DEQ POLICY MEMORANDUM
PM-99-2

GROUND WATER MONITORING POLICY FOR SMALL EXEMPT MUNICIPAL LANDFILL

STATEMENT OF PURPOSE

To create a statewide policy for determining if monitoring of ground water at small exempt municipal solid waste landfills (MSWLFs) is necessary in order to protect ground water resources and source water supplies.

Scope: This policy applies to all small exempt MSWLFs in Idaho. Small exempt MSWLFs are those that receive less than 20 tons of municipal solid waste daily, based on an annual average, with no evidence of ground water contamination from the municipal solid waste landfill unit or expansion. The small exempt MSWLF must either serve a community that experiences an annual interruption of at least three consecutive months of surface transportation that prevents access to a regional waste management facility, or must have no practicable waste management alternative and the landfill unit must be located in an area that annually receives less than or equal to 25 inches of precipitation.

STATEMENT OF POLICY:

Authority: DEQ is authorized to administer and enforce certain provisions of the Idaho Solid Waste Facilities Act pursuant to Idaho Code §39-105 (3) (m). The Idaho Solid Waste Facilities Act, Section 39-7410 as amended in 1997, requires ground water monitoring to be included within the design of all MSWLFs, except:

> (a) When the MSWLF unit meets the conditions for exemption in 40 CFR 258.1(f) [*the conditions for small exempt MSWLF's*]; provided however, that the Director may, at his discretion, require monitoring* of a MSWLF unit which meets the conditions for exemption in 40 CFR 258.1(f), if necessary to protect ground water resources. If the Director does require ground water monitoring of such MSWLF unit, a method other than the ground water monitoring wells required in this section and in 40 CFR 258.51 through 258.55 may be used to detect a release of contamination from the unit; or (b)When suspended upon demonstration in accordance with 40 CFR 258.50 that there is no potential for migration of hazardous constituents from the MSWLF unit to the uppermost aquifer during the active life of the unit and the post-closure care periods when certified by a qualified professional and approved by the Director.
>
> **emphasis added*

Idaho Code Section 39-7410 allows for an exemption from ground water monitoring for small exempt MSWLF's under certain conditions. However, some small exempt MSWLF's have been constructed and are accepting waste in locations that have a high probability of impacting ground water from release of contaminants in leachate. Locations such as gravel pits and other porous geologic formations and shallow depth to fractured bedrock are locations where small exempt MSWLF's will be required to monitor ground water. The policy section outlines the conditions which may require ground water monitoring.

PROCESS FOR REQUIRING GROUND WATER MONITORING AT SMALL EXEMPT MUNICIPAL LANDFILLS:

In order to comply with Idaho Code Section 39-7410, the Division shall evaluate small exempt MSWLFs on a case-by-case basis to ensure that ground water shall be protected. Each small exempt MSWLF shall be evaluated for such characteristics as waste type, type of containment, depth to ground water, geology, proximity of domestic wells and history of MSWLF operating problems. These site specific categories will be recorded on the Small Exempt Municipal Solid Waste Landfill Ground Water Evaluation Work Sheet. Small exempt MSWLFs scoring over 700 points and unable to comply with Idaho Code Section 39-7410(1)(b), shall be required to monitor ground water through use of monitoring wells. MSWLFs scoring between 500 and 700 points and unable to comply with Idaho Code Section 39-7410(1)(b), maybe required to assess ground water by conducting ground water monitoring through use of monitoring wells or implement other monitoring method(s) approved by the Director, which will effectively determine if ground water is being impacted.

IMPLEMENTATION:

This policy shall be effective immediately.

DATED this 12 Day of April, 1999

C. STEPHAN ALLRED,
ADMINISTRATOR

STATE of IDAHO

Small Exempt Municipal Landfill Groundwater Evaluation Worksheet

This worksheet is to be used by DEQ staff to determine whether a small exempt municipal landfill should provide for groundwater monitoring.

Facility Name:	**County:**	**Region:**
Location:	**Lat/Long:**	**Date:**
Contact Person:	**Facility Size:**	**DEQ Staff:**
Contact Address:	**Date Opened:**	**Total Score:**

Instructions:

1) Fill out the above site information and enter the score after computed.

2) Where information is not supplied or available to the reporter, assume the highest value assigned to that category.

3) Circle all applicable value(s) for each category, multiply by a factor if necessary, and place the total in the score column below. Add all the values in the score column and enter the total in the score box above. Please take thorough notes and add comments about the site where appropriate.

4) Keep the original for your file and send a copy of the completed form and any attached notes to your Regional Administrator and to Barry Burnell , DEQ Central Office, 1410 N. Hilton St., Boise, ID, 83706.

5) If the small exempt MSWLF has the potential to affect a Sensitive Resource Aquifer, then ground water monitoring shall be required.

Category	Points	Value	Score
A) Facility daily volume (Enter the estimated volume of waste received per day)			
> 10 tons per day	30	_____	
< 10 tons per day	10	_____	
			_____

B) Waste type With District Health assistance, estimate percent of known waste types. Also, enter 100 if you know or suspect that hazardous waste is present such as conditionally exempt small quantity generated (CESQG) hazardous waste. If subtitle C hazardous waste is present, the facility must be referred to RCRA staff at DEQ, CO.)

Category	Points	Value	Score
Known/observed (CESQG) hazardous waste disposal	100	_____	
Municipal	___% X 40 =	_____	
Agriculture waste	___% X 20 =	_____	
Petroleum contaminated soil	___% X 20 =	_____	
Sewage sludge	___% X 20 =	_____	
Paper mill ash	___% X 20 =	_____	
Const & Demo	___% X 20 =	_____	
			_____

Category		Points	Value	Score
C) Waste containment (With District Health assistance, enter any that apply)				
No synthetic liner		100	_____	
Waste exposed (closed portion)		75	_____	
Soil or clay cover (closed portion)	poor	50	_____	
	good	0	_____	
Vegetative cover (closed portion)	poor	50	_____	
	good	0	_____	
				_____

D) Depth to groundwater from bottom of landfill (Enter one)

0 to 5	feet	100
5 to 50	feet	75
50 to 100	feet	50
> 100	feet	25

_____

Category	Points	Value	Score
E) Geology and hydrologic conductivity (K) above aquifer (Enter one)			
Gravel, clean sand, fractured igneous or metamorphic rock, cavernous limestone or dolomite	100	_____	
Sands, sandy silts, high K till, moderate K limestone, dolomite, sandstone, fractured igneous or metamorphic rock	75	_____	
Silt, loess, or till, limestone, dolomite, sandstone or fractured igneous or metamorphic rock with medium K	50	_____	
Clay, till, shale, unfractured igneous or metamorphic rock with low K	10	_____	
			_____
F) Domestic water wells potentially at risk (Enter one)			
Wells exist within 1,200 feet	100	_____	
Wells exist between 1,200 and 2,500 feet	75	_____	
Wells exist between 2,500 and 5,000 feet	50	_____	
Wells exist more than 5,000 feet	25	_____	
			_____
G) History of Operating Problems (with District Health assistance, enter any that apply)			
Waste has been placed below the high seasonal water level	100	_____	
Documented contamination of surface water	100	_____	
Storm water run on/off control problems	100	_____	
Repeated, uncorrected problems noted in past visits	50	_____	
Documented leachate seep	50	_____	
			_____

Category	Points	Value	Score
H) Evidence of Contamination			
Lab documentation that ground water has been impacted by leachate?	100	_____	
Are the site conditions such as stressed vegetation present that suggest that it is likely that ground water has been impacted by leachate?	75	_____	
			_____

I) Any Other Characteristics (plus or minus value scores accordingly)

_____
_____
_____ _____

Please add the scores for categories A though I here and enter the total at the top of page 1.

A	_____
B	_____
C	_____
D	_____
E	_____
F	_____
G	_____
H	_____
I	_____

TOTAL SCORE ALL CATEGORIES ..... _____