



August 2, 1990

Fall River T.9S R.2E

Mr. Ken Buhler
South Dakota Department of
Water and Natural Resources
Joe Foss Building
523 East Capital
Pierre, South Dakota 57501-3181

Dear Mr. Buhler:

In compliance with section 74:02:04:71 of the South Dakota Well Construction Standards, the following information is provided regarding the plugging of 9 monitoring wells and/or test holes at the SDDS Lonetree Balefill site near Edgemont, South Dakota. Well Construction specifications are provided on Table 1.

Owner: South Dakota Disposal Services
500 2nd Ave.
Edgemont, South Dakota 57735

Plugging Procedure: Initially, an attempt was made to pull the 2" PVC casing from each boring prior to adding the grout. Each borehole was then reamed with a 5 1/2-inch drill bit to remove any remaining well casing and backfill materials. Fresh city water was added when necessary to maintain circulation. High volume air was circulated through the borehole for several minutes after the total depth was reached.

In compliance with sections 74:02:04:53 and 74:02:04:54, a neat cement grout consisting of seven gallons of clean water mixed with one sack of "High Early" cement (Type III) and two pounds of powdered bentonite was mixed on site in a 55 gallon drum. High volume compressed air flow was used to mix the grout.

The bentonite/cement grout was poured into to the open boring from the surface. Due to the low water producing nature of the on-site shales, or the initial dry condition of the test hole, standing water in the boring was not of concern. The grout was allowed to settle for several hours prior to adding additional grout to the land surface.

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Grout Materials: Cement: Dacotah "High Early"
Rapid City, SD

Bentonite: "Federal Bentonite"
117 5th Ave.
Belle Fourche, SD 57717

Water: City of Edgemont

I certify the above information to true and accurate regarding the plugging of monitoring wells at the SDDS-Lonetree Balefill site near Edgemont, SD.

Leonard P. Komes

Leonard Komes

South Dakota License No 311

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Date

cc: Mr. Keith Andersen, SDDS, Inc.
Mr. Bill Bond, GEOCHEM, Inc.

TABLE 1

**SDDS Lonetree Balefill, Edgemont, South Dakota
Monitoring Well/Test Hole Construction Specifications
Prior to Plugging**

<u>WELL NO.</u>	<u>WELL LOCATIONS</u> (T9S, R2E)	<u>COMPLETION</u> <u>DATE</u>	<u>HOLE</u> <u>SIZE</u>	<u>PVC</u> <u>CASING</u> <u>SIZE</u>	<u>TOTAL</u> <u>DEPTH</u>	<u>COND.</u> <u>OF WELL</u>
TH-1	SE 1/4 OF NE 1/4 OF SEC. 34	11/9/88	4 1/2"	2"	35'	Dry
TH-2	NW 1/4 OF SE 1/4 OF SEC. 34	11/9/88	4 1/2"	2"	33'	Dry
TH-3	NW 1/4 OF SE 1/4 OF SEC. 34	11/9/88	4 1/2"	2"	29'	Low Yeild
TH-4	SE 1/4 OF SE 1/4 OF SEC. 34	11/9/88	4 1/2"	2"	45'	Dry
TH-7	NW 1/4 OF SW 1/4 OF SEC. 35	4/3/89	5"	2"	80'	Dry
TH-11	SE 1/4 OF NE 1/4 OF SEC. 34	4/3/89	5"	2"	75'	Low Yeild
TH-12A	NW 1/4 OF SE 1/4 OF SEC. 34	5/22/89	5"	2"	17'	Low Yeild
TH-12B	NW 1/4 OF SE 1/4 OF SEC. 34	5/23/89	5"	2"	60'	Low Yeild*
TH-15	SW 1/4 OF NE 1/4 OF SEC. 34	3/28/89	5"	2"	72'	Dry

* 52 feet of steel conductor casing left in place and grouted to ground surface.

