

March 23, 2006

Mr. Peter Feneht
Division of Water, Compliance and Consumer Affairs
Public Service Commission of Wisconsin
610 North Whitney Way
PO Box 7854
Madison, WI 53707-7854

Subject: **Request for Construction Authorization
Blending Well and Facilities
City of Delafield, Wisconsin
Earth Tech Project No. 86145**

Dear Mr. Feneht,

On behalf of the City of Delafield, we are submitting this letter to advise you of the City's intent to proceed with the construction of water system improvements, and to seek your approval and construction authorization in accordance with the requirements of the Wisconsin Administrative Code, Chapter PSC 184.

DESCRIPTION, PURPOSE AND NECESSITY

Planned improvements include a new 500 gallon per minute well, reservoir, and pumping facility. The facilities will connect to the existing water system through water main in Highway 83. The enclosed Preliminary Basis of Design Report served as the basis for DNR approval of the project as the solution to the City's Well 1 radionuclide noncompliance and source of supply to developing property near Highways 16 and 83. The report includes a description of the project components and their function, calculation of water demands, fire protection needs, and blending needs to be met by the project. Location maps are also found in the report. The site of the well and facilities is not located in a floodplain. The nearest floodplain is located near the Bark River approximately 5,000 feet to the south.

QUALITY AND RELIABILITY OF SERVICE

The City of Delafield water system is served by only one well. An emergency interconnection with the Arbors subdivision provides an emergency source of supply. The Arbors well also contains radionuclide concentrations above the regulatory limits. The proposed improvements will bring Delafield's Well 1 into compliance with the radionuclide standards. Water stored in the existing system will, in turn, provide an emergency source to the new Well 2 service area. Current planning includes provision for supply of compliant, blended water to the Arbors subdivision. The proposed facilities will have full emergency power backup, and the City keeps a spare well pump on hand.

ALTERNATIVES

The radionuclide compliance alternative to blending is treatment at the Well 1 site. This alternative would not provide a redundant source of supply for the city. The City of Delafield and the Village of Hartland considered an inter-municipal connection, but did not find a mutually agreeable means of accomplishing this.

COST AND FINANCING

The estimated cost of the facilities is shown in Table 1.

Table 1
Estimate of Probable Construction Cost

Well	\$183,000
Building	247,500
HVAC, Plumbing, Electrical	140,300
Generator	88,000
Controls	132,000
Well Pump and Motor	88,000
Booster Pumps, Motors, and VFDs	165,000
Process Piping	55,000
Chlorination Equipment	33,000
Site Utilities	19,000
Grading and Site work	34,000
Reservoir	<u>450,000</u>
Subtotal	\$1,634,800
15% Engineering and Administrative	<u>245,200</u>
Total	\$1,880,000

The City will finance the work through budgeted funds and additional borrowing. Based on pump horsepower and the average anticipated pumping over the 20-year planning period, the annual operating cost is estimated at \$7,100 per year primarily attributed to pumping power cost.

PROPERTY BEING REPLACED

No facilities will be retired as a result of this project. There will be some reduction in pump running time and chlorine use at Well 1 as a result of blending.

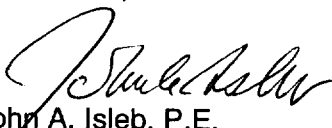
UTILITIES AND PRIVATE RESIDENCES AFFECTED

The Village of Hartland operates the nearest water utility. The Village was notified of the test well pump testing, and observed no impacts on their nearest well, Well 3. The Village of Chenequa has requested information from the City of Delafield in order to evaluate potential impacts of the well on Pine and Beaver Lakes. These impacts were evaluated in the test well report, a copy of which is enclosed. A copy of recent Correspondence addressing questions from the Village is enclosed. A number of residences in the area are served by private wells. The City performed baseline water quality and quantity measurements at those wells, and monitored two adjacent private wells during test well test pumping. A list of the nearby properties with private wells is also enclosed.

We trust this information is sufficient for you to complete your review of the project. If you have any questions or need additional information, please contact the undersigned at 414-225-5147.

Very truly yours,

Earth Tech, Inc.


John A. Isleb, P.E.
Project Engineer

Enclosures: Preliminary Basis of Design Report
Report on Test Well Construction and Aquifer Performance Testing
DNR Approval Letter - Preliminary Basis of Design Report
DNR Approval Letter - Well 2
Correspondence addressing Village of Chenequa questions
List of nearby property owners

c: Thomas J. Hafner, P.E.
Director of Public Works
City of Delafield