IDAHO DEPARTMENT
OF HEALTH AND WELFARE

DIVISION OF
ENVIRONMENTAL QUALITY

1410 North Hilton, Boise, ID 83706-1255, (208) 334-0502

Philip E. Batt, Governor

February 27, 1997

Mayor E. Spence Horsley
City of Malad
59 Bannock Street
Malad, Idaho 83252

SUBJECT: City of Malad, Land Application Permit LA-000159-01

Dear Mayor Horsley:

We met with the Wayne Shepherd of Shepherd Engineering on February 10, 1997 to discuss a revised sample schedule in regards to your land application permit.

The following changes were made:

1. We agreed to revise the ground water monitoring schedule as shown on the attached table.

2. In order to determine if the high TDS result from the sample taken from cell #4 in 1995 is representative of water that will be land applied, additional one-time sampling will done for TDS in the treatment cells and influent.

3. Lagoon effluent from cells 1 and 3 will be sampled on a one-time basis for major ions.

The sample requirements for final effluent going to land application remain the same. Please attach this revised sample schedule to your land application permit.

If you have any questions, please contact Paul Wakagawa of my staff at (208) 373-0502.

Sincerely,

Richard G. Rogers

Richard G. Rogers
Engineering Manager
Drinking Water & Wastewater Bureau
Water Quality & Remediation

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cc: Wayne Shepherd, Shepherd Engineering
Joe Baldwin, W&APB
Paul Wakagawa, DWWB
Henry Moran, Pocatello Regional Office
Mike Cook

Supplemental Monitoring and Reporting Requirements
City of Malad, LA-000159
Issued February 11, 1997

Item	Parameters [1,2]	Sampling Frequency	Monitoring Points
Ground Water	COD, Fe, fecal coliform, Mn, NO_3-N, TDS	Every month from March 1997 to August 1997, inclusive. Beginning in October 1997, every other month through Feb. 1998. After Feb 1998, ground water sample frequency will be reviewed.	GW-015901 through 015904
Ground Water	Ca, Cl, CO_3+HCO_3, Fe, fecal coliform, K, Mg, Mn, Na, NO_3-N, SO_4, TDS	One-time, Sept. 1997	GW-015901 through 015907
Influent and each lagoon cell	NVDS, TDS	One-time, March 1997	5 sample locations
Lagoon effluent, cells 1 & 3	Ca, Cl, CO_3+HCO_3, K, Mg, Na, SO_4	One-time, Sept. 1997	

Table Legend

1. Use analytical methods as specified in Appendix I, page 121 of the 1994 Guidelines for Land Application of Wastewater.

2. Abbreviations are defined as follows:

Ca	= Calcium
Cl	= Chloride
CO_3+HCO_3	= Carbonate + Bicarbonate
COD	= Chemical Oxygen Demand
Fe	= Iron, Total Unfiltered
K	= Potassium
Mg	= Magnesium
Mn	= Manganese, Total Unfiltered
Na	= Sodium
NO_3-N	= Nitrate as Nitrogen
NVDS	= Non-volatile dissolved solids
SO_4	= Sulfate
TDS	= Total Dissolved Solids
Tot-P	= Total Phosphorus

GROUND WATER MONITORING LOCATIONS

Ground Water Monitoring Points

Serial #	Well Location
GW-015901	MW-1, Due west of Hess Pumice by fence, upgradient monitoring well
GW-015902	MW-2, SE corner of land application site by fence, downgradient monitoring well
GW-015903	MW-3, south of land application site by fence, downgradient monitoring well
GW-015904	MW-4, SW corner of land application site by fence, downgradient monitoring well
GW-015905	Domestic well, Phillips, NW of ponds
GW-015906	Domestic well along Deep Creek, SW of ponds
GW-015907	Hess well, SE of ponds

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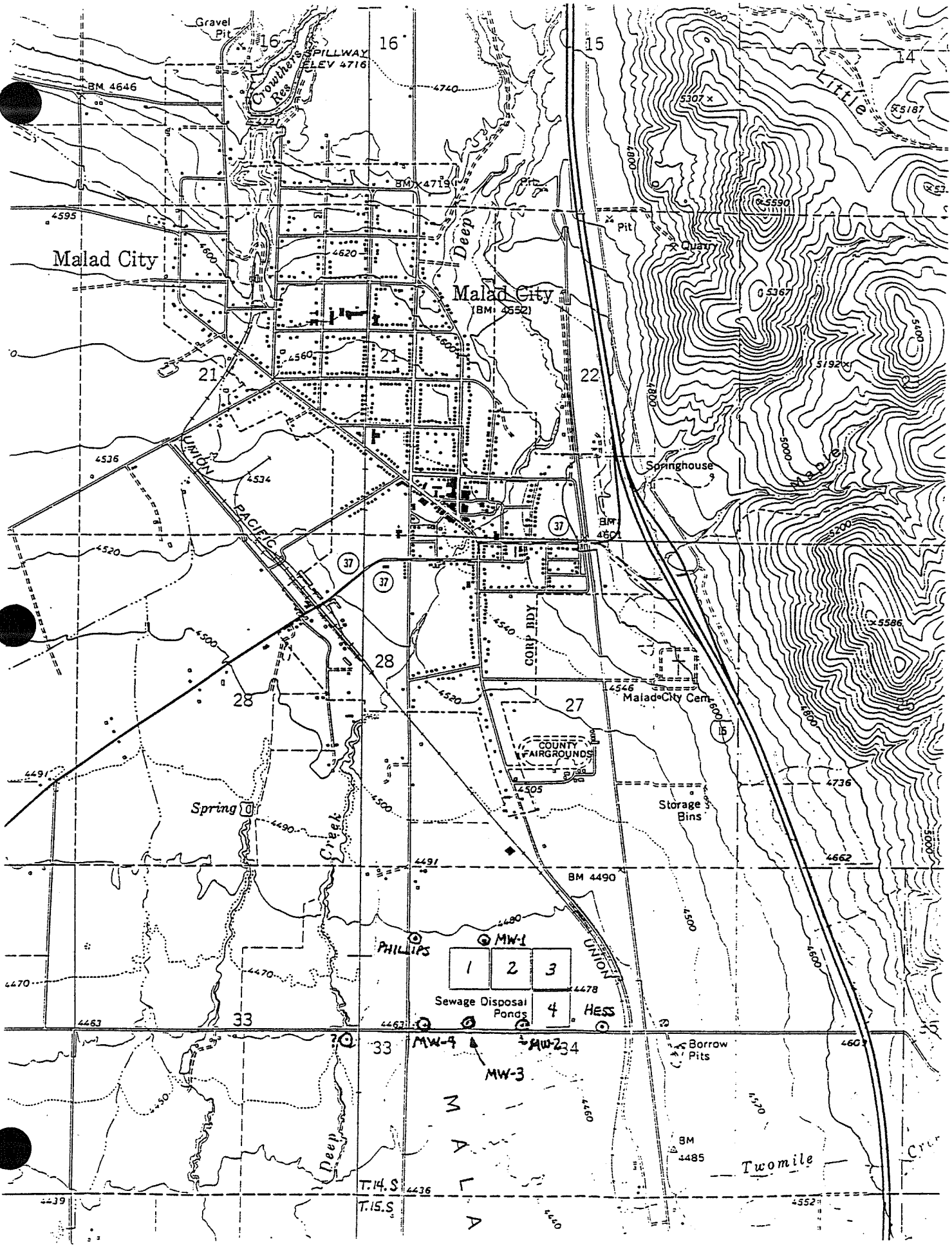

Gravel Pit
SPILLWAY ELEV 4716
Crowthers Res
BM 4646
BM 4719
Malad City
Malad City
(BM 4552)
Deep
Pit
Quarry
Little
Maple
Springhouse
UNION PACIFIC
CORP BDY
Malad City Cem
COUNTY FAIRGROUNDS
Storage Bins
Spring
Creek
BM 4490
PHILLIPS
MW-1
1
2
3
4
Sewage Disposal Ponds
HESS
MW-4
MW-2
MW-3
Borrow Pits
BM 4485
Twomile
T.14.S
T.15.S