

**Wah Chang - Fabrication Area  
Groundwater Remediation Monthly Narrative Summary  
September (August 29 to September 30) 2002**

|  |                               | Notes            | Prior Month    | This Month     | Cumulative        |
|--|-------------------------------|------------------|----------------|----------------|-------------------|
| <b>Operation Hours</b>                     |                               |                  |                |                |                   |
|  | (Start Date)                  |                  |                |                |                   |
| FW1  | 6/28/01                       |                  | 610            | 788            | 8,085             |
| FW2  | 6/18/01                       |                  | 597            | 726            | 10,000            |
| FW3  | 5/15/01                       |                  | 650            | 734            | 11,590            |
| FW4  | 4/26/01                       |                  | 623            | 736            | 8,977             |
| FW5  | 8/2/01                        |                  | 670            | 791            | 7,366             |
| FW6  |                               | (1)              | 0              | 0              | 0                 |
| FW7  | 4/16/01                       |                  | 313            | 523            | 5,318             |
| <b>Extraction Gallons</b>                  |                               |                  |                |                |                   |
| FW1  |                               | Recorded on 8/28 | 115,323        | 65,807         | 2,178,578         |
| FW2  |                               | Recorded on 8/28 | 252,953        | 311,275        | 4,280,604         |
| FW3  |                               | Recorded on 8/28 | 72,730         | 81,465         | 940,356           |
| FW4  |                               | Recorded on 8/28 | 161,930        | 101,130        | 2,506,449         |
| FW5  |                               | Recorded on 8/28 | 60,636         | 73,879         | 1,135,908         |
| FW6  |                               | (1)              | 0              | 0              | 0                 |
| FW7  |                               | Recorded on 8/28 | 51,446         | 72,141         | 1,198,497         |
|  | <b>Total</b>                  |                  | <b>715,018</b> | <b>705,697</b> | <b>12,240,392</b> |
| <b>Influent Concentration</b>              |                               |                  |                |                |                   |
| FW1  | (TVOCs) ug/L                  | Sampled on 7/26  | 946            | 1493           |                   |
| FW2  | (TVOCs) ug/L                  | Sampled on 7/26  | 676            | 638            |                   |
| FW3  | (TVOCs) ug/L                  | Sampled on 7/26  | 3074           | 2578           |                   |
| FW4  | (TVOCs) ug/L                  | Sampled on 7/26  | 1145           | 1033           |                   |
| FW5  | (Ammonia+Ammonium) mg/L       | Sampled on 7/26  | 403            | 983            |                   |
| FW6  | (TVOCs) ug/L                  | (1)              | -              | -              |                   |
| FW7  | (TVOCs) ug/L                  | Sampled on 7/26  | 24             | 40             |                   |
| <b>Midpoint Concentration</b>              |                               |                  |                |                |                   |
| FW1  | (TVOCs) ug/L                  | Sampled on 7/26  | 181.9          | 384.0          |                   |
| FW2  | (TVOCs) ug/L                  | Sampled on 7/26  | 66.3           | 2.1            |                   |
| FW3  | (TVOCs) ug/L                  | Sampled on 7/26  | 78.6           | 83.0           |                   |
| FW4  | (TVOCs) ug/L                  | Sampled on 7/26  | 414.2          | 20.1           |                   |
| FW5  | (Ammonia/Ammonium)            | -                | -              | -              |                   |
| FW6  | (TVOCs) ug/L                  | (1)              | -              | -              |                   |
| FW7  | (TVOCs) ug/L                  | Sampled on 7/26  | 0.0            | 0.0            |                   |
| <b>Contaminant Mass Extracted (pounds)</b> |                               |                  |                |                |                   |
| FW1  | (TVOCs)                       |                  | 0.91           | 0.82           | 12.3              |
| FW2  | (TVOCs)                       |                  | 1.43           | 1.66           | 20.3              |
| FW3  | (TVOCs)                       |                  | 1.87           | 1.75           | 30.9              |
| FW4  | (TVOCs)                       |                  | 1.55           | 0.87           | 20.9              |
| FW5  | (Ammonia/Ammonium)            |                  | 203.91         | 606.00         | 4513.1            |
| FW6  | (TVOCs)                       | (1)              | -              | -              | -                 |
| FW7  | (TVOCs)                       |                  | 0.01           | 0.02           | 0.67              |
|  | <b>Total VOCs</b>             |                  | <b>5.76</b>    | <b>5.13</b>    | <b>85.1</b>       |
|  | <b>Total Ammonia/Ammonium</b> |                  | <b>204</b>     | <b>606</b>     | <b>4513.1</b>     |

**Notes:**

Due to poor well yield (< 0.1 gpm) no pump or treatment system equipment installed.

Date of last carbon filter changeout:

FW-1 - September 30, 2002

FW-2 - July 24, 2002

FW-3 - No changeout to date

FW-4 - Week of August 5th, 2002

FW-7 - May 29, 2002

**Table 2  
Fabrication Area Cumulative  
Treatment System Parameters**