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November 16, 2007

Mr. Victor L. Kotwicki, Chief Real Estate Division United States Army Engineer District, Detroit McNamara Federal Building, Sixth Floor 477 Michigan Avenue Detroit, Michigan 48226

RE: "Nomex" Tank Farm Relocation Praxair-Linde Site 175 East Park Drive Town of Tonawanda, New York 14151-0044

Dear Mr. Kotwicki:

At your request, we have inspected the subject site and reviewed various submitted documentation relative to the proposed relocation of the "Nomex" gas tank farm located on the Tonawanda, New York site. The relocation is required by the continuing remediation of the site due to residual radiation caused by a previous USACE sponsored project. The purpose of this review is to provide an opinion on the reasonableness and necessity of Praxair's estimated relocation cost of \$758,794.51.

SUMMARY AND CONCLUSIONS

The area involved encompasses approximately 18,000 square feet located east of Building #2A. It includes storage tanks containing hydrogen, helium, and methane, together with piping, wiring, a gas compressor, and a vertical thermal oxidizer, or flare. The documentation included detailed contractor estimates of electrical and piping costs, manufacturer's proposal to replace the oxidizer unit, and Praxair's cost estimate to provide relocation services with respect to the hydrogen and helium tanks. The gas tank farm provides the various gases to research facilities located in the facility. The proposed relocation area is immediately south of the existing location on the same site.

Our methodology is limited by the circumstances. The physical inspection was confined to the periphery of the installation. Although the owner's representative indicated that they would consider providing photographs of the installation, none has been provided to date. Nor would Praxair allow us to take photos. There are no plans or detailed specifications according to Praxair. The only detail information provided was submitted by the contractors, and there is no explanation as to how their data was determined.

This is a partial taking since the government is acquiring a portion of the property as opposed to the total property. The property to be acquired has been limited to two buildings and a series of utility tunnels thus far. The obligation of the government in a partial taking is to pay the market value of the property taken plus the cost to restore the property to the same economic condition as existed prior to the taking. The property is not to be enhanced at the expense of the government. Purthermore, the loss of good will or loss of going concern value of a business are not compensable unless the government has condemned the business property with the intention of carrying on the business.

We made a rough estimate of the quantities of piping and wiring required for relocation, as well as the other costs of moving. In addition, we reviewed the detailed contractor cost calculations. Our conclusions, based upon this methodology, is that the cost as claimed by Praxair appears to be both excessive and to include betterment. The following text explains our conclusions.

ANALYSIS

As described previously, no schematics of piping or wiring were provided for our use. Also, we were not allowed to take photographs, nor were any provided. Praxair claims that the processes conducted in this area were proprietary in nature. At our inspection we performed a rough layout sketch to scale, noting the location and quantity of equipment, as well as the piping and wiring servicing this equipment. We acknowledge that this inspection was cursory, but the documentation provided was quite detailed.

We discussed the proposed relocation with representatives of the property owner, the USACE, and the environmental remediation contractor on the site. We calculated piping, wiring, and general contractor costs from R.S. Means Building Construction Data - 2007, an internationally accepted source of engineering construction cost information.

Several questions arise as a result of our review. First, the basic question, is whether all of the work is necessary? Specifically, where and what is the extent of the contamination? Would it be possible to move only a portion of the field, for example, could either the thermal oxidizer or the gas compressor

remain in place while the remainder of the field moves? The remediation contractor could not provide us with a response to these questions, but did indicate that it felt that for safety purposes the entire field should be relocated during remediation.

There are a few anomalies in the contractor's material estimates. The mechanical contractor indicates 5000 lineal feet of galvanized struts at a cost of \$20,000 before markups in his estimate. These struts are used to support the piping and wiring above ground. We did not observe anything approaching 5000 lineal feet of struts in our inspection. The 5000 lineal feet in the estimate would provide approximately 150 assembled standards as viewed, an amount far greater than that observed.

The mechanical contractor also proposed to replace such equipment as a transducer at \$3,333, a Watlow heater at \$12,400, and a sulferizer at \$7,333. It would appear that the original units could be relocated economically.

The electrical contractor proposes \$4,934.25 before markup in heat traces apparently to heat various lengths of piping. Although we did not specifically search for heat traces at our inspection, our notes did not indicate their presence. Similarly, the contractor estimates 2,150 lineal feet of conduit but 60,000 lineal feet of wire, roughly 30 conductors per conduit. The contractor indicates the cost of \$5,445 installed for the wire without markups. Interestingly, Shaw Environmental and Infrastructure, Inc.'s estimated cost for the wiring installed is \$19,750 without markup.

Praxair proposes to replace new the thermal oxidizer at a material cost of \$60,582 as opposed to relocating the current unit.

Praxair also proposes to relocate two helium receivers and install two hydrogen receivers at a cost of \$38,916.51. The work proposed is not fully explained and the quantities of tanks are less than those observed, but we assume this to be a rigging cost. In addition to a labor cost of \$95 per hour, which apparently has already been marked up, the company adds an additional markup of 44.5% plus a profit markup of 15%.

The proposal to replace various equipment items is based upon Praxair's requirements that the relocation cause as little

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interference as possible with respect to the business operation. In addition to the equipment replacement, both the electrical and mechanical contractors include provisions for overtime work. Typically, such costs are termed "business interruption avoidance costs".

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Although business interruption avoidance costs may be a reasonable request, it appears that the federal government may be responsible for compensating the owner for any property taken and for the moving cost of personal property, but it is not responsible for the payment of losses or expenses incurred by property owners incidental to or as a consequence to the taking of real property. In situations where the consequences are regarded as overly "harsh", the courts have indicated that the remedy may exist with Congress.

We performed a very rough relocation cost estimate based upon our brief inspection. Our costs were adjusted with allowances for contractor's overhead and profit, engineering and design, sales tax, management fees, permits, and contingencies. We did not consider overtime or equipment replacement costs.

We estimated mechanical costs at approximately \$220,000. In addition, the mechanical contractor estimated various general contractor costs in the proposal such as concrete bases, concrete block walls, concrete barrier walls, and chain link fencing. Our estimate of the general contractor costs is approximately \$70,000. The total cost for the equivalent mechanical work is \$290,000 before markups. This cost was compared to the proposal. Our estimate was based upon calculations with an estimated total length of piping at 3,000 feet. The mechanical contractor estimated 4,000 feet. We then adjusted the piping portion of the estimate, allowing the benefit of the doubt to the contractor, by raising our estimate of piping to \$293,000 roughly. Adding in the general contractor's cost of \$70,000 and rounding produces an estimated figure of \$365,000 compared to the proposal estimate of \$494,546.

Our electrical estimate was significantly lower than the proposed contractor estimate. Our estimate is \$85,000 compared to the proposed amount of \$164,750.

Mr. Victor L. Kotwicki November 16, 2007

In lieu of replacing the vertical thermal unit, the flare, at a material cost of \$60,383, we estimated a relocation cost for the unit at \$30,000. This cost was estimated after conferring with the manufacturer of the unit.

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With respect to Praxair's moving cost for tanks of \$38,916.51, we estimated a cost for equivalent services at \$30,000.

Our total estimate is \$510,000 without equipment replacements and overtime. Praxair's estimate is \$758,794.51 with equipment replacement and overtime. It should be noted that Praxair's estimates are based on 2005 prices and would probably require updating to compensate for inflation.

The estimate calculated by us of \$510,000 is not intended to be the recommended amount of compensation for the proposed relocation. Rather, it is offered as a check figure against Praxair's proposal of \$758,794.51. Again, we would like to indicate we were not provided with schematics, drawings or photos with the exception of a very small plan view drawing of the existing and proposed location. However, it is our conclusion based upon the rough calculations made by us that Praxair's estimate is not based on work that is necessary and that the cost is not reasonable according to our understanding of federal relocation compensation standards.

The detailed notes supporting this estimate will be retained in our files. Should any additional information be required, please call upon us.

Respectfully submitted,

Ronald C. Grzybowski

RCG:plg