Post-it® Fax Note 7671	Date 9-8-04	# of pages ▶ 9
To Joe Renville	From Jennie E.	
Co./Dept.	Co.	
Phone #	Phone #	
Fax #	Fax #	

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REINHART
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ATTORNEYS AT LAW

August 27, 2004

Raymond M. Roder
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Ms. Jennifer S. Easterly
Remediation and Redevelopment Program
Wisconsin Department of Natural Resources
Northeast Region Office
625 East County Road Y, Suite 700
Oshkosh, WI 54901-9731

Dear Ms. Easterly:

Re: Former FF/NN Landfill
WDNR License # 467
BRRTS # 02-20-00915

I am enclosing a copy of the August 25, 2004 letter to me from GeoTrans in which GeoTrans critiques your August 6, 2004 revised groundwater monitoring plan. As GeoTrans states, its letter was prepared at the request of Nelson Olavarria. As you are probably aware, Mr. Olavarria is an in-house environmental consultant for a member of the FF/NN Landfill PRP Group (the "Group") and, as such, is very experienced with landfill remedial investigations. Because he perceived that the monitoring requirements set forth in the August 6th letter might be excessive, he asked for GeoTrans' assessment and recommendations.

You will see that GeoTrans agrees with some of the August 6th letter, disagrees with other parts and proposes compromises to still others. As to the first category there is no need for response from the Department. The remaining two categories in combination involve the following sampling points: P-101, MW-102, P-102, MW-106, MW-108, P-108, P-111, MW-111 and the existing gas probes.

With respect to MW-102 and MW-106 you will see that GeoTrans is relying in part on data that was not available to the Department when the August 6th letter was written and its accompanying tables were prepared. GeoTrans included a discussion of MW-111 even though it was not addressed in your August 6th letter. Your reconsideration on these matters is necessary because collection of unnecessary data can be (and in the case of the Group will be) a waste of limited resources.

Your reconsideration is also requested on the other matters raised by GeoTrans such as: whether new wells upgradient or sidegradient of P-102 are needed; whether sampling beyond one more confirmation sample at MW-108, P-108 and P-111 is needed; and, whether monthly sampling of the existing gas probes is needed, particularly until the new gas probes

are installed, sampled and their results evaluated in conjunction with concurrent sampling of the existing probes. Again, the concern is the cost of collecting unneeded data.

To the extent you disagree with GeoTrans' recommendations in the August 25th letter, please provide them and me with your reasons, including the data that support your disagreements. The Group will implement GeoTrans' recommendations in the meantime.

I will note that the Department and the Group have been able to reach agreement on a substantial part of the sampling plan through the give and take of correspondence like the enclosure and your August 16th letter. When evaluating GeoTrans' critique of the Department's August 6th version of the sampling plan, please take that substantial agreement into account as well as the increased monetary impact of the additional data collection already agreed to.

Thank you for your consideration of the above.

Sincerely,

Raymond M. Roder

Madison\132383RMR:JJS

Encs.

cc Mr. Gerald DeMers (w/o encs.)
Mr. Nelson Olavarria (w/encs.)
Mr. Steve Barg (w/encs.)

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August 25, 2004
(1011.002)

Mr. Raymond Roder
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22 East Mifflin Street, Suite 600
P.O. Box 2018
Madison, WI 53701-2018

Re: Response to August 6, 2004 WDNR Letter Regarding Revised Groundwater Monitoring Plan, FF/NN Landfill, Ripon, WI

Dear Ray:

GeoTrans has prepared this response to the August 6, 2004 letter from Jennie Easterly of the Wisconsin Department of Natural Resources (WDNR) at the request of Nelson Olavarria. Comments from the August 6 letter are given in italics, and responses follow.

1. Although the main contaminant of concern is VOCs, indicator parameters (per Table 1 in ch.NR507 Wis. Adm. Code) should be considered contaminants of concern. Reducing the indicator parameters during the investigation/remediation phase of this site to field parameters (pH, conductivity, Temperature, Dissolved Oxygen) is acceptable at this time...

NR507.30 Table 1 states that detection (i.e., indicator) parameters are alkalinity, chloride, COD, field conductivity, field pH, field temperature, groundwater elevation and hardness. With permission granted by the WDNR to reduce monitoring to include only field parameters, we will sample for field conductivity, field pH, field temperature and groundwater elevation. Dissolved oxygen (DO) is a natural attenuation parameter and the Department has indicated that it has no interest in natural attenuation parameters, as stated in comment 2 below. Monitoring for DO would require deployment of a meter not typically used for field observations. Therefore, we will not be monitoring DO in future events.

2. Natural attenuation parameters will not be required by the Department. This monitoring will be at the discretion of the PRP Group.

No response is necessary. We do not intend to analyze for natural attenuation parameters.

3. Table 1A which was submitted in the May 28, 2004 GeoTrans report has been revised ....
A. MW-3A – Quarterly monitoring - The actual depth of the Rhode (sic) well is unknown but suspected at approximately 250 feet. Because both the MW-3A and MW-3B wells are either above or below the suspected depth of the Rhode (sic) well...both of the MW-3A and B wells should be monitored. If the total depth of the Rhode (sic) well could be measured to determine it's total depth and one of the MW-3 A or B wells were determined to be a more accurate monitoring point as a sentinel well for the Rhode (sic) household then one of the wells could

reduce the sampling frequency to semi-annual. In addition, due to the recent detection of vinyl chloride in MW-3B, monitoring of MR-3A is warranted considering the groundwater plume seems to be diving.

We recommend conducting quarterly sampling of MW-3A until the depth of the Rohde well is determined in the future.

B. P-101 – Quarterly monitoring is being asked of this well because of the problems being discovered in the P-102 well that is nearby. This well has not been sampled since May of 2002. If it is determined, that this well is clean then the frequency of monitoring could return to annual sampling.

P-101 is upgradient of the landfill, while P-102 is sidegradient. P-101 has had no detections of VOCs in it since 1993. We recommend sampling this well one more time to confirm no impacts are present. Additional sampling beyond that is not warranted.

C. MW-102 – Quarterly sampling for 1 year – if the well is not impacted then the well could return to semi-annual monitoring. This well has not been sampled since October of 2002 and with the impacts in the P-102 well, the groundwater drop and flow reversal, sampling of the shallow well is warranted.

We were able to sample MW-102 in July 2004. No VOCs were detected in this well. This is consistent with past results; VOCs were last detected in this well in 1998, and those detections were less than 1 ug/l. Therefore, we believe that semiannual sampling for one year is sufficient to show that this well remains free of VOC impacts.

D. P-102 – Quarterly monitoring is requested due to the increasing vinyl chloride trend in this well. The PRP Group should be looking into additional investigation in this area. At this time, there are no other monitoring wells to the northeast of this well. Please propose a workplan to address this new problem.

GeoTrans agrees that quarterly groundwater sampling should be performed at this well to monitor vinyl chloride. However, an additional investigation in this area is not warranted for the following reasons:

- The suspected original source of the vinyl chloride is the landfill, which is now located downgradient of this well again;
- The reason for impacts in the well is known—the direction of groundwater flow was temporarily reversed, from east to west to west to east, by pumping at Northeast Asphalt. This transported the vinyl chloride by advection (with the flow of groundwater) to the well;
- The direction of groundwater flow has fully returned to its normal direction of east to west;
- Any additional investigation would be upgradient of P-102; and
- There is no hydrogeological evidence that supports the need for additional investigation in the upgradient direction.

If the WDNR believes that a further investigation of this area is necessary, then we believe that Northeast Asphalt should be named by the WDNR as an additional Potentially Responsible Party. Both GeoTrans and the WDNR believe that the migration of vinyl chloride to this well is the direct result of the pumping that was done by Northeast Asphalt.

E. P-103 – Annual monitoring is requested at this point to determine if the groundwater flow drop/reversal has had an impact on this well. This well has not been sampled since May of 2002.

We agree with annual sampling of this well at this time.

F. P-104 – Annual monitoring is requested at this point to determine if the groundwater flow drop/reversal has had an impact on this well. This well has not been sampled since August of 2002.

We agree with annual sampling of this well at this time.

G. MW-106 Quarterly monitoring for a year – if no exceedances then return to a semi-annual sampling program. This well is in the same general area where problems are being discovered with the P-102 well. This well has not been sampled since February 2002.

We were able to sample MW-106 in July 2004. No VOCs were detected in this well. This is consistent with past results; VOCs were last detected in this well was in 1994. Therefore, we recommended that semiannual sampling is sufficient to show that this well remains free of VOC impacts.

H. MW-108 – Annual monitoring to determine any impacts from the groundwater drop/reversal from the pumping at the NE Asphalt gravel pit. In addition to have as a clean shallow sentinel well sidegradient of the landfill.

The reversal of groundwater flow by northeast Asphalt's pumping made this well upgradient of the landfill. The well was sampled in December 2002 and contained no detections of VOCs, which is consistent with past results. We recommend collecting one additional sample from this well to confirm that it is clean. If clean, we propose to drop this well from further groundwater monitoring.

I. P-108 – Annual monitoring to determine any impacts from the groundwater drop/reversal from the pumping at the NE Asphalt gravel pit. In addition to have as a clean sentinel well sidegradient of the landfill in this geologic strata.

The reversal of groundwater flow made this well upgradient of the landfill. The well was sampled in May 2002 and contained no detections of VOCs, which is consistent with past results. We recommend collecting one additional sample from this well to confirm that it is clean. If clean, we propose to drop this well from further groundwater monitoring.

J. P-111 – Annual monitoring to determine any impacts from the groundwater drop/reversal from the pumping at the NE Asphalt gravel pit. In addition to have as a clean sentinel well in this geologic strata downgradient of the landfill.

This well was sampled in April 2004, and no VOCs were detected. No VOCs have been detected in this well since 1994. Therefore, we recommend no additional sampling of this well.

Furthermore, MW-111 has never had detections of VOCs and was last sampled in December 2002. We recommend collecting one additional sample from this well to confirm that it is clean. We propose not sampling this well thereafter.

K. *P-115 – Quarterly monitoring of this sentinel well to protect downgradient receptors (private wells).*

We recommend collecting quarterly samples from this well.

4 *B. New data from the new gas monitoring wells have identified that the Lower Explosive Limit (LEL) for methane has been exceeded beyond the limits of waste. With this new information, the attached Table 3 specifies gas monitoring that should be completed. The waste program has also looked at the monitoring plan and has agreed that this is an appropriate sampling plan for this situation.*

Monthly gas sampling is specified on the table attached to the letter. As indicated in our previous letter, past sampling has indicated that methane concentrations vary significantly at locations where it is detected. Knowing that the methane concentration varies greatly on a monthly basis does not offer any additional useful information than if the samples are collected quarterly, as long as the LEL has been exceeded. Monthly data would be useful if we were monitoring an active gas recovery system, which we are not. Monthly data would also not be more useful than quarterly data for the design of an active system. Therefore, we believe that quarterly gas sampling is sufficient.

GeoTrans recommends that this gas sampling be deferred until the proposed additional gas probes have been installed. Access to install the additional probes on David Sauer's land has been requested. Probe installation is pending his approval.

5 *B. Environmental monitoring, analyses, and sampling frequency should be conducted in accordance with the attached revised tables (Tables 1, 2, 3 and 4)...*

Specific comments regarding sampling frequency are provided above.

10 *A. Groundwater level measurements should also be collected from all monitoring wells on a quarterly basis to better understand the groundwater flow characteristics of each aquifer.*

Quarterly water levels will continue to be collected.

7/5. *At least one surface water sample should be collected and analyzed for VOC's from the wetland downgradient of MW-112 (wetland on the R and R Wash property owned by Roger Washkovick) in October of 2004. To clarify what was incorrectly stated in the May 28, 2004 GeoTrans letter, the Department did not agree to gain access to the Washkovick property for the PRP group, but did offered assistance to the PRP Group if Mr. Washkovick did not grant access for the sampling. The PRP Group is responsible for obtaining this access. Please notify the Department in writing if the PRP Group is requesting our assistance with this matter. The data collected shall be submitted in the quarterly report following the sampling event.*

We understand that the PRP Group has contacted Mr. Washkovick to indicate that we will be collecting a surface water sample from the wetland in October, at the request of the WDNR. The WDNR will be contacted if any assistance is needed to obtain access.

The following items have already been agreed upon by the PRP Group and the Department and are listed within this letter for documentation...

No response is necessary.

****

We trust this information meets your needs. If you have any questions please give us a call.

Sincerely,

GeoTrans, Inc.

Gerald DeMers

Heidi W Yantz

Gerald L. DeMers
Senior Engineer, Associate

Heidi W. Yantz
Project Hydrogeologist

Attachment

OK w/DNR

Table 1A - Evaluation of monitoring wells, results and sampling frequency
FF/NN Landfill, Ripon, WI

Sampling Point:	WDNR Recommended Sampling Interval	GeoTrans Recommended Sampling Interval	Reasoning	WDNR Response, 8/2004	GeoTrans Response 8/20/04
MW-3A	Q	A	Downgradient of P-107D, 1 of 3 wells in this layer; no detections ever	Q	Q
MW-3B	Q	Q	Sentinel well for Rohde and other S. Koro Road homes	Q	Q
MW-101	Q	SA	Upgradient well with last PAL exceedance in 1999	SA	SA
P-101	Q	None	Upgradient; no historical exceedances; removed from sampling program in 1994	Q	1 more sample
MW-102	Q	SA for one year, then remove from sampling program if no exceedances	No historical PAL exceedances; removed from sampling program in 1998 **Sampled in July 2004; No VOCs detected**	Q	SA - 1 year then drop
P-102	Q	SA	Need to monitor VC, which is <1 ppb.	Q	Q
MW-103	Q	SA	Need to monitor exceedances; VOCs have been declining since 1994	SA	SA
P-103	SA	None	No exceedances since 1996; removed from monitoring program in 1998	A	A
P-103D	None	Q for 1 year, SA thereafter	New well, VC <2ppb; establish data	Q	Q for 1 year, SA thereafter
MW-104	Q	SA	Need to monitor exceedances; VC has varied from 1.1 to 29 ppb since 1993, without a discernable trend	SA	SA
P-104	Q	None	No exceedances to monitor, and very few detections (chloroethane likely related to sample bottle contamination) Removed from monitoring in 1998	A	A
MW-106	Q	SA for one year, then off the program if no exceedances	No historical exceedances, but we haven't been able to monitor for two years. Was removed from monitoring in 1994. **Sampled in July 2004; No VOCs detected.**	Q	SA - 1 year then drop
P-106	SA	SA	Need to monitor exceedances; all TCE detections since 1993 have been less than 1 ppb and have stayed relatively constant	SA	SA
MW-107	Q	SA	Need to monitor exceedances; all TCE detections since 1993 have been less than 3 ppb, and there has been no trend in detections. SA sampling would be consistent with other wells in the nest.	SA	SA
P-107	SA	SA	Need to monitor exceedances; VC has slowly declined from 3 ppb in 1994 to about 1 ppb	SA	SA
P-107D	SA	SA	Need to monitor exceedances; VC has ranged from 0.6 to 10 ppb since 1993 without a clear trend	SA	SA

-SA

SA

-OK

SA->Biennial

Table 1A - Evaluation of monitoring wells, results and sampling frequency
FF/NN Landfill, Ripon, WI

Sampling Point:	WDNR Recommended Sampling Interval	GeoTrans Recommended Sampling Interval	Reasoning	WDNR Response, 8/2004	GeoTrans Response 8/20/04
MW-108	Q	None	Cross-gradient; was removed from monitoring in 1998; no detections since 1997. 2002 sample confirmed no impacts	A	1 sample
P-108	SA	None	Cross-gradient; was removed from monitoring in 1994; no detections ever	A	1 sample
MW-111	A	None	No detections ever; removed from monitoring in 1994	A	1 sample
P-111	A	None	No detections ever; removed from monitoring in 1994. **Sampled in April 2004; No VOCs detected.**	A	1 Sample; already collected in 4/04
P-111D	Q	Q	Relativley new well; monitor trend, VC is 9 to 15 ppb	Q	Q
MW-112	Q	Q	Need to monitor exceedances VC concentrations increased after pumping by Northeast Asphalt	Q	Q
P-113A	Q	A	1 of 3 wells in this layer	A	A
P-113B	Q	Q	Sentinel well for downgradient private wells	Q	Q
P-114 (former Ehster well)	Q	Q	Need to monitor exceedances; VC ranges from 3.3 to 9.2 ppb	Q	Q
P-115 (former Wiese well)	Q	SA	Sentinel Well for leading edge of plume	Q	Q
P-116 (former Hadel well)	Q	Q	Sentinel Well for centerline of leading edge of plume	Q	Q
Baneck	Q	Q	Private Well	Q	Q
Gaastra	Q	Q	Private Well	Q	Q
Rohde	Q	Q	Private Well	Q	Q