



## State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

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Matthew J. Frank, Secretary  
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# FILE COPY

June 9, 2010

MR BRADLEY S NAVE  
DUPONT CORPORATE REMEDIATION GROUP  
325 W MAIN ST  
SUITE 1202  
LOUISVILLE KY 40202

Subject: Conditional Approval – Site Specific Residual Contaminant Levels  
Former DuPont Barksdale Works Site, Town of Barksdale, Bayfield County, Wisconsin  
WDNR BRRTS Activity #02-04-000156 and 02-04-550402

Dear Mr. Nave:

On December 18, 2009, the Department of Natural Resources' Remediation and Redevelopment program received a letter report titled *Clarification to DuPont's Response to WDNR Comments, Request for Technical Assistance*, prepared for the above named site by the DuPont Corporate Remediation Group and dated December 16, 2009. The correspondence was provided as a follow-up to a September 2, 2009 meeting at the site. This meeting was held to discuss comments from the Departments of Natural Resources and Health Services on your original request for approval of site specific residual contaminant levels (SSRCLs) for site contaminants, as well as background concentrations for certain inorganic compounds. This original request was made in a document titled *Derivation of Site-Specific Soil Residual Contaminant Levels for the Former DuPont Barksdale Works Facility*, dated October 24, 2008.

More recently, the Department received additional correspondence from you titled *Barksdale Site-Specific Background Levels and Residual Contaminant Levels, Clarification to DuPont's Response to WDNR Comments, Request for Technical Assistance*, dated April 30, 2010. This correspondence provides additional clarification regarding the proposed SSRCLs and contaminant background concentrations at the site. After reviewing all of the available information, we are able to conditionally approve a portion of your SSRCL request at this time. The conditions of approval are listed below:

1. This approval applies only to your request for approval of SSRCLs for lead and arsenic, and only for those areas on the former DuPont Barksdale property designated as "recreational use" under the alternative exposure scenario contained in the original SSRCL request. The values that we have approved are 2.5 milligrams per kilogram (mg/Kg) for arsenic and 1,500 mg/Kg for lead, as described in Table 1 of your April 30, 2010 correspondence. The only difference between the standard assumptions for calculating SSRCLs for non-industrial sites and for the recreational use areas is a 60-day exposure frequency. As we have pointed out in previous correspondence, approval of an SSRCL utilizing the 60-day exposure frequency necessitates that the annual use of these areas will be limited to the 60 days assumed in the SSRCL calculation for as long as the contaminant concentrations remain above generic RCLs.

2. In addition, please note that the 1,500 mg/Kg SSRCL for lead is based on a non-cancer endpoint, and will conditionally remain in effect only until such time when compelling data from US EPA becomes available to determine a cancer-endpoint RCL for lead. The US EPA has determined that lead is a probable carcinogen, but it has not provided - to date - a toxicity factor to quantify a cancer-endpoint RCL. As such, the Department's conditional approval of a non-cancer endpoint for lead is contingent on the non-availability of a carcinogenic toxicity factor for lead from the US EPA. In the future, however, when a cancer slope factor for lead becomes available, the areas that exceed a cancer-endpoint soil-lead RCL will need to be addressed further.
3. Prior to or as part of any determination of no further action made by the Department for any proposed recreational use area on the former DuPont Barksdale property, whether through a closure review under ch. NR 726, Wis. Adm. Code, or through a review of a General Liability Clarification Letter request, you will need to submit a package for listing of the area on the Department's GIS Registry. To review the sites on the GIS Registry web page, visit the RR Sites Map page at <http://dnr.wi.gov/org/aw/rr/gis/index.htm>. The GIS Registry listing will allow for the appropriate continuing obligations (i.e., 60-day exposure frequency) to be recorded as required under s. 292.12, Wis. Stats. Further information on continuing obligations can be found on the Department's web site at <http://dnr.wi.gov/org/aw/rr/cleanup/obligations.htm>, while the DNR fact sheet RR-819, "Continuing Obligations for Environmental Protection" can be found at <http://dnr.wi.gov/org/aw/rr/archives/pubs/RR819.pdf>.

At this time, we cannot approve the SSRCLs proposed for the contaminants other than lead and arsenic that are listed in Table 1 of the April 30, 2010 correspondence. It is our understanding from previous meetings and correspondence that the scope of the SSRCL request would be narrowed to include only lead and arsenic in the recreational use areas. The SSRCL request was going to be narrowed in scope because lead and arsenic were reportedly the only contaminants present in the recreational use areas, because those areas that are not designated as recreational use would be subject to different exposure assumptions, and because the presence of multiple contaminants in addition to lead and arsenic would require an evaluation of the total excess cancer risk and hazard quotient at each individual area being evaluated. As such, we do not believe that approval of the requested SSRCLs for these other contaminants would be appropriate.

In addition, the Department feels that further discussion is warranted regarding your proposed background arsenic concentration of 4.3 mg/Kg, as described in Table 2-2 of the April 30, 2010 correspondence. Specifically, we are unsure how you were able to calculate a background value of 4.3 mg/Kg when the data set did not include any samples with concentrations higher than 3.8 mg/Kg. It is possible that, after more discussion, the proposed background value will prove to be acceptable and could ultimately be used in lieu of the 2.5 mg/Kg value for the recreational use SSRCL. However, at this time, we cannot accept the 4.3 mg/Kg value as representative of a background concentration for arsenic at the site.

Mr. Bradley S. Nave – June 9, 2010  
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Your continued cooperation in addressing the contamination at this site is greatly appreciated. If you have any questions concerning this letter or the project in general, please do not hesitate to write or call me at 715-685-2920. I can also be reached by e-mail at [Christopher.Saari@Wisconsin.gov](mailto:Christopher.Saari@Wisconsin.gov).

Sincerely,



Christopher A. Saari  
Hydrogeologist

cc: Paul Bretting – C.G. Bretting Manufacturing, Inc.  
Cary Pooler – URS Diamond  
Aristeo Pelayo – WDNR Madison RR/5  
Henry Nehls-Lowe – Wisconsin Department of Health Services  
Millie Lindsey – Bayfield County Health Department