## **Environmental Summary for Website**

In 2016, The City of Hudson hired Environmental Design Group to prepare a "Voluntary Action Program Phase II Property Assessment" relative to Hudson Public Power / Hudson Bus Garage at 95 & 91 Owen Brown Street in Hudson. That report, dated October 14, 2016, is reproduced in full below.

The results of Environmental Design Group's environmental assessment of this property can be summarized as follows:

## 91 Owen Brown Street

The Certified Professional determined that the property is <u>not</u> in compliance with the applicable environmental standards. To remedy this situation, Hudson's consultant recommended that soils exceeding Ohio Voluntary Action Program standards for direct contact be excavated and properly disposed off-site, and additional sampling of soil gas be performed to determine if the property is in compliance

The report noted that soil gas samples and indoor air samples were not collected as part of the assessment. Additional data and/or evaluation would be needed to determine if the volatilization of surface soils to indoor air pathway is complete. Also, the potential of leaching of chemicals of concern from subsurface soil to groundwater was not evaluated in the report due to the current existence of chemicals of concern within the shallow groundwater underlying the property.

## 94 Owen Brown Street

The Certified Professional determined that the property is <u>not</u> in compliance with the applicable environmental standards. Direct contact with soils, volatilization of organic compounds into the indoor air of buildings, and potential surface water and sediment exposures were found to either exceed applicable Ohio Voluntary Action Program ("VAP") standards or require additional assessment to completely evaluate. To remedy this situation, Hudson's consultant recommended that (i) soils exceeding Ohio Voluntary Action Program standards for direct contact be excavated and properly disposed of off-site, (ii) a use restriction prohibiting groundwater from the property being used for potable purposes, and (iii) additional sampling of soil gas be performed to determine if the property is in compliance.

The report noted that soil gas samples and indoor air samples were not collected as part of the assessment. Additional data and/or evaluation would be needed to determine if the volatilization of surface soils to indoor air pathway is complete. Also, the potential for leaching of chemicals of concern from subsurface soil to groundwater was not evaluated in the report due to the current existence of chemicals of concern within the shallow groundwater underlying the property.

Furthermore, this report included an amendment to an earlier Phase I property assessment conducted at the property. The amendment set forth nine (9) identified areas, five (5) of which are located at 95 Owen Brown Street (see diagram below that is reproduced from the report).

\* Identified Area 1 comprised of the western half of the property may contain Polychlorinated Bipheryls ("PCBs").

\* Identified Area 2 noted staining in the parking lot and that suspected chemicals of concern would include volatile organic compounds (VOCs"), semi-volatile organic compounds ("SVOCs"), TPH, and RCRA 8 metals.

\* Identified Area 3 comprised of a building where auto repair activities were conducted. Chemicals of concern included VOCs, PAHs, TPH, and RCRA metals.

\* Identified Area 4 is comprised of historic fill on all of tax parcel 3201855 consisting of asphalt grindings, brick and other aggregate. Suspected chemicals of concern included VOCs, SVOCs, and RCRA metals

\* Identified Area 5 contained former underground storage tanks, including one (1) 6,000- gallon gasoline tank and another underground storage tank of an unknown size. Suspected chemicals of concern included BTEX, MTBE, PAHs, TPH, and lead.

In addition, the report noted Identified Area 6, which is located on an adjacent parcel across Owen Brown Street and housed a former underground storage tank. Suspected chemicals of concern from the adjacent property included BTEX, MTBE, PAHs, and lead.

As a result of surface soils, subsurface soils and groundwater testing, the following were detected:

- Identified Area 1 contained *benzo(a)pyrene* at 4.1 mg/kg exceeding the VAP residential land use category standard of 1.2 mg/kg by **342%**.
- Identified Area 2 contained *arsenic* at 13.8 ug/L exceeding the VAP Unrestricted Potable Use Standard ("UPUS") of 10 ug/L by 13.8% *lead* exceeding the VAP UPUS of 15 ug/L, *benzo(a)pyrene* at 0.20 ug/L which is also the VAP UPUS standard, and *naphthalene* at 9.6 ug/L exceeding the VAP UPUS of 1.4 ug/L by 685.7%.
- Identified Area 3 contained *arsenic* at 130 ug/L exceeding the VAP UPUS of 10 ug/L by 1,300%, *chromium* at 343 ug/L exceeding the VAP UPUS of 100 ug/L by 343%, and *lead* at 256 ug/L exceeding the VAP UPUS of 15 ug/L by 1706%.
- Identified Area 4 contained *benzo(a)pyrene* at 4.1 mg/kg exceeding the VAP residential land use category standard of 1.2 mg/kg by **341.7%**.
- Identified Area 5 contained *lead* at 294 ug/L exceeding the VAP UPUS of 15 ug/L by 1,960%.

Groundwater samples were taken in February and May 2016 in each of the Identified Areas 1-5. *Benzo(a)pyrene, Naphthalene, Arsenic, Lead, Cadmium, and Chromium* were each detected in Identified Areas 1,2, and 4 to <u>exceed</u> the VAP UPUS. *Arsenic, Chromium, and Lead* were detected in Identified Area 3 to <u>exceed</u> the VAP UPUS. *Lead* was detected in Identified Area 5 to <u>exceed</u> the VAP UPUS. *Dibenz(a,h) anthracene* was detected in Identified Areas 1-2 to exceed the VAP UPUS.

## CONCLUSION

It would appear that the properties' non-compliance with applicable environmental laws and the cost of the recommended environmental remediation necessary to make the property safe for residential development under Ohio Environmental Protection Agency standards was a significant economic factor in the parties' decision not to proceed with development.

Furthermore, it appears that the taxpayers of Hudson, rather than the proposed developer of the Phase II project, will now be saddled with the costs of this environmental cleanup, and that these costs will far exceed the City's conservative estimates of replacing approximately 40,000 cubic yards of soil. Note that the City's estimate of \$200,000 for this work includes only the cost of 20,000 cubic yards of clean fill material, perhaps only half the quantity required, and does not include removal and proper transportation and disposal of contaminated soil per EPA requirements, transportation of the clean fill to the site, and backfill and compaction of the clean replacement soil. These costs could add a substantial amount to the cost of remediation of the contamination found at this site by the City's consultant, Environmental Design Group.