

**From:** Mark Davidson <mdavidson@msa-ps.com>  
**Sent:** Friday, August 20, 2021 10:25 AM  
**To:** Neitzel, Grant D - DNR  
**Subject:** FW: Pace Analytical National Level II Report for 17711000 902-904 Belknap Street L1390795  
**Attachments:** 17711000 2021 Sub Slab Results Table.pdf

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**Sub-Slab Vapor Sampling Results**  
902-904 Belknap Street, Superior, Wisconsin

| Compound/Parameter                                | CAS No.     | Residential              |                              | Small Commercial         |                        | Sample Identifier and Date Collected |          |          |          |
|---|-------------|--------------------------|------------------------------|--------------------------|------------------------|--------------------------------------|----------|----------|----------|
|   |             | Wisconsin Indoor Air VAL | Wisconsin Subslab Vapor VRSL | Wisconsin Indoor Air VAL | Wisconsin Subslab VRSL | Sub-Slab Samples                     |          |          |          |
|   |             |                          |                              |                          |                        | SS-1                                 | SS-2     | SS-3     | SS-4     |
|   |             |                          |                              |                          |                        | 08/11/21                             | 08/11/21 | 08/11/21 | 08/11/21 |
| Result  | Result      | Result                   | Result                       |                          |                        |                                      |          |          |          |
| <b>Wisconsin Quick Look Up Compounds</b>          |             |                          |                              |                          |                        |                                      |          |          |          |
| Benzene   | 71-43-2     | 3.6                      | 120                          | 16                       | 530                    | 1.56                                 | 3.42     | <0.760   | <15.2    |
| Carbon tetrachloride                              | 56-23-5     | 4.7                      | 160                          | 20                       | 670                    | <1.54                                | <1.54    | <1.54    | <30.7    |
| Chloroform  | 67-66-3     | 1.2                      | 40                           | 5.3                      | 180                    | 25.6                                 | 4.92     | 39.1     | <23.2    |
| Chloromethane                                     | 74-87-3     | 94                       | 3,100                        | 390                      | 13,000                 | <0.708                               | <0.708   | <0.708   | <14.2    |
| Dichlorodifluoromethane                           | 75-71-8     | 100                      | 3,300                        | 440                      | 15,000                 | 3.42                                 | 2.27     | 3.69     | <45.2    |
| 1,1-Dichloroethane (1,1 DCA)                      | 75-34-3     | 18                       | 600                          | 77                       | 2,600                  | <0.966                               | <0.966   | <0.966   | <19.4    |
| 1,2-Dichloroethane (1,2 DCA)                      | 107-06-2    | 1.1                      | 37.0                         | 4.7                      | 160                    | <0.943                               | <0.943   | <0.943   | <18.9    |
| 1,1-Dichloroethene (1,1 DCE)                      | 75-35-4     | 210                      | 7,000                        | 880                      | 29,000                 | 1.47                                 | 90.8     | 2.15     | <20.1    |
| cis-1,2-Dichloroethene                            | 156-59-2    | NA                       | NA                           | NA                       | NA                     | 908                                  | 21,400   | 1,350    | 34.9     |
| trans-1,2-Dichloroethene                          | 156-60-5    | NA                       | NA                           | NA                       | NA                     | 1.15                                 | 351      | 7.77     | <22.1    |
| Ethylbenzene                                      | 100-41-4    | 11.0                     | 370                          | 49.0                     | 1,600                  | <1.21                                | <1.21    | <1.21    | <24.1    |
| Methylene chloride (Dichloromethane)              | 75-09-2     | 630                      | 21,000                       | 2,600                    | 87,000                 | <1.13                                | 1.97     | <1.13    | <22.7    |
| Methyl-tert-butyl ether (Isopropyl ether or MTBE) | 1634-04-4   | 110                      | 3,700                        | 470                      | 16,000                 | <0.778                               | <0.778   | <0.778   | <15.5    |
| Naphthalene                                       | 91-20-3     | 0.83                     | 28                           | 3.6                      | 120                    | <6.13                                | <6.13    | <6.13    | <122     |
| Tetrachloroethene (PCE)                           | 127-18-4    | 42                       | 1,400                        | 180                      | 6,000                  | 13,600                               | 61,900   | 5,980    | 383      |
| Toluene   | 108-88-3    | 5,200                    | 170,000                      | 22,000                   | 730,000                | <1.09                                | 1.30     | <1.09    | 23.7     |
| 1,1,1-Trichloroethane (1,1,1 TCA)                 | 71-55-6     | 5,200                    | 170,000                      | 22,000                   | 730,000                | <1.33                                | <1.33    | <1.33    | <26.7    |
| Trichloroethene (TCE)                             | 79-01-6     | 2.1                      | 70                           | 8.8                      | 290                    | 1,900                                | 7,820    | 1,310    | 54.1     |
| Trichlorofluoromethane                            | 75-69-4     | NA                       | NA                           | NA                       | NA                     | <1.53                                | 1.85     | <1.53    | <30.7    |
| 1,2,4-Trimethylbenzene                            | 95-63-6     | 63                       | 2,100                        | 260                      | 8,700                  | <1.25                                | <1.25    | <1.25    | <25.0    |
| 1,3,5-Trimethylbenzene                            | 108-67-8    | 63                       | 2,100                        | 260                      | 8,700                  | <1.28                                | <1.28    | <1.28    | <25.5    |
| Vinyl chloride                                    | 75-01-4     | 1.7                      | 57                           | 28                       | 930                    | <0.808                               | 28.1     | 6.31     | <16.2    |
| Total Xylenes                                     | 179601-23-1 | 100                      | 3,300                        | 440                      | 15,000                 | <3.15                                | <3.15    | <3.15    | <63      |
| <b>Detected Compounds</b>                         |             |                          |                              |                          |                        |                                      |          |          |          |
| 1,1-Difluoroethane                                | 75-37-6     | 42,000                   | 1,400,000                    | 180,000                  | 6,000,000              | <1.16                                | 1,850    | 44.8     | 321      |
| 1,2,3-Trimethylbenzene                            | 526-73-8    | 63                       | 2,100                        | 260                      | 8,700                  | <1.32                                | <1.32    | <1.32    | <26.4    |
| 2,2,4-Trimethylpentane                            | 540-84-1    | NE                       | NE                           | NE                       | NE                     | <2.07                                | <2.07    | <2.07    | <41.4    |
| 2-Butanone (MEK)                                  | 78-93-3     | 5,200                    | 170,000                      | 22,000                   | 730,000                | <0.799                               | <0.799   | <0.799   | <16.0    |
| Bromodichloromethane                              | 75-27-4     | 0.76                     | 25                           | 3.3                      | 110                    | 2.56                                 | <1.57    | 4.33     | <31.3    |
| 2-Propanol  | 67-63-0     | NE                       | NE                           | NE                       | NE                     | <2.16                                | <2.16    | <2.16    | <43.3    |
| 4-Ethyltoluene                                    | 622-96-8    | NE                       | NE                           | NE                       | NE                     | <1.28                                | <1.28    | <1.28    | <25.7    |
| 4-Methyl-Pentanone (MIBK)                         | 108-10-1    | 3,100                    | 100,000                      | 13,000                   | 430,000                | <1.04                                | <1.04    | <1.04    | <20.9    |
| Acetone   | 67-64-1     | 32,000                   | 1,100,000                    | 140,000                  | 4,700,000              | 12.0                                 | 55.4     | 34.5     | 104      |
| Carbon Disulfide                                  | 75-15-0     | 730                      | 24,000                       | 3,100                    | 100,000                | <1.06                                | 1.31     | <1.06    | <21.2    |
| Chlorodifluoromethane                             | 75-45-6     | 52,000                   | 1,700,000                    | 220,000                  | 7,000,000              | <1.55                                | <1.55    | <1.55    | 54.5     |
| Chloroethane                                      | 75-00-3     | NE                       | NE                           | NE                       | NE                     | <0.876                               | <0.876   | <0.876   | <17.5    |
| Cyclohexane                                       | 110-82-7    | 6,300                    | 210,000                      | 26,000                   | 870,000                | <0.864                               | <0.864   | <0.864   | <17.3    |
| Ethanol   | 64-17-5     | NE                       | NE                           | NE                       | NE                     | 6.09                                 | 27.9     | 8.15     | 68.1     |
| Ethyl Acetate                                     | 141-78-6    | 73                       | 2,400                        | 310                      | 10,000                 | <1.20                                | <1.20    | <1.20    | <24.0    |
| Heptane   | 142-82-5    | 420                      | 14,000                       | 1,800                    | 60,000                 | <1.42                                | <1.42    | <1.42    | <28.3    |
| Isopropylbenzene (Cumene)                         | 98-82-8     | 420                      | 14,000                       | 1,800                    | 60,000                 | <1.27                                | <1.27    | <1.27    | <25.4    |
| Methyl Cyclohexane                                | 108-87-2    | NE                       | NE                           | NE                       | NE                     | <1.09                                | <1.09    | <1.09    | <21.8    |
| Methyl Methacrylate                               | 80-62-6     | 730                      | 24,000                       | 3,100                    | 100,000                | <1.20                                | <1.20    | <1.20    | <23.9    |
| N-Hexane  | 110-54-3    | 730                      | 24,000                       | 3,100                    | 100,000                | <2.42                                | <2.42    | <2.42    | <48.3    |
| Styrene   | 100-42-5    | 1,000                    | 33,000                       | 4,400                    | 150,000                | <1.12                                | <1.12    | <1.12    | <22.4    |
| Tetrahydrofuran                                   | 109-99-9    | NE                       | NE                           | NE                       | NE                     | <0.722                               | <0.722   | <0.722   | <14.4    |
| GRO (TPH (GC/MS) Low Fraction)                    |             | NE                       | NE                           | NE                       | NE                     | 4,790                                | 9,010    | 5,370    | <10,900  |

**Notes:**

**Wisconsin Quick Look UP and Detected Compounds Only**

**Based on May 2018 US EPA Regional Screening Levels**

**Bold = Detected Concentration**

**Exceedance**

EPA = Environmental Protection Agency

VAL = Vapor Action Level

VRSL = Vapor Risk Screening Level

NE = Vapor Action Level determined by 2017 EPA Vapor Risk Calculator Spreadsheet

<0.02 = Not Detected above laboratory reporting limits

-- = Not Analyzed

<sup>a</sup> = Exceedance calculated using 2017 EPA Vapor Risk Calculator Spreadsheet

All measurements in ug/m<sup>3</sup>

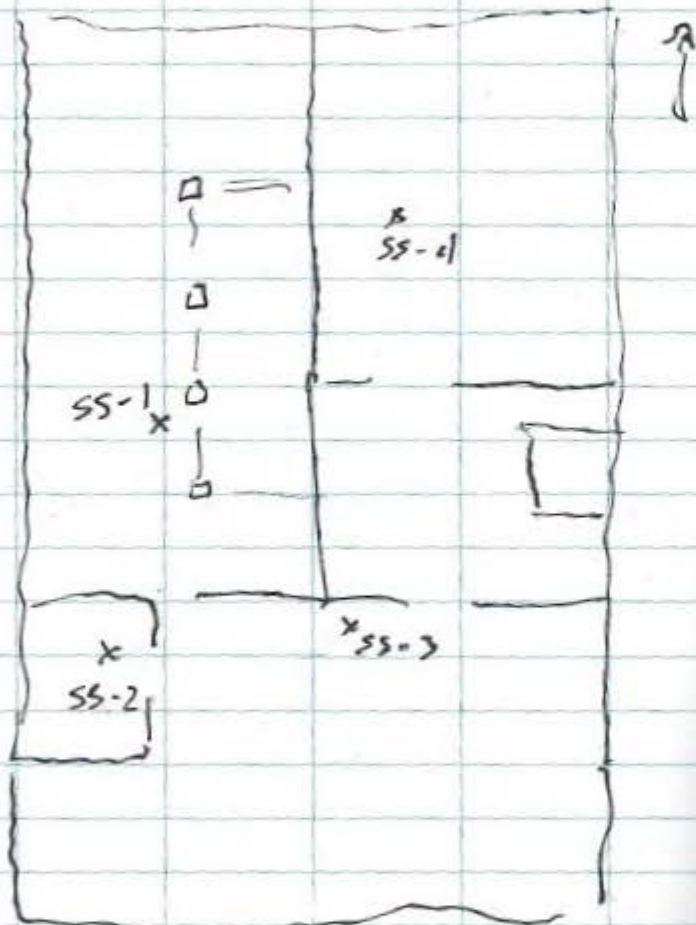
8/11/21

902 Billerap

Sunday 78

1020

ms. k



1330 - Begin sampling SS-1

summa 012280

value 11369

initial pressure -28

end pressure -6

1405 Finish SS-1

PID:

1340 Begin sampling SS-2

summa 10424

value 9078

initial pressure -30

end pressure -5

PID:

1411 - finish sampling

Begin sampling SS-3

1415

summa 12203

value 9078

initial pressure -30

end pressure -7

1445 - finish sampling