

March 15, 1994  
File No. 7875-C



Mr. Frank Vumbaco  
Nuclear Metals, Inc.  
2229 Main Street  
Concord, Massachusetts 01742

Re: Addendum to Groundwater Monitoring Report  
1992-1993 Monitoring Year  
Nuclear Metals, Inc.  
Concord, Massachusetts

120 Needham Street  
Newton Upper Falls  
Massachusetts 02164  
617-969-0030  
FAX 617-965-7769

Dear Mr. Vumbaco:

It was recently brought to our attention by Nuclear Metals, Inc., that our 1992-1993 Groundwater Monitoring Report for the NMI site, issued on December 16, 1993, contains errors in Table 6, the summary of uranium concentration data. In the May 1993 sampling round, a new laboratory, TMA Norcal, Inc., was employed to conduct uranium analyses, as Bolton & Galanek, Inc., the laboratory which had conducted the previous analyses, no longer offers this service. TMA Norcal reports its results in units of pCi/l, while previous results by Bolton & Galanek were reported in units of ug/l. GZA made a unit conversion error in converting the May results to units comparable to prior results. A revised Table 6 is attached.

The revised concentrations indicate higher uranium concentrations for the May 1993 sampling round than were listed in the original version of Table 6. However, it is GZA's opinion that the revised data do not indicate that any additional sampling locations may have been influenced by discharges from the Holding Basin beyond those discussed in our December 1993 report.

The concentrations reported by TMA Norcal for the May 1993 sampling round are higher than those reported by Bolton & Galanek. GZA notes that, as part of our Phase II - Comprehensive site assessment being conducted under the Massachusetts Contingency Plan, we have collected additional samples from the monitoring wells installed during the Phase II study, and submitted these samples to multiple laboratories for analysis. TMA's results were also higher than reported by the other laboratories, whose results were comparable to Bolton & Galanek's and some of whom used techniques similar to Bolton & Galanek's. It is GZA's opinion that the higher values reported by TMA may reflect differences in analytical methods as

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opposed to actual increases in uranium concentration. Additional monitoring rounds will provide additional information on trends in uranium concentration.

GZA apologizes for the errors in the original report. Please call Sara Hanna or John Ayres if you have questions concerning the revisions to the monitoring report.



Very truly yours,

GZA GEOENVIRONMENTAL, INC.

A handwritten signature in cursive script, appearing to read 'Sara R. Hanna'.

Sara R. Hanna  
Senior Project Manager

A handwritten signature in cursive script, appearing to read 'Charles A. Lindberg'.

Charles A. Lindberg  
Consultant/Reviewer

A handwritten signature in cursive script, appearing to read 'John E. Ayres'.

John E. Ayres  
Senior Principal

SRH/JEA:idm

Attachment: Table 6 (revised)

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TABLE 6  
URANIUM CONCENTRATIONS,  $\mu\text{g}/\text{l}^1$

Sampling Location	October 1992	May 1993	Maximum Value <sup>3</sup>	Minimum Value <sup>3</sup>	Average Value <sup>3</sup>
PW-4	<0.2	NA <sup>2</sup>	4.2	0.2	1.1
GZW-5	<0.2	0.20±0.03	300	0.1	16.4(6)
PW-5	0.6	NA <sup>2</sup>	1.5	<0.1	0.7
PW-6	<0.2	NA <sup>2</sup>	8.7	<0.1	1.1
PW-7A	0.4	NA <sup>2</sup>	1	<0.1	0.5
PW-8	0.3	NA <sup>2</sup>	4	<0.1	0.8
HB-7	120	140±26(267±50)	1,523	36.0	264 (271)
HB-8	174	222±42(425±81)	1,460	80.0	356 (366)
HB-9	NA <sup>4</sup>	NA <sup>4</sup>	5.1	0.3	1.6
HB-10	1.2	NA <sup>2</sup>	7.93	0.2	1.5
Cooling Water	0.3	16±3(31±6)	16±3(31±6)	0.3	6.9 (7.8)
Septic Tank 1	50.0	28±4(53±8.3)	340	3.0	55.6 (56.7)
Septic Tank 2	3.0	49±23(94±44)	49±23(94±44)	0.25	15.8 (18.2)
PW-2	0.4	NA <sup>2</sup>	2.2	<0.2	0.8
PW-3	<0.2	0.16±0.03	7.6	0.076	1.1
ML-3-1	0.3	0.15±0.03	8.0	0.07	1.5
P-4	0.4	NA <sup>2</sup>	4.4	0.2	1.0
Supply Well 1	0.3	0.13±0.03	<2	0.06	0.5
Supply Well 2A	8.0	28±4(53±8.3)	35	2.4	15.1 (17.0)
P-1	<0.2	0.09±0.03	1.0	0.04	0.4
P-2	<0.2	<0.07	3	<0.1	0.7
P-3	0.3	0.15±0.03	10	0.07	1.3
Assabet River (upstream)	0.3	NA <sup>2</sup>	3.0	0.2	0.7
Assabet River (downstream)	<0.2	NA <sup>2</sup>	<2	0.2	0.7
GZW-6-1	NA	0.23±0.04	0.23±0.04	<0.2	<0.2
GZW-6-2	NA	<0.073	<0.2	<0.073	<0.1
GZW-6-3	14	176±33(336±63)	176±33(336±63)	14	67 (99)
GZW-7-1	NA	200±38(380±72)	200±38(380±72)	41	120 (178)
GZW-7-2	70	84±9(161±17)	84±9(161±17)	13	53 (7')
GZW-8-1	NA	0.3±0.04	0.3±0.0r	0.3±0.04	0.3±0.04
GZW-8-2	0.3	0.9±0.16	4	0.3	1.9

TABLE 6 (CONT'D)

Notes:

1. Samples collected by GZA personnel October 21-22, 1992 and May 13-17, 1993. Analyses by Bolton and Galanek, Inc., Cambridge, Massachusetts (October 1992) and by TMA Norcal, Inc. of Richmond, California (May 1993).
2. NA indicates not analyzed; refer to Table 1 for sampling schedule.
3. Statistics (maximum, minimum, average) refer to data collected during all of GZA's annual and semi-annual sampling rounds at NMI, 1981-1993. Statistics for GZW-6 and GZW-7 series include results of one monitoring round conducted prior to October 1992. One-half the detection limit was used for non-detected concentrations in calculating averages.
4. Well HB-9 not sampled; refer to text.
5. Results for May 1993 converted from pCi/l to  $\mu\text{g/l}$  using a conversion factor of 0.6872 pCi/ $\mu\text{g}$  provided by TMA Norcal for natural uranium. For results of analyses of samples from wells HB-7, HB-8, GZW-6-3, GZW-7-1, GZW-7-2, SW-2A, septic tanks ST-1, ST-2, and the cooling water, conversion from pCi/l to  $\mu\text{g/l}$  using a conversion factor of 0.36 pCi/ $\mu\text{g}$  for depleted uranium is also provided, as indicated in parentheses. GZA considers the depleted uranium conversion factor more appropriate for these samples; refer to text for additional discussions.
6. Average calculated using maximum value of 300  $\mu\text{g/l}$ , which was apparently an anomalous value; average of remaining values is 0.6  $\mu\text{g/l}$ .
7. Statistics based on analysis of one sample only (May 1993).

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August 3, 1993  
File No. 3736.92



Timothy C. Johnson  
Division of Low-Level Waste Management and Decommissioning  
United States Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

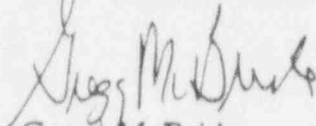
Dear Mr. Johnson:

This letter is in response to your undated letter, referenced by Docket No. 40-1650, to Wallace Whitney, Jr. of Wyman-Gordon Company (W-G) in which you requested a release from GZA GeoEnvironmental, Inc.'s (GZA's) copyright to allow reports prepared on behalf of W-G to be placed in the Nuclear Regulatory Commission (NRC) public document room. Any past and future reports prepared by GZA for the W-G and submitted to the NRC can be copied by the NRC to be made available for informational purposes in their public document room.

We trust that this letter meets your needs at this time. If you have any additional questions please call me at 617-630-6231.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

  
Gregg McBride  
Associate Principal

GM:rsk

cc: J. Tharp, Wyman-Gordon Company

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