures a/s:

Cy: D. Trujillo, U.S. Forest Service, Jemez Ranger District
B. Koch, DOE/LAAO, w/enc., MS A316
G. Sinnis, P-23, w/enc., MS H803
B. Beers, ESH-18, w/enc., MS K497
N. Williams, ESH-18, w/enc., MS K497
M. Saladen, ESH-18, w/enc., MS K497
H. Decker, ESH-18, w/enc., MS K497
WQ&H File, w/enc., MS K497
CIC-10, w/enc., MS A150

NOTICE OF INTENT TO DISCHARGE

1. Name and address of the facility making the discharge.

Los Alamos National Laboratory
Los Alamos, New Mexico 87545

2. Location of discharge.

Milagro Project at Fenton Hill
Sandoval County, New Mexico
NE 1/4 Section 13, T19N, R2E (New Mexico Principal Meridian)
1,776,000 N, 374,000 E (New Mexico State Plane Grid)

3. Project description.

Since 1995, Los Alamos National Laboratory and a number of academic institutions have operated an astrophysical observatory, called the Milagro Project, at Fenton Hill. Using light sensitive detectors submerged in a five-million gallon pond (lined and covered), the observatory records signals from high-energy cosmic emissions. In order to minimize interference, the water in the pond has been filtered (carbon and media filters), and softened through ion exchange. Fill and make-up water for the Milagro Project is provided by the facility's water supply well. Currently, the pond contains approximately 2.5 million gallons of purified water.

In April 1998, it will be necessary for the Milagro Project to drain the pond. The Laboratory proposes to drain the pond by applying the water to approximately 22 acres of Forest Service land adjacent to the facility. A map has been attached showing the location of the proposed application area. The U.S. Forest Service, Jemez Ranger District, has approved the discharge, contingent upon NMED approval.

4. The means of discharge (to lagoon, flowing stream, water course, arroyo, septic tank, other).

The discharge will be applied to the surface of approximately 22 acres of land within the boundaries of the Santa Fe National Forest. The method of land application is described below.

1. PVC pipes will serve as headers to deliver water from the pond throughout the application area.
2. Along each header, standard garden hoses will be attached.
3. At the end of each garden hose an impact-type (Rain Bird) sprayer will be installed. The sprayer will be set to maximum fog (to maximize evaporation) with a discharge rate of approximately 2-4 gallons per minute (gpm).
4. Sprayer locations and application rates will be chosen so as to minimize ponding and to prevent runoff from entering a water course.
5. The rate of application will be 100 gpm. Land application will be conducted 24 hours per day. The estimated duration of land application will be 18 days.
6. The land application site will be monitored during working hours. If ponding or runoff occurs, the offending sprayers will be turned off or moved.

The proposed discharge of approximately 2.5 million gallons of water is equal to approximately 7.67 acre-feet of water. Since water is being land applied to 22 acres of land, the Laboratory will be applying approximate 4.2 inches of water over an 18-day period (minus evaporation), or approximately 0.23 inches of water per day (minus evaporation).

5. **The estimated concentration of contaminants in the discharge.**

Six (6) samples of Milagro Project pond water, MGRO-12, MGRO-13, MGRO-14, MGRO-15, MGRO-16, and MGRO-17, were collected on December 12, 1997, and submitted to Assaigai Analytical Laboratories, Inc. for analysis for total metals, cyanide, nitrate, general chemistry, semi-volatile organic compounds, and volatile organic compounds, respectively. The enclosed Table 1.0 summarizes the analytical results. In addition, a copy of Assaigai's analytical report has been enclosed.

The Milagro Project pond water does not exceed any of the NMWQCC 3101. Surface Water Standards (See Table 1.0).

Two contaminants, boron (B) and chloride (Cl), are present in Milagro Project pond water at concentrations exceeding NMWQCC Ground Water Standards (See Table 1.0). Boron concentrations in the pond water (1.4 mg/L) can be attributed to the facility's water supply well since none of the Milagro Project's treatment operations introduce boron.

Chloride concentrations in the pond water (266 mg/L) marginally exceed the NMWQCC 3103. Ground Water Standard of 250 mg/L (See Table 1.0). The source of the chloride is presumed to be the water softener since testing of the facility's water supply well in 1995 showed chloride (Cl) concentrations at 36 mg/L.

6. **The type of operation from which the discharge derived.**

Astrophysical observatory (See #3-Project Description).

7. **The estimated flow to be discharged per day.**

Approximately 144,000 gallons per day. The total volume of water to be discharged is approximately 2.5 million gallons.

8. **The estimated depth to ground water (if available).**

The depth to the top of the aquifer at the site is approximately 370 ft (113m). Water level measurements in observation wells in the immediate area of the site indicate that the water table is nearly flat.

Signed Steven Rae **Date** Jan. 27, 1998

Steven Rae
Group Leader
Water Quality and Hydrology Group

Table 1.0

Milagro Project at Fenton Hill
Water Quality Data
5 MG Pond Water
Sample Date: 12/12/97
Sample Type: total, unfiltered

Analyte	Results (mg/L)	NM WQCC 3103 Ground Water Standards (mg/L)	NM WQCC 3101 Surface Water Standards (mg/L)
Al	<0.5	5.0	5.0
As	<0.06	0.1	0.2
Ba	<0.01	1.0	
Be	<0.004		0.1
B	**1.4**	**0.75**	5.0
Cd	<0.008	0.01	0.05
CN	<0.02	0.2	0.22
Cr	<0.04	0.05	1.0
Co	<0.01	0.05	1.0
Cu	<0.04	1.0	0.5
Fe	<0.2	1.0	
Total Hg	<0.0002	0.002	0.000012
Pb	<0.06	0.05	0.1
Mn	<0.01	0.2	
Mo	<0.02	1.0	
Ni	<0.04	0.2	
Total Recoverable Se	<0.005	0.05	0.002
Ag	<0.02	0.05	
Tl	<0.3		
U	0.0029	5.0	
Zn	0.7	10.0	25.0
Nitrate-N	<0.2	10.0	
pH (standard units)	7.8	between 6 and 9	between 6 and 9
TDS	770	1000.0	
TSS	<4.0		
Chloride	**266**	**250.0**	
Fluoride	<0.5	1.6	
Sulfate	14.7	600.0	
Semi-volatiles			
SW846-8270	Non-detect		
Volatiles			
SW846-8240	Non-detect		

Certificate of Analysis

Client: **LOS ALAMOS NATIONAL LABS**

Project: **9712126 FENTON HILL**

Client Sample ID **MGRO 11B** Sample Matrix **WATER**

Collect	Fraction	QC Group	Analyte	Result	Units	Limit	*	Run Group - #	Run Date
			EPA-160 series						
12/12/97	9712126-14A	WTDS-435	Total Dissolved Solids	9930	mg / L	10		MT 1997 476 - 9	12/16/97

Client Sample ID **MGRO 11C** Sample Matrix **WATER**

Collect	Fraction	QC Group	Analyte	Result	Units	Limit	*	Run Group - #	Run Date
			EPA-160 series						
12/12/97	9712126-15A	WTDS-435	Total Dissolved Solids	12550	mg / L	10		MT 1997 476 - 10	12/16/97

Client Sample ID **MGRO 12** 5-MILE POND WATER Sample Matrix **WATER**

Lab Control Spike/Duplicate Accuracy

Collect	Fraction	QC Group	Analyte	Result	Units	Limit	*	Run Group - #	Run Date
			ASTM V 11.01/02						
12/12/97	9712126-16A	MT.1998.91	Uranium, total	0.0029	mg/L	0.0001		MT.1998.91 - 3	01/09/9
			EPA-200 series AA-GF						
12/12/97	9712126-16A	M97914	Molybdenum	< 0.02	mg / L	0.02		MW 1997 1044 - 13	12/23/9
		M97914	Selenium	< 0.005	mg / L	0.005		MW 1998.6 - 15	01/05/9
			EPA-200.7 ICP						
12/12/97	9712126-16A	M97927	Aluminum	< 0.5	mg / L	0.5		MW 1998.1 - 26	12/31/9
		M97927	Arsenic	< 0.06	mg / L	0.06		MW 1998.1 - 26	
		M97927	Barium	< 0.01	mg / L	0.01		MW.1998.1 - 26	
		M97927	Beryllium	< 0.004	mg / L	0.004		MW 1998.1 - 26	
		M97927	Boron	1.4	mg / L	0.1		MW 1998.21 - 26	01/06/
		M97927	Cadmium	< 0.008	mg / L	0.008		MW.1998.1 - 26	12/31/
		M97927	Chromium	< 0.04	mg / L	0.04		MW.1998.1 - 26	
		M97927	Cobalt	< 0.01	mg / L	0.01		MW.1998.1 - 26	
		M97927	Copper	< 0.04	mg / L	0.04		MW 1998.1 - 26	
		M97927	Iron	< 0.2	mg / L	0.2		MW.1998.21 - 26	01/06/
		M97927	Lead	< 0.06	mg / L	0.06		MW 1998.21 - 26	
		M97927	Manganese	< 0.010	mg / L	0.01		MW 1998.1 - 26	12/31
		M97927	Nickel	< 0.04	mg / L	0.04		MW 1998.1 - 26	
		M97927	Silver	< 0.02	mg / L	0.02		MW.1998.1 - 26	
		M97927	Thallium	< 0.3	mg / L	0.3		MW 1998.1 - 26	
		M97927	Zinc	0.7	mg / L	0.1	B	MW 1998.21 - 26	01/06/
			SW846-7470 / EPA-245.1						
12/12/97	9712126-16A	M97925	Mercury	< 0.0002	mg / L	0.0002		MW 1997.1051 - 17	12/24

Client Sample ID **MGRO 13** 5-MILE POND WATER Sample Matrix **WATER**

Collect	Fraction	QC Group	Analyte	Result	Units	Limit	*	Run Group - #	Run D
			EPA-335 / SM-4500						
12/12/97	9712126-17A	W97547	Cyanide	< 0.02	mg / L	0.02		MW 1997 1027 - 13	12/17

Client Sample ID **MGRO 14** 5-MILE POND WATER Sample Matrix **WATER**

Collect	Fraction	QC Group	Analyte	Result	Units	Limit	*	Run Group - #	Run D
			EPA-300 series						
12/12/97	9712126-18A	W97543	Nitrate, Nitrogen	< 0.2	mg N/ L	0.2		MW 1997 1025 - 18	12/19

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

Client: **LOS ALAMOS NATIONAL LABS**

Project: **9712126 FENTON HILL**

Client Sample ID **MGRO 15** 5-MG POND WATER — Sample Matrix **WATER**

Collect	Fraction	QC Group	Analyte	Result	Units	Limit *	Run Group - #	Run Date
			EPA-150.1					
12/12/97	9712126-19A	WPH-573	pH	7.8	units	0.1	MT 1997 446 - 3	12/13/97
			EPA-160 series					
12/12/97	9712126-19A	WTDS-435	Total Dissolved Solids	770	mg / L	10	MT 1997 476 - 11	12/16/97
		WTSS-494	Total Suspended Solids	< 4.0	mg / L	4	MT 1997 469 - 9	12/17/97
			EPA-300 series					
12/12/97	9712126-19A	W97543	Chloride	266	mg / L	0.5	MW 1997 1025 - 24	12/16/97
		W97543	Fluoride	< 0.5	mg / L	0.5	MW 1997 1025 - 15	
		W97543	Sulfate	14.7	mg / L	0.5	MW 1997 1025 - 15	

Client Sample ID **MGRO 16** 5-MG POND WATER — Sample Matrix **WATER**

Collect	Fraction	QC Group	Analyte	Result	Units	Limit *	Run Group - #	Run Date
			SW846-8270 / EPA-625 Semi-Volatiles					
12/12/97	9712126-20A	X97468	1,2,4-Trichlorobenzene	< 2.0	ug / L	1	XG 1997 373 - 12	12/19/97
		X97468	1,2-Dichlorobenzene	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	1,3-Dichlorobenzene	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	1,4-Dichlorobenzene	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	1-Methylnaphthalene	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	2,3,4,6-Tetrachlorophenol	< 100	ug / L	50	XG 1997 373 - 12	
		X97468	2,4,5-Trichlorophenol	< 20	ug / L	10	XG 1997 373 - 12	
		X97468	2,4,6-Trichlorophenol	< 20	ug / L	10	XG 1997 373 - 12	
		X97468	2,4-Dichlorophenol	< 20	ug / L	10	XG 1997 373 - 12	
		X97468	2,4-Dimethylphenol	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	2,4-Dinitrophenol	< 100	ug / L	50	XG 1997 373 - 12	
		X97468	2,4-Dinitrotoluene	< 20	ug / L	10	XG 1997 373 - 12	
		X97468	2,6-Dinitrotoluene	< 20	ug / L	10	XG 1997 373 - 12	
		X97468	2-Chloronaphthalene	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	2-Chlorophenol	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	2-Methylnaphthalene	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	2-Methylphenol	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	2-Nitroaniline	< 20	ug / L	10	XG 1997 373 - 12	
		X97468	2-Nitrophenol ccc	< 20	ug / L	10	XG 1997 373 - 12	
		X97468	3+4 Methylphenol	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	3,3'-Dichlorobenzidine	< 20	ug / L	10	XG 1997 373 - 12	
		X97468	3-Nitroaniline	< 20	ug / L	10	XG 1997 373 - 12	
		X97468	4,6-Dinitro-2-methylphenol	< 20	ug / L	10	XG 1997 373 - 12	
		X97468	4-Bromophenyl-phenylether	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	4-Chloro-3-methylphenol	< 20	ug / L	10	XG 1997 373 - 12	
		X97468	4-Chloroaniline	< 20	ug / L	10	XG 1997 373 - 12	
		X97468	4-Chlorophenyl-phenylether	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	4-Nitroaniline	< 20	ug / L	10	XG 1997 373 - 12	
		X97468	4-Nitrophenol	< 41	ug / L	20	XG 1997 373 - 12	
		X97468	Acenaphthene	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	Acenaphthylene	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	Aniline	< 20	ug / L	10	XG 1997 373 - 12	

Certificate of Analysis

Client: **LOS ALAMOS NATIONAL LABS**

Project: **9712126 FENTON HILL**

12/12/97	9712126-20A	X97468	Anthracene	< 2.0	ug / L	1	XG 1997 373 - 12	12/19/97
		X97468	Azobenzene&1,2-Diphenylhydrazine	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	Benzo (a) anthracene	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	Benzo(a)pyrene	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	Benzo(b & k)fluoranthene	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	Benzo(g,h,i)perylene	< 20	ug / L	10	XG 1997 373 - 12	
		X97468	Benzoic acid	< 200	ug / L	100	XG 1997 373 - 12	
		X97468	Benzyl alcohol	< 100	ug / L	50	XG 1997 373 - 12	
		X97468	bis (2-Chloroethyl) ether	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	bis(2-Chloroethoxy)methane	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	bis(2-Chloroisopropyl)ether	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	bis(2-Ethylhexyl)phthalate	< 20	ug / L	10	XG 1997 373 - 12	
		X97468	Butylbenzylphthalate	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	Chrysene	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	di-n-Butylphthalate	< 20	ug / L	10	XG 1997 373 - 12	
		X97468	di-n-Octylpthalate	< 20	ug / L	10	XG 1997 373 - 12	
		X97468	Dibenz(a,h)anthracene	< 20	ug / L	10	XG 1997 373 - 12	
		X97468	Dibenzofuran	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	Diethylphthalate	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	Dimethylphthalate	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	Fluoranthene	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	Fluorene	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	Hexachlorobenzene	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	Hexachlorobutadiene	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	Hexachlorocyclopentadiene	< 100	ug / L	50	XG 1997 373 - 12	
		X97468	Hexachloroethane	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	Indeno(1,2,3-cd)pyrene	< 20	ug / L	10	XG 1997 373 - 12	
		X97468	Isophorone	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	n-Nitroso-di-n-propylamine	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	n-Nitroso-dimethyl-amine	< 20	ug / L	10	XG 1997 373 - 12	
		X97468	n-Nitrosodiphenylamine	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	Napnthalene	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	Nitrobenzene	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	Pentachlorophenol	< 20	ug / L	10	XG 1997 373 - 12	
		X97468	Phenanthrene	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	Phenol	< 20	ug / L	10	XG 1997 373 - 12	
		X97468	Pyrene	< 2.0	ug / L	1	XG 1997 373 - 12	
		X97468	Pyridine	< 20	ug / L	10	XG 1997 373 - 12	

Client Sample ID: **MGRO 17** POND WATER Sample Matrix: **WATER**

Collect	Fraction	QC Group	Analyte	Result	Units	Limit	*	Run Group - #	Run Da
			SW846-8240 Volatiles						
12/12/97	9712126-21A	X97483	1,1 Dichloroethane	< 1.0	ug / L	1		XG 1997 380 - 9	12/24/
		X97483	1,1 Dichloroethene	< 1.0	ug / L	1		XG 1997 380 - 9	
		X97483	1,1,1 Trichloroethane	< 1.0	ug / L	1		XG 1997 380 - 9	
		X97483	1,1,1,2 Tetrachloroethane	< 1.0	ug / L	1		XG 1997 380 - 9	
		X97483	1,1,2 Trichloroethane	< 1.0	ug / L	1		XG 1997 380 - 9	
		X97483	1,1,2,2 Tetrachloroethane	< 1.0	ug / L	1		XG 1997 380 - 9	

Certificate of Analysis

Client: **LOS ALAMOS NATIONAL LABS**

Project: **9712126 FENTON HILL**

12/12/97	9712126-21A	X97483	1,2 Dibromoethane (EDB)	< 1.0	ug / L	1	XG 1997 380 - 9	12/24/97
		X97483	1,2 Dichlorobenzene	< 1.0	ug / L	1	XG 1997 380 - 9	
		X97483	1,2 Dichloroethane	< 1.0	ug / L	1	XG 1997 380 - 9	
		X97483	1,2 Dichloropropane	< 1.0	ug / L	1	XG 1997 380 - 9	
		X97483	1,2,3 Trichloropropane	< 1.0	ug / L	1	XG 1997 380 - 9	
		X97483	1,3 Dichlorobenzene	< 1.0	ug / L	1	XG 1997 380 - 9	
		X97483	1,4 Dichloro-2-butene	< 10	ug / L	10	XG 1997 380 - 9	
		X97483	1,4 Dichlorobenzene	< 1.0	ug / L	1	XG 1997 380 - 9	
		X97483	2-Butanone (MEK)	< 5.0	ug / L	5	XG 1997 380 - 9	
		X97483	2-Chloroethylvinylether	< 5.0	ug / L	5	XG 1997 380 - 9	
		X97483	2-Hexanone (MBK)	< 5.0	ug / L	5	XG 1997 380 - 9	
		X97483	4-Methyl-2-pentanone (MIBK)	< 5.0	ug / L	5	XG 1997 380 - 9	
		X97483	Acetone	< 5.0	ug / L	5	XG 1997 380 - 9	
		X97483	Acrolein	< 20	ug / L	20	XG 1997 380 - 9	
		X97483	Acrylonitrile	< 20	ug / L	20	XG 1997 380 - 9	
		X97483	Benzene	< 1.0	ug / L	1	XG 1997 380 - 9	
		X97483	Bromodichloromethane	< 1.0	ug / L	1	XG 1997 380 - 9	
		X97483	Bromoform	< 1.0	ug / L	1	XG 1997 380 - 9	
		X97483	Bromomethane	< 5.0	ug / L	5	XG 1997 380 - 9	
		X97483	Carbon disulfide	< 5.0	ug / L	5	XG 1997 380 - 9	
		X97483	Carbon tetrachloride	< 1.0	ug / L	1	XG 1997 380 - 9	
		X97483	Chlorobenzene	< 1.0	ug / L	1	XG 1997 380 - 9	
		X97483	Chlorodibromomethane	< 1.0	ug / L	1	XG 1997 380 - 9	
		X97483	Chloroethane	< 5.0	ug / L	5	XG 1997 380 - 9	
		X97483	Chloroform	< 1.0	ug / L	1	XG 1997 380 - 9	
		X97483	Chloromethane	< 5.0	ug / L	5	XG 1997 380 - 9	
		X97483	cis-1,2 dichloroethene	< 1.0	ug / L	1	XG 1997 380 - 9	
		X97483	cis-1,3 dichloropropene	< 1.0	ug / L	1	XG 1997 380 - 9	
		X97483	Dibromomethane	< 1.0	ug / L	1	XG 1997 380 - 9	
		X97483	Ethyl methacrylate	< 5.0	ug / L	5	XG 1997 380 - 9	
		X97483	Ethylbenzene	< 1.0	ug / L	1	XG 1997 380 - 9	
		X97483	Freon 113	< 5.0	ug / L	5	XG 1997 380 - 9	
		X97483	Freon 12	< 10	ug / L	10	XG 1997 380 - 9	
		X97483	Iodomethane	< 5.0	ug / L	5	XG 1997 380 - 9	
		X97483	Methyl t-butyl ether (MTBE)	< 1.0	ug / L	1	XG 1997 380 - 9	
		X97483	Methylene chloride	< 10	ug / L	10	XG 1997 380 - 9	
		X97483	o-Xylene	< 1.0	ug / L	1	XG 1997 380 - 9	
		X97483	p/m Xylenes	< 2.0	ug / L	2	XG 1997 380 - 9	
		X97483	Styrene	< 1.0	ug / L	1	XG 1997 380 - 9	
		X97483	t-1,2 Dichloroethene	< 1.0	ug / L	1	XG 1997 380 - 9	
		X97483	t-1,3 Dichloropropene	< 1.0	ug / L	1	XG 1997 380 - 9	
		X97483	Tetrachloroethene	< 1.0	ug / L	1	XG 1997 380 - 9	
		X97483	Toluene	< 1.0	ug / L	1	XG 1997 380 - 9	
		X97483	Trichloroethene	< 1.0	ug / L	1	XG 1997 380 - 9	
		X97483	Trichlorofluoromethane	< 5.0	ug / L	5	XG 1997 380 - 9	
		X97483	Vinyl acetate	< 5.0	ug / L	5	XG 1997 380 - 9	
		X97483	Vinyl chloride	< 5.0	ug / L	5	XG 1997 380 - 9	

TA-57

Milagro Project Land Application Site

FIMAD Plot ID: 106405 15 Apr 98

Milagro Project Land Application Site

- Contour, 50 ft
- Contour, 10 ft
- Drainage
- Fence, Industrial
- PRS
- Road, Dirt
- Road, Paved
- Application Area (7.0 acres)
- Application Area Buffer (25 ft)
- Pond
- Structure

APR 1998 RECEIVED

3715

FACILITY for INFORMATION, MANAGEMENT, ANALYSIS and DISPLAY

EARTH & ENVIRONMENTAL SCIENCES DIVISION (EES-5)
LOS ALAMOS NATIONAL LABORATORY, Los Alamos, New Mexico

Produced by: Marcia Jones
Date: April 15, 1998 FIMAD Plot ID: 106405

N

State Plane Coordinate System, New Mexico Central Zone.
1983 North American Datum

Grid provides NM State Plane coordinates in feet.
Grid interval, in feet: 2000
Contour interval: 10 ft

0 91 182 273 364
METERS
0 300 600 900 1200
FEET

NOTICE: The information on this map is provisional. Feature locations are dependent on scale and symbology and their accuracy may not have been confirmed. Los Alamos National Laboratory boundary is based on legal description established in 1995. Contour data are from a September 1991 aerial survey. All other data are from various sources and are part of the FIMAD repository.