

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

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November 2, 2005

Randy Mueller
Exfoliate Properties
201 Main Street
Oakfield, WI 53086

*Resent on
11-8-05.*

SUBJECT: Site Investigation Report Review for the Oakfield Properties, 201 Main Street, Oakfield, WI.
BRRTS # 02-20-202459

Dear Mr. Mueller:

On October 11, 2005, the Department received a report titled "Site Investigation and Remedial Action Plan" from your consultant TEMCo. A \$750 review fee was received on October 12, 2005. A copy of this report was also forwarded to Rick Stoll (WDNR – Regional Hydrogeologist) for his review of the remedial action plan for the injection permit that would be necessary for the proposed remediation.

The Department has reviewed the above submittal and is unable to approve of the site investigation and the remedial action plan as there are items that need to be addressed prior to any remedial implementation. The \$750 review fee that was submitted with this report, will be considered a site investigation review fee and not for the remedial plan. The remedial plan that was submitted did not contain all the information necessary for our approval and we are unable to properly assess if the remedial action your consultant has proposed is a viable option at this time. This does not mean that the proposed remedial action is not possible, but that the Department needs additional information to assess it as a remedy. Thus, your consultant will need to resubmit a more detailed remedial design report with a \$750 review fee.

The site investigation is not complete and the following are items that need to be addressed:

1. There are several directions in which the degree and extent are not defined (in groundwater and soil) for the various compounds on the site both vertically and horizontally. Some of this was stated earlier for a non-fee review response on January 6, 2004 and no new data has been submitted since then. A remedial action for the hotspot area can be completed as an interim action at some point in the near future; however, additional wells will be necessary to define the degree and extent in order to obtain closure and notify all the off-site impacted properties. In addition, if any of the contamination is not co-mingled with the larger chlorinated plume, it will then be treated as a separate release and given a separate BRRTS tracking number.

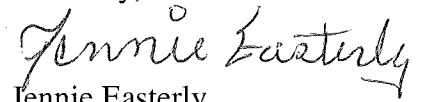
2. How extensive is the polychlorinated biphenyl (PCB) plume? Only 1 groundwater sample was collected from TMW-11 in 2001 and never sampled again. The concentration in this well is very significant considering PCBs do not usually mix well with water. Further investigation and sampling of this compound needs to be completed in order to define the degree and extent and also for the WPDES permit that goes with the injection permit. If PCB's are detected in the groundwater near the injection area, injection may not be permitted in those locations.
3. How extensive is the cutting oil plume?
4. How extensive is the petroleum plume?
5. Considering this was a metal fabricating company historically, I would suggest sampling for metals in the groundwater at all monitoring wells. Will any potential metals interfere with the injection process? Will the injection process mobilize any metals, natural or otherwise in the groundwater after injection? The WPDES permit that is associated with the injection permit will need this information if metals contamination is present in the groundwater.
6. Polycyclic aromatic hydrocarbons (PAHs) in groundwater have only been sampled in 3 temporary wells (MP-8, MP-9 and TMW-11) in 2001. TMW-11 has shown enforcement standard exceedances but no wells have been sampled for PAHs again. The degree and extent of PAH related contamination must be defined.
7. Groundwater from the monitoring wells has only been sampled for Volatile organic compounds (VOCs) a maximum of 3 times (1999, 2001, and 2003) from most of the wells. This type of sampling does not provide any contaminant trends or seasonal variations in groundwater quality. The groundwater monitoring plan does state that monitoring wells will be sampled as a baseline prior to injection, however the plan does not state what parameters will be sampled. Considering the limited groundwater sampling, it would be in your best interest to sample all wells for all parameters.
8. None of the maps supplied, included the off-site wells at the Oakfield Oil Company. These wells are now the responsibility of Exfoliate Properties and should be included in all mapping. Please submit new maps to include these wells.
9. There were no isoconcentration maps of the different categories (chlorinated, petroleum, PCBs, cutting oils) of contaminants in soils and groundwater. Please provide these in addition to cross-section maps of the site geology and any hydraulic conductivity testing that has been completed.
10. Under NR716.13 (11) Wis. Adm. Code, all samples should provide quality assurance/quality control (QA/QC). None of the samples submitted to date have shown that any QA/QC has been completed. All future samples shall provide the appropriate QA/QC sampling protocol.
11. Please provide documentation on the status of the free product areas, how much has been removed, how it was removed, and when it was removed for all categories of contaminants. No injection will be allowed if there is any free product in the area of injection.

12. Where is the product that was removed from the extraction wells stored now? The investigative wastes need to be properly characterized and disposed of properly, with the disposal documentation submitted to the Department.
13. Utility corridors are not marked on the west and south side of the property. It was described that a storm sewer line leaves the property on the south side, but it is not on any of the maps. Please add this to the maps. Please also provide any information on any utility investigations completed at the site.
14. Is the stream downgradient of the plume impacted? Have any samples of the stream been collected? This should be completed.
15. The artesian well should be sampled for all contaminants prior to abandonment. The total depth of this well should be documented.
16. Is the storm water that leaves the property through storm water piping impacted? The storm water piping and associated trenching should be evaluated as a potential pathway for existing contamination.
17. The cistern and associated tunnel system that is not being used should be cleaned out and properly abandoned if it is no longer in use to prevent this from being a pathway for contamination or as a pathway for any potential remedial action that involves injection. Original samples of the material in the cistern were contaminated and should be tested and disposed of appropriately.
18. Please provide another copy of the Chain of Custody for the 12-19-2003 sampling data that shows the lab signed for it.
19. Why is the 6-12-2002 data sheets labeled "revised"?
20. The Department still does not have some of the information (lab sheets, abandonment forms, boring logs, temp well construction forms, etc.) that should have accompanied the Engel reports stated in the 1-6-2004 memo by the Department. Please ask for this information from Engel and Associates.
21. This Site Investigation report needs to be signed and stamped by a certified professional engineer, hydrogeologist or scientist.

The submitted Remedial action plan portion of this report can not be reviewed until the above questions can be answered. The Remedial Design report will need to include more specific information such as groundwater sampling plan before, during, and after injection, what potential receptors are in the injection area, how utility corridors will be protected, will injection occur at all wells at the same time, how will the injection be completed, timetables, plans and specifications, etc. Please refer to NR 724 Wis. Adm. Code for remedial design report requirements. Therefore a separate remedial design report will need to be submitted with the review fee of \$750.

Should you have any questions regarding this letter, please call me at (920) 303-5447. Thank you for your cooperation.

Sincerely,

A handwritten signature in cursive script that reads "Jennie Easterly". The signature is written in black ink and is positioned above the printed name.

Jennie Easterly
Hydrogeologist
Remediation and Redevelopment Program

cc: NER Oshkosh File
Jeff Hosler – TEMCo via ecopy jlhosler@temco-llc.com