

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

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October 25, 2010

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

Subject: Liability Clarification and Current Environmental Conditions at Undeveloped Area "A" of the Former DuPont Barksdale Explosives Plant, Town of Barksdale, Bayfield County, Wisconsin WDNR BRRTS #07-04-555533 and 02-04-000156

Dear Mr. Nave:

Purpose

The purpose of this letter is to provide you with clarifications as to environmental liabilities and current environmental conditions at the portion of the former DuPont Barksdale Explosives Plant site identified as Use Area UAA (i.e., undeveloped area "A"), hereinafter referred to as "the Property". The Property consists of approximately 84 acres of land located in the E ¹/₂, NE ¹/₄, Section 24, T. 48 N., R. 5 W and the NW ¹/₄, NW ¹/₄, Section 19, T. 48 N., R. 4 W., in the Town of Barksdale, Bayfield County. The Property is depicted on the attached Figure 1, Site Location Map, prepared by URS Corporation.

Request

On June 30, 2010, you requested that the Department of Natural Resources ("the Department"), issue a liability clarification letter. The letter is to contain a determination whether further response actions are needed under the ch. NR 700 rule series, Wis. Adm. Code, based on the presence of one or more hazardous substances discharges at the Property. The Department received the fee for providing assistance, in accordance with s. NR 749.04(1), Wis. Adm. Code.

In order for the Department to make this determination, you have requested a review of the report entitled *Summary of the Current Conditions of Use Area UAA*, prepared by URS Corporation, a copy of which accompanied the request. Upon initiating our review of this report, we noted what appeared to be questionable results listed in Table 1, Summary of Detected Constituents in Soil; the questionable results were attributed to formatting errors during creation of the table. Revised tables were subsequently forwarded to the Department on September 2, 2010. The Department has examined this report and provides the following summary of the facts of the case and opinions concerning environmental conditions at the Property.

Background and Summary of Environmental Conditions

According to the reviews of historical records, maps and aerial photos as well as visual and walk through inspections by DuPont and URS Corporation, the Property has been essentially undeveloped since the Property was first acquired by DuPont in 1903. The Property is part of a large area of land that includes the former DuPont Barksdale Explosives Plant site, which is subject to an on-going investigation and remedial action overseen by the Department. There are no records to indicate that the Property was ever used for manufacturing or storage of explosives during the time that the former DuPont Barksdale Explosives Plant was in operation. In June 1986, the C.G. Bretting Manufacturing Company, Inc. purchased all property owned by DuPont, including the Property that is the subject of this letter (Use Area UAA), and subsequently transferred that Property to Bretting Development Corporation (BDC). BDC has owned the Property since that time.

As documented in the *Summary of the Current Conditions of Use Area UAA* report, ten soil samples were collected on an 8-acre grid in August and September 2006. The samples were analyzed for nitroaromatic and nitroamine organic compounds (NNOCs), metals and volatile organic compounds (VOC). There were no detections of NNOCs, while the detected metals would appear to fall in the range of background concentrations. Low concentrations of two VOCs (acetone and methyl ethyl ketone) were detected in one soil sample, but the detections are believed to be related to laboratory contamination.

Single sediment samples were collected from a drainage channel exiting the Property in 2002 and 2005. The samples were analyzed for NNOCs, metals, semi-volatile organic compounds (SVOCs) and VOCs. No NNOCs or SVOCs were detected in the samples. Some reported metals results appear to be elevated relative to naturally occurring metals concentrations, but this is believed to be a function of the sampling location adjacent to a former railroad grade rather than contaminant transport from source areas located upstream on the site. In addition, relatively low concentrations of acetone, carbon disulfide and toluene were detected in the VOC analyses.

Surface water samples were collected at the same location and on the same dates as the sediment samples discussed above, and analyzed for NNOCs, inorganics, VOCs and SVOCs. Similar to the sediment results, no NNOCs or SVOCs were detected in surface water. Low-level inorganics were detected in the samples, but at concentrations that are below levels of environmental concern. A detection of acetone in one of the surface water samples is suspected of being a laboratory contaminant.

Groundwater samples have been collected on the Property from four sets of nested monitoring wells between 2001 and 2006. Samples from the wells have been analyzed for inorganics for groundwater provenance information, NNOCs, VOCs, SVOCs or perchlorate. The NNOCs 2,4-dinitrotoluene (DNT) and 2,6-DNT have consistently been detected in monitoring wells on the Property at concentrations exceeding their respective enforcement standards found in ch. NR 140, Wis. Adm. Code, while other NNOCs without established enforcement standards are also routinely detected in groundwater samples collected here. The SVOC results showed some detections of explosives-related compounds, including perchlorate, in monitoring wells on the Property. However, based on the observed direction of groundwater flow and the lack of manufacturing history on the Property, these detections almost assuredly originated upgradient at production areas –on the former DuPont Barksdale Explosives Plant site. No VOCs were observed in the samples. Detected inorganic compounds would appear to be indicative of background conditions.

Liability Determination

The Wisconsin Hazardous Substance Discharge Law, s. 292.11, Wis. Stats., commonly called the Spill Law, requires those who cause, possess or control a hazardous substance discharge to "take the actions necessary to restore the environment to the extent practicable and minimize the harmful effects from the discharge to the air, lands or waters of this state." Section 292.55, Wis. Stats., authorizes the Department to issue clarification letters concerning liability for environmental pollution.

The data summarized above does not indicate that hazardous substance discharges have occurred on the Property, but it does appear that contaminants may have migrated onto or beneath the Property. Based on the criteria in s. NR 716.05(2), Wis. Adm. Code and the information presently available to the Department, the Department has determined that further site investigation activities are not required on the Property, and that no further response action is required under the ch. NR 700, Wis. Adm. Code, rule series, at this time.

However, it is apparent that discharges have occurred on or around the former production areas on the DuPont Barksdale Explosives Plant site (the "source property"), and that these discharges have migrated in groundwater beneath the Property. As a result, groundwater monitoring will need to be continued at the Property as part of the overall investigation and cleanup activities related to that site by DuPont. Furthermore, because of the groundwater contamination, drinking water wells may not be installed on the Property without first getting guidance and approval from the Department staff. BDC is not eligible for the off-site liability exemption for the Property, as they also own the source property.

In response to the first recommendation made in the *Summary of the Current Conditions of Use Area UAA* report, the Department will not be able to revise the geographic description of the DuPont Barksdale Explosives Plant site. Because groundwater contamination has flowed from the upgradient source areas beneath Use Area UAA, the Property technically falls within the site boundaries, so revision of the geographic description is not warranted.

In reference to the report's final recommendation regarding recording a land use covenant on the Property deed prohibiting groundwater use, please note that the Department no longer utilizes deed instruments to convey continuing obligations on a property. As a result, the Department will not apply a land use covenant to the deed.

However, at the time when the DuPont Barksdale Explosives Plant site is approved for case closure, if there is documented groundwater contamination that exceeds the enforcement standards in ch. NR 140, Wis. Adm. Code, the Department will apply a continuing obligation regarding groundwater use. The Department applies this continuing obligation by recording notice of residual groundwater contamination on the GIS Registry of Closed Remediation Sites. Also, chs. NR 811 and 812, Wis. Adm. Code, include regulatory requirements that apply to installation of drinking water wells in areas with groundwater contamination. This obligation will apply to all land within the site boundaries, including the Property if appropriate. Understand however, that this does not prohibit you from working out an agreement with BDC to restrict groundwater use on the Property.

In the future, if the Department becomes aware of new information concerning the contaminants referenced above, or the presence of other contaminants on the Property not previously identified, the Department will need to evaluate that data to determine if response actions may be required.

Whenever possible, the Department requires the person who caused the discharge to take the appropriate response actions.

The Bureau for Remediation and Redevelopment Tracking System (BRRTS) identification number for this activity is shown at the top of this letter. The Department tracks information on all determinations such as this in a Department database that is available on the Internet at http://dnr.wi.gov/org/aw/rr/. See "BRRTS on the web" under "Contaminated Land Databases".

If you have any questions concerning this letter or the project in general, please do not hesitate to write or call Chris Saari, the project manager, at 715-685-2920. He can also be reached by e-mail at Christopher.Saari@Wisconsin.gov.

Sincerely,

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Untinuk for John Robinson Act. 26, 2010 John Robinson

Northern Region Team Supervisor Remediation and Redevelopment Program

Attachment: Figure 1, Site Location Map

cc: Chris Saari – DNR Ashland Cary Pooler – URS Corporation Paul Bretting – C.G. Bretting Manufacturing Company, Inc.

