Viacom Inc.
Bloomington Project
One City Centre, Suite 108
Bloomington, IN 47404
(812) 334-0030
(812) 334-7855 (Fax)

VIACOM

January 30, 2001

BP-01-0009

Mr. Thomas Alcamo
U.S. EPA, Region V
77 West Jackson Boulevard
Chicago, IL 60604

Mr. John Langley
City of Bloomington
1969 South Henderson
Bloomington, IN 47402

Mr. Vince Epp
Indiana Department of Environmental Mgmt.
100 North Senate Avenue
Indianapolis, IN 46206

Subject: Delineation of Lemon Lane Perimeter Security Fence

Viacom is making preparations with the fence contractor to re-establish the security fence at Lemon Lane Landfill. The timing will depend on the weather conditions and when the soils are firm enough to permit the contractor to access the site with his vehicles and equipment.

Viacom's plan is to: [1] reduce the perimeter boundary of the security fence in order to return portions of the property back to the original owners and [2] position the Indiana Gas Company access easement with the City of Bloomington outside the perimeter of the fence. In addition, the relocation of the fence along the East will provide the City of Bloomington sufficient offset from the Lemon Lane Street to establish a buffer zone between the landfill and the residents adjacent to and near the site. This plan is consistent with the Lemon Lane Remedial Design/Work Plan issued on May 17, 2000, with the exception of the West boundary of the fence because it will be located on the adjoining Viacom property.

I have attached a sketch of the approximate fence location around the landfill. The fence has been overlaid on the excavated grids. The numerical value or BDL for a grid depicts the final verification sample result for that grid. The grids outside the perimeter fence meet the applicable cleanup criteria.

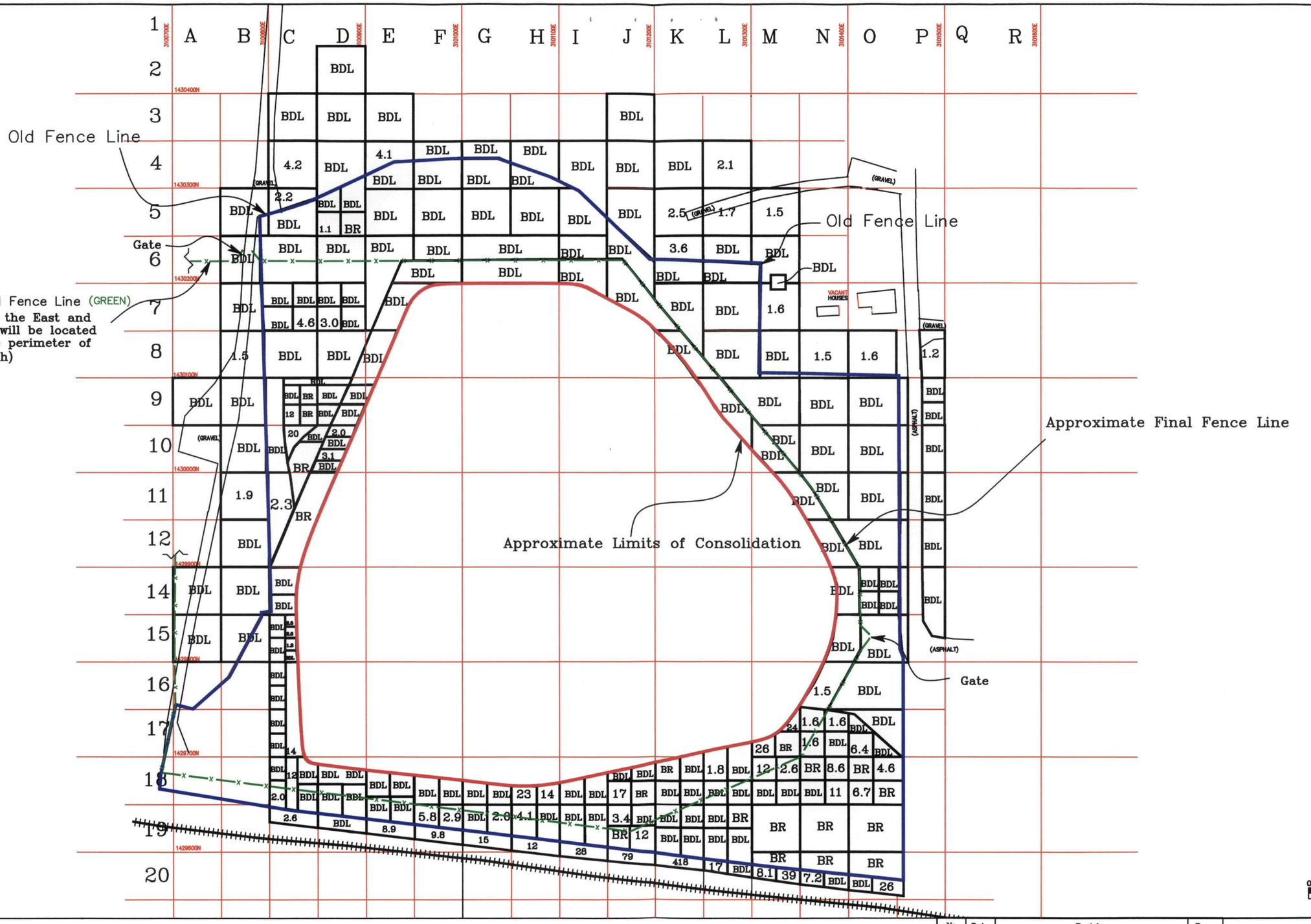
Please review the attached and advise me of your comments and approval so I can finalize the arrangements with the fence contractor.

Sincerely,

James B. Patrick
Project Site Manager

Attachment: Proposed Site Fence Location dated 1/3/01

cc: Dottie Alke, Viacom
Russ Cepko, Viacom
Dennis Williamson, MCHD



PSARA TECHNOLOGIES, INC.

All Grids are covered with at least 10" of clean soil from an off-site source.

1.6 – Final Grid Results in parts-per-million (PPM)

– Old Fence Line

– Location of Final Fence

BR – Bedrock

BDL – Below Detection Limit

No.	Date	Revision	By

VIACOM

Proposed Location of New Fence
Lemon Lane Landfill
Bloomington, Indiana

Drawn By:	Date:	Scale:
SWW	01/23/01	NTS

ENCLOSURE

FIELD OVERSIGHT SUMMARY FOR
JANUARY 30, 2001
LEMON LANE LANDFILL SITE
BLOOMINGTON, INDIANA

(Two Pages)

FIELD OVERSIGHT SUMMARY
LEMON LANE LANDFILL SITE
BLOOMINGTON, INDIANA

Tetra Tech Oversight Personnel: Jason Massey
Reporting Period: January 30, 2001

INTRODUCTION

As requested by the U.S. Environmental Protection Agency (EPA), Tetra Tech EM Inc. (Tetra Tech) is conducting oversight of field investigation activities at the Lemon Lane Landfill site in Bloomington, Indiana, under Contract No. 68-W7-0003, Work Assignment No. 019-RSBD-0529. Viacom, Inc. (Viacom), is the responsible party for the site. PSARA Technologies, Inc. (PSARA), is Viacom's consultant; American Drilling Services (ADS) is Viacom's drilling contractor; and Cassidy Electrical (Cassidy) is Viacom's electrical contractor.

This report summarizes Tetra Tech's oversight observations on January 30, 2001, and discusses issues and developments during the reporting period. Appendix A contains a photographic log of Tetra Tech's field activities, and Appendix B contains a copy of Tetra Tech's oversight field notes. The attachment contains a copy of the ADS driller's log for monitoring well MW-16 that was the focus of the investigation activities; this log includes polychlorinated biphenyl (PCB) analytical results for clay and water samples that were collected by Viacom at the time of drilling.

OVERSIGHT OBSERVATIONS

Tetra Tech arrived at the site at 9:50 a.m. on Tuesday, January 30, 2001. Rain was falling, the temperature was around 38 °F, and the wind was out of the west at 10 to 15 mph. At 10:15 a.m., Cassidy arrived at the site and unlocked the gate. At 10:30 a.m., Cassidy left the site and PSARA arrived. PSARA started setting up and securing a tent around MW-16 to shield it from the wind and rain (see Photograph No. 1). At 10:50 a.m., PSARA started setting up video-logging equipment (see Photograph No. 2). PSARA reported that it had video-logged MW-16 from the ground surface (GS) to the level of groundwater encountered on Thursday, January 25, 2001. Therefore, PSARA would start video-logging

in MW-16 at the groundwater level and continue to the bottom of the well. At 11:00 a.m., PSARA and Tetra Tech reviewed the video log for MW-16 recorded on January 25, 2001. In the video, groundwater was seen filling the well hole somewhere between GS and 36 feet below ground surface (bgs). In addition, groundwater was encountered at a depth of 64 feet bgs.

At 11:10 a.m., PSARA lowered the video camera into MW-16. Groundwater was encountered at a depth of 62 feet bgs. At 11:20 a.m., PSARA started video-logging MW-16. At a depth of 77 feet bgs, sediment was observed flowing downward as the video camera was lowered, indicating the downward flow of groundwater. At a depth of 83 to 84 feet bgs, a void was encountered, and the groundwater flow appeared to be lateral. At 11:50 a.m., a small fracture was observed at a depth of 95 feet bgs. At 11:55 a.m., PSARA encountered the bottom of the well at a depth of 102.5 feet bgs. At 12:00 noon, PSARA started retracting the video camera while decontaminating the deployment wire (see Photograph No. 3). At 12:10 p.m., PSARA started disassembling the video-logging equipment (see Photograph No. 4). The ADS drill rig was stationed in the southeast corner of the site (see Photograph No. 5). At 12:45 p.m., Tetra Tech and PSARA left the site.

ISSUES AND DEVELOPMENTS

On Tuesday, January 30, 2001, the groundwater level in MW-16 was observed to be 2 feet higher than the level observed on Thursday, January 25, 2001. The higher level was due to the precipitation that occurred on January 30.

The video-logging results for MW-16 corresponded with the driller's log for MW-16 (see the attachment to this report).

PSARA reported that video-logging of monitoring well MW-15 could not continue until a sleeve was inserted in the well. As of January 30, PSARA was uncertain of the time needed to insert the sleeve.

PSARA reported that soft soil conditions were limiting movement of the ADS drill rig. As a result, rock drilling for piezometer PZ-G on the northwest side of the landfill cap would be delayed.

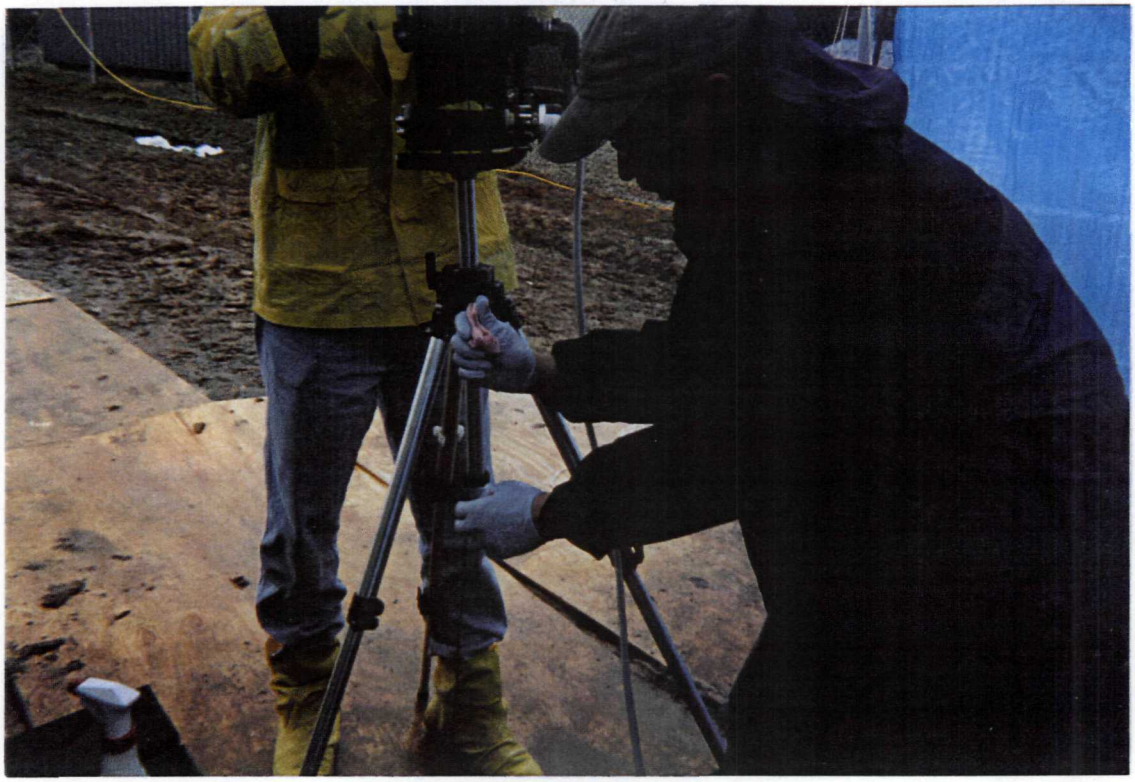
APPENDIX A

PHOTOGRAPHIC LOG
LEMON LANE LANDFILL

(Three Pages)

Photograph No. 1 Location: Lemon Lane Landfill
Orientation: South Date: January 30, 2001
Description: PSARA Technologies, Inc. (PSARA), inside protective tent around monitoring well MW-16

Photograph No. 2 Location: Lemon Lane Landfill
Orientation: Southwest Date: January 30, 2001
Description: PSARA setting up video-logging equipment



Photograph No. 3 Location: Lemon Lane Landfill
Orientation: Northeast Date: January 30, 2001
Description: PSARA retracting the video camera and decontaminating deployment wire

Photograph No. 4 Location: Lemon Lane Landfill
Orientation: Southwest Date: January 30, 2001
Description: PSARA disassembling video-logging equipment

Photograph No. 5 Location: Lemon Lane Landfill
Orientation: South Date: January 30, 2001
Description: American Drilling Services drill rig stationed in southeast corner of site

APPENDIX B

OVERSIGHT FIELD NOTES
LEMON LANE LANDFILL

(One Sheet)

Field Logbook No. Lemon Lane Date 1/30/01

810	Contacted Mike McCann (CBS/Nixon) and confirmed start time (10-11am.) for video logging. Neal Vaughn (CBS/Nixon) will be performing the video logging.
950	Tt arrived on-site.
1015	Cassidy Electrical contractors arrived on-site & unlocked gate.
1030	Cassidy off site
1035	PSARA (Neil Vaughn & Brian) on-site. Setting up protection cover (tent) for weather
(Photo: 5)	conditions (rainy & windy).
1050	Setting up monitoring
(Photo: 5)	equipment. PSARA reports they will start @ water (MW-16) level & work down. They monitored from ground surface (gs) to water last Thursday.
1100	Viewed video log from Thursday (MW-16). Water coming through ~~fracture~~ Between gs & 36'. Hit groundwater @ 64'.

Jason Massey

Field Logbook No. Lemon Lane Date 1/30/01

1110	lowered camera to end of well casing (36') & proceeded to GW (62'). PSARA reports previous day (wet) sampled from hole = 8.2 ppm, GW sampled @ 66' = 210 ppb, GW sampled @ 84' = 9.3 ppb. Bottom of hole is about ~~54~~ 86' bgs.
1140	@ 77' sediment was flowing downward as camera was lowered @ 83' void encountered, GW flow. 83-84' lateral flow encountered.
1150	Small fracture @ 95'
1155	Hit bottom @ 102.5'. Started re-tracking camera & decanning wire (Photo: NE).
1210	PSARA breaking down equipment (photo SW). ADS drill rig in SE corner (photo: 5)
1245	PSARA & Tt off site.

Jason Massey

ATTACHMENT

AMERICAN DRILLING SERVICES
DRILLER'S LOG FOR MONITORING WELL MW-16
LEMON LANE LANDFILL

(One Sheet)

Driller's Log for MW-16 at Lemon Lane				
Approximate Surface Elevation - 880 ft. amsl				
Start Depth	End Depth	End Elevation	Description	Sample Result
0	7	873	soil,fill, 8" steel casing set	
7	12	868	limestone, dry, solid	
12	17	863	limestone, dry, solid	
	18	862	soft, parting, or clay seam	
	20	860	soft, parting, or clay seam	
20	22	858	limestone, dry, solid	
22	27	853	limestone, dry, solid	
29	32	848	clay-filled void	
32	33	847	clay-filled void, wet clay is sampled	8.2 ppm
33	35	845	broken rock and wet clay	
35	37	843	limestone, solid	
	39.5	841.5	small void or fracture	
39.5	41	839	limestone, solid	
41	46	834	limestone, solid	
46	50	830	limestone, very hard	
	50	830	small void or fracture	
50	52	828	limestone, hard	
52	53	827	limestone, soft, shaly or thin bedded	
	53	827	small void or fracture	
	55	825	small void or fracture	
	56	824	small void or fracture, hole making little water	
56	61	819	limestone, solid	
	62	818	small void or fracture	
	63	817	small void or fracture	
	64	816	small void or fracture	
64	66	814	limestone, shaly or thin bedded, water sampled	210 ppb
	68.5	811.5	small void or fracture	
66	71	809	limestone, hard, water @ <1 gpm	
71	74	806	limestone, shaly or thin bedded	
	74	806	small void or fracture	
74	76	804	limestone, shaly or thin bedded	
76	81	799	limestone, solid	
	81	799	small void or fracture	
82.5	83	797	fracture or void zone, water @ 5-10 gpm	
83	83.5	796.5	limestone, solid	
83.5	84	796	fracture or void zone, water @ 5-10 gpm	
84	90	790	limestone, solid, water sampled	9.3 ppb
90	91	789	limestone, hard	
	93	787	small void or fracture	
	94	786	small void or fracture	
94	102	778	limestone, hard	