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August 31, 2004
(BUB 01-2200-2582)

Ms. Nancy D. Ryan, Hydrogeologist
Wisconsin Department of Natural Resources
Plymouth Service Center
1155 Pilgrim Road
Post Office Box 408
Plymouth, Wisconsin 53073-0408

RE: Proposed Environmental Activities Workplan; Icke & Bublitz, Incorporated, 6529 West Highland Road, Mequon, Wisconsin; WDNR BRRTS #0246000365, WDNR FID #246102120

Dear Ms. Ryan:

During February 2004, Northern Environmental Technologies, Incorporated (Northern Environmental) submitted a report on behalf of Icke & Bublitz, Incorporated and the city of Mequon entitled *Environmental Site Assessment Report* to the Wisconsin Department of Natural Resources (WDNR). The report documented the results of a records review and Phase II environmental site assessment (ESA) activities completed at the Icke & Bublitz, Incorporated property located at 6529 West Highland Road, Mequon, Wisconsin (the Property). At the time of submittal, a WDNR technical review was requested. In two letters dated March 11, 2004, the WDNR provided information regarding Icke & Bublitz, Incorporated's responsibility to address environmental contamination to properly close the solid waste facility and comments regarding the needed additional work.

This letter informs the WDNR of future environmental activities at the Property to address the petroleum product, shooting range soil pile, supply wells, and solid waste. WDNR comments/requirements are in italics and are followed by our response.

> *The entire area that has been used for disposal purposes must be covered in accordance with the design requirements of ch. NR 506.08(3) or other Department approved plan. The Department will also require that a deed restriction be placed on the property, requiring maintenance of the cover as long as the waste is present.*

Icke & Bublitz, Incorporated proposes to cap the area of Resource Conservation and Recovery Act (RCRA) metals concentrations exceeding regulatory limits with one foot of compacted earth exhibiting low hydraulic conductivity values. If future redevelopment occurs within the capped area, structural improvements such as buildings and roadways will serve as the cap. The proposed cap area is labeled "area of RCRA metal concentrations exceeding regulatory limits" in Figure 7 of the Northern Environmental's March 11, 2004 report. Placing the soil cap in this area is justified for the following reasons:

- Based on information obtained from the records review and Phase II ESA, fill material is present over two-thirds of the Property (Figure 5 of the March 11, 2004 report). The fill material consists predominately of silt, clay, and sand. Concrete, asphalt, metal, bricks, and other demolition debris were noted in several boreholes and test pits. Also, cinders and ash was noted in boreholes located primarily in the northeastern portions of the Property. Since

much of the "fill area" consists of silt, sand, and clay and inert construction demolition waste (normally exempt from Chapter NR 500, Wisconsin Administrative Code regulations), it is not economically feasible to construct a cap meeting the requirements of section NR 506.08, Wisconsin Administrative Code (s. NR 506.08, Wis. Adm. Code) across the entire area containing fill material. Also, the proposed cap would cover more than 80 percent of the sampling points where cinders or ash (the "solid waste") were noted. The few boreholes containing cinders or ash sporadically located outside the proposed cap area appear limited in extent.

- Much of the fill material at the Property is present beneath the water table. Based on the groundwater sampling results, only lead and mercury in monitoring well MW2 and lead in monitoring well MW4 exceeded the preventive action limit. Groundwater quality across most the Property has not been impacted by the fill material. Therefore, a cap meeting the requirements of s. NR 506.08, Wis. Adm. Code is not required to prevent storm water or snow melt from infiltrating through the waste material. Instead, a cap is necessary to prevent direct contact with the fill material.

- The Property is currently zoned for single-family residential. However, future development plans will require the city of Mequon to re-zone the Property for commercial or industrial use. The zoning change will limit the use of the Property, thereby protecting future end users against direct contact threats.

Before constructing the cap, the shooting range soil pile will be dismantled and distributed within the proposed cap area. Once capping activities are completed, a restriction will be placed on the Property deed outlining the maintenance requirements of the cap.

The Department will require additional groundwater monitoring to confirm contaminant concentrations, verify contaminant trends, and demonstrate compliance with ch. NR 140 groundwater standards and ch. NR 700 closure requirements.

To satisfy this request, the existing groundwater monitoring well network will be sampled annually until the cap is constructed. Each monitoring well (eight total) will be sampled for RCRA metals and volatile organic compounds. Groundwater elevations will also be measured during each event to determine groundwater flow direction and gradient. The results of the sampling will be provided to the WDNR in a report. Seven of the eight wells are located outside the proposed cap area. After the cap is constructed, the frequency and/or the need for additional monitoring will be assessed.

Petroleum product discovered near the former asphalt batch plant shall be removed to the extent practicable prior to covering the waste.

The degree and extent of free product is defined since free product was not present in the other GeoProbe® boreholes (B900, B1100, B1200, and B1300) surrounding borehole B1000. To address petroleum product present near the former asphalt batch plant, a 4-inch diameter recovery well will be installed near the location of B1000 before constructing the cap. The recovery well will be installed using conventional hollow-stem auger drilling techniques. The recovery well will extend to a depth of approximately 15 feet below grade and constructed with a 10-foot screen.

Initially, groundwater will be extracted from the recovery well using a vacuum truck on a bi-monthly basis for a period of 2 months. If the product thickness is minimal (i.e., less than $^1/_{16}$ inch) after the pumping events, the product will be bailed by hand with a disposable bailer on a weekly basis. Between site visits, product may be collected using absorbent socks or a Petro-trap. Recovered product will be stored in 55-

gallon drums for proper disposal. Free product recovery efforts will be completed before placement of the cap discussed above.

> *Groundwater from the supply well near the former asphalt batch plant should be sampled for dissolved metals. The well must then be abandoned. The farmhouse well must also be abandoned, if it hasn't already been.*

The water supply well associated with the asphalt batch plant will be sampled for RCRA metals as requested. Following sampling activities, the well will be abandoned by a licensed well driller.

The farmhouse well has not been abandoned. Since the well is not located within the "fill area," the Property owner will request a variance from the WDNR to maintain the well. In addition, this well is hydraulically downgradient of the solid waste and if needed, is a potential future sampling point to assess groundwater quality in the dolomite aquifer.

The proposed activities will be initiated in during 2004, and the first field activity will be the installation of the recovery well. Implementing these actions should meet applicable requirements to protect human health and safety and the environment and obtain case closure for the Property. If you have any questions or comments regarding the proposed closure plan, please contact Northern Environmental at (262) 241-3133.

Sincerely,
Northern Environmental Technologies, Incorporated

Stuart J. Gross, PG
Project Manager

SJG/lmh

c: Mr. David Bublitz
Mr. Bill Hoppe, City of Mequon

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