# **GIS REGISTRY**

# **Cover Sheet**

March, 2010 (RR 5367)

| Source Dre          | norty Information                                                                       |             |                                             |                                                          |                 |
|---------------------|-----------------------------------------------------------------------------------------|-------------|---------------------------------------------|----------------------------------------------------------|-----------------|
| Source Pro          | perty Information                                                                       |             |                                             | CLOSURE DATE                                             | E: Jan 20, 2012 |
| BRRTS #:            | 02-36-544601                                                                            |             |                                             | EID "                                                    | 426106110       |
| ACTIVITY NAME:      | Skana (K&V) (Sumps)                                                                     |             |                                             | FID #:                                                   | 436106110       |
| PROPERTY ADDRESS    | · 2009 Mirro Dr                                                                         |             |                                             | DATCP #:                                                 |                 |
|                     |                                                                                         |             |                                             | COMM #:                                                  |                 |
| MUNICIPALITY:       | City of Manitowoc                                                                       |             |                                             |                                                          | ı               |
| PARCEL ID #:        | 052-809-401-010.00                                                                      |             |                                             |                                                          |                 |
|                     | *WTM COORDINATES:                                                                       |             | WTM COORDINATE                              | S REPRESENT:                                             |                 |
|                     | X: <b>709769</b> Y: <b>408731</b>                                                       |             | <ul><li>Approximate Center Of</li></ul>     | Contaminant Sou                                          | rce             |
|                     | * Coordinates are in<br>WTM83, NAD83 (1991)                                             |             | Approximate Source Pa                       | rcel Center                                              |                 |
| Please check as app | ropriate: (BRRTS Action Code)                                                           |             |                                             |                                                          |                 |
|                     | Co                                                                                      | ontamina    | ated Media:                                 |                                                          |                 |
| X Gr                | oundwater Contamination > ES (2                                                         | 36)         | Soil Contamination                          | on > *RCL or **SSF                                       | RCL (232)       |
|                     | Contamination in ROW                                                                    |             | Contaminati                                 | ion in ROW                                               |                 |
|                     | Off-Source Contamination                                                                |             | Off-Source C                                | Contamination                                            |                 |
|                     | <b>ote:</b> for list of off-source properties<br>e "Impacted Off-Source Property" form) |             |                                             | f-source properties<br>Source Property" forr             | n)              |
|                     | ı                                                                                       | Land Use    | e Controls:                                 |                                                          |                 |
|                     | N/A (Not Applicable)                                                                    |             | ズ Cover or Ba                               | rrier <i>(222)</i>                                       |                 |
|                     | Soil: maintain industrial zoning                                                        | (220)       | ( <b>note:</b> maintena<br>groundwater or a | •                                                        |                 |
|                     | ote: soil contamination concentration                                                   |             | ☐ Vapor Mitig                               |                                                          |                 |
| Г                   | Structural Impediment (224)                                                             | ,           | Maintain Li                                 | ability Exemption                                        | (230)           |
| Г                   | Site Specific Condition (228)                                                           |             |                                             | ernment unit or econo<br>poration was directed<br>ction) |                 |
|                     |                                                                                         | Monitor     | ing Wells:                                  |                                                          |                 |
|                     | Are all monitoring w                                                                    | ells proper | rly abandoned per NR 141? <i>(2</i>         | 234)                                                     |                 |
|                     | <b>⊚</b> Yo                                                                             | es ON       | lo ON/A                                     |                                                          |                 |
|                     |                                                                                         |             |                                             | <b>"</b>                                                 |                 |

<sup>\*</sup> Residual Contaminant Level

<sup>\*\*</sup>Site Specific Residual Contaminant Level

| State of Wisconsin                                | GIS Registry Checklist |             |
|---------------------------------------------------|------------------------|-------------|
| Department of Natural Resources http://dnr.wi.gov | Form 4400-245 (R 3/10) | Page 1 of 3 |

This Adobe Fillable form is intended to provide a list of information that is required for evaluation for case closure. It is to be used in conjunction with Form 4400-202, Case Closure Request. The closure of a case means that the Department has determined that no further response is required at that time based on the information that has been submitted to the Department.

**NOTICE:** Completion of this form is mandatory for applications for case closure pursuant to ch. 292, Wis. Stats. and ch. NR 726, Wis. Adm. Code, including cases closed under ch. NR 746 and ch. NR 726. The Department will not consider, or act upon your application, unless all applicable sections are completed on this form and the closure fee and any other applicable fees, required under ch. NR 749, Wis. Adm. Code, Table 1 are included. It is not the Department's intention to use any personally identifiable information from this form for any purpose other than reviewing closure requests and determining the need for additional response action. The Department may provide this information to requesters as required by Wisconsin's Open Records law [ss. 19.31 - 19.39, Wis. Stats.].

| <u> </u>                                                                                                                  |                     | •                                           |                                     |                        |  |  |  |
|---------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------------------------------|-------------------------------------|------------------------|--|--|--|
| BRRTS #:                                                                                                                  | 02-36-544601        | PARCEL ID #                                 | : 052-809-401-010.00                |                        |  |  |  |
| ACTIVITY NAME:                                                                                                            | Skana (K&V) (SU     | IMPS)                                       | WTM COORDINATES:                    | X: 709769 Y: 408731    |  |  |  |
| CLOSURE DOC                                                                                                               | UMENTS (the D       | Department adds these items to the          | final GIS packet for posting of     | on the Registry)       |  |  |  |
| <b>区</b> Closure Lette                                                                                                    |                     |                                             |                                     |                        |  |  |  |
| <b>⋉</b> Maintenance                                                                                                      | e Plan (if activity | is closed with a land use limitation or coi | ndition (land use control) under s. | . 292.12, Wis. Stats.) |  |  |  |
| Continuing Obligation Cover Letter (for property owners affected by residual contamination and/or continuing obligations) |                     |                                             |                                     |                        |  |  |  |
|                                                                                                                           |                     |                                             |                                     |                        |  |  |  |
| Certificate of Completion (COC) (for VPLE sites)                                                                          |                     |                                             |                                     |                        |  |  |  |
| COLIDCE LECAL                                                                                                             | DOCUMENTS           |                                             |                                     |                        |  |  |  |

#### SOURCE LEGAL DOCUMENTS

- **Deed:** The most recent deed as well as legal descriptions, for the **Source Property** (where the contamination originated). Deeds for other, off-source (off-site) properties are located in the **Notification** section.
  - **Note:** If a property has been purchased with a land contract and the purchaser has not yet received a deed, a copy of the land contract which includes the legal description shall be submitted instead of the most recent deed. If the property has been inherited, written documentation of the property transfer should be submitted along with the most recent deed.
- ▼ Certified Survey Map: A copy of the certified survey map or the relevant section of the recorded plat map for those properties where the legal description in the most recent deed refers to a certified survey map or a recorded plat map. (lots on subdivided or platted property (e.g. lot 2 of xyz subdivision)).
  - Figure #: Title: Property Map, CSM Volume 24, page 63, April 14, 2010
- Signed Statement: A statement signed by the Responsible Party (RP), which states that he or she believes that the attached legal description accurately describes the correct contaminated property.

#### MAPS (meeting the visual aid requirements of s. NR 716.15(2)(h))

Maps must be no larger than 11 x 17 inches unless the map is submitted electronically.

**Location Map:** A map outlining all properties within the contaminated site boundaries on a U.S.G.S. topographic map or plat map in sufficient detail to permit easy location of all parcels. If groundwater standards are exceeded, include the location of all potable wells within 1200 feet of the site.

**Note:** Due to security reasons municipal wells are not identified on GIS Packet maps. However, the locations of these municipal wells must be identified on Case Closure Request maps.

Figure #: 1 Title: Skana Location

Detailed Site Map: A map that shows all relevant features (buildings, roads, individual property boundaries, contaminant sources, utility lines, monitoring wells and potable wells) within the contaminated area. This map is to show the location of all contaminated public streets, and highway and railroad rights-of-way in relation to the source property and in relation to the boundaries of groundwater contamination exceeding a ch. NR 140 Enforcement Standard (ES), and/or in relation to the boundaries of soil contamination exceeding a Residual Contaminant Level (RCL) or a Site Specific Residual Contaminant Levels (SSRCL) as determined under s. NR 720.09, 720.11 and 720.19.

# Figure #: 2, 2 Title: Property Map of Skana, Detailed Site Map Sumps (VOC) Area

Soil Contamination Contour Map: For sites closing with residual soil contamination, this map is to show the location of all contaminated soil and a single contour showing the horizontal extent of each area of contiguous residual soil contamination that exceeds a Residual Contaminant Level (RCL) or a Site Specific Residual Contaminant Level (SSRCL) as determined under s. NR 720.09, 720.11 and 720.19.

Figure #: Title:

| Dep | te of Wisconsin<br>partment of Natural Resource<br>p://dnr.wi.gov | es                                                                                                                                                                                                                               | GIS Registry Form 4400-245                     |                                   | Page 2 of 3       |
|-----|-------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|-----------------------------------|-------------------|
| BF  | RRTS #: 02-36-544601                                              | ACTIVITY NAME: S                                                                                                                                                                                                                 | kana (K&V) (SUMPS)                             |                                   |                   |
| M   | APS (continued)                                                   |                                                                                                                                                                                                                                  |                                                |                                   |                   |
| X   | Residual Contaminant Lo<br>ch. NR 140 Enforcement                 | <b>Map:</b> A map showing the source location and vertical evel (RCL) or a Site Specific Residual Contaminant Level (Standard (ES) when closure is requested, show the sound locations and elevations of geologic units, bedroom | el (SSRCL). If ground<br>ource location and ve | water contami<br>rtical extent, w | ination exceeds a |
|     | Figure #: 5                                                       | Title: West to East and North to South Geologic                                                                                                                                                                                  | Cross Sections                                 |                                   |                   |
|     | Figure #:                                                         | Title:                                                                                                                                                                                                                           |                                                |                                   |                   |
| X   | extent of all groundwate<br>Indicate the direction an             | <b>ntration Map:</b> For sites closing with residual grounds or contamination exceeding a ch. NR140 Preventive And date of groundwater flow, based on the most recent show the total area of contaminated groundwater.           | ction Limit (PAL) and                          |                                   |                   |
|     | Figure #: 12                                                      | Title: VOC Summary of Last Reported Data Avai                                                                                                                                                                                    | lable, September/D                             | ecember 201                       | 11                |
| X   |                                                                   | ection Map: A map that represents groundwater monistory of the site, submit 2 groundwater flow maps sh                                                                                                                           |                                                |                                   | •                 |
|     | Figure #: 8                                                       | Title: Groundwater Contours August 27, 2011                                                                                                                                                                                      |                                                |                                   |                   |
|     | Figure #:                                                         | Title:                                                                                                                                                                                                                           |                                                |                                   |                   |
| TA  | BLES (meeting the req                                             | uirements of s. NR 716.15(2)(h)(3))                                                                                                                                                                                              |                                                |                                   |                   |
|     | _                                                                 | an 11 x 17 inches unless the table is submitted electro <b>BOLD</b> or <i>ITALICS</i> is acceptable.                                                                                                                             | nically. Tables <u>must</u>                    | <u>not</u> contain sh             | ading and/or      |
|     | <b>Note:</b> This is one table of                                 | A table showing <u>remaining</u> soil contamination with an<br>of results for the contaminants of concern. Contamina<br>emain after remediation. It may be necessary to create                                                   | ints of concern are th                         | ose that were                     | found during the  |
|     | Table #:                                                          | Title:                                                                                                                                                                                                                           |                                                |                                   |                   |
| X   | •                                                                 | al <b>Table:</b> Table(s) that show the <u>most recent</u> analytica<br>ells for which samples have been collected.                                                                                                              | l results and collection                       | on dates, for al                  | l monitoring      |
|     | Table #: 1                                                        | Title: Wells Sampled to Characterize the Sump A                                                                                                                                                                                  | Area for VOCs, Indiv                           | idual Well Ta                     | bles              |
| X   |                                                                   | : Table(s) that show the previous four (at minimum) very free product is to be noted on the table.                                                                                                                               | vater level elevation ı                        | measurements                      | s/dates from all  |
|     | Table #: 1                                                        | Title: see Individual Well Tables                                                                                                                                                                                                |                                                |                                   |                   |
| IM  | PROPERLY ABANDON                                                  | IED MONITORING WELLS                                                                                                                                                                                                             |                                                |                                   |                   |
| No  | _                                                                 | ot properly abandoned according to requirements of solon the GIS Registry for only an improperly abandoned rother GIS Registry Packet.                                                                                           |                                                | _                                 |                   |
| X   | Not Applicable                                                    |                                                                                                                                                                                                                                  |                                                |                                   |                   |
|     | not been properly aband                                           | ap showing all surveyed monitoring wells with specifi<br>doned.<br>onitoring wells are distinctly identified on the Detailed S.                                                                                                  |                                                | _                                 |                   |
|     | Figure #:                                                         | Title:                                                                                                                                                                                                                           |                                                |                                   |                   |
|     | Well Construction Repo                                            | ort: Form 4440-113A for the applicable monitoring w                                                                                                                                                                              | ells.                                          |                                   |                   |

**Deed:** The most recent deed as well as legal descriptions for each property where a monitoring well was not properly abandoned.

| Dep | te of Wisconsin<br>partment of Natural Resources<br>p://dnr.wi.gov |                                                                                                                                                                                                                                                    | GIS Registry Checklist<br>Form 4400-245 (R 3/10) | Page 3 of 3       |
|-----|--------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|-------------------|
| BR  | RRTS #: 02-36-544601                                               | ACTIVITY NAME:                                                                                                                                                                                                                                     | Skana (K&V) (SUMPS)                              |                   |
| NC  | OTIFICATIONS                                                       |                                                                                                                                                                                                                                                    |                                                  |                   |
| So  | urce Property                                                      |                                                                                                                                                                                                                                                    |                                                  |                   |
| X   | Not Applicable                                                     |                                                                                                                                                                                                                                                    |                                                  |                   |
|     |                                                                    | <b>operty Owner:</b> If the source property is owner of the letter notifying the current owner of the current owner. | •                                                | , .               |
|     | <b>Return Receipt/Signature Co</b> property owner.                 | onfirmation: Written proof of date on which                                                                                                                                                                                                        | confirmation was received for notifyi            | ng current source |
| Of  | f-Source Property                                                  |                                                                                                                                                                                                                                                    |                                                  |                   |
|     | oup the following information<br>f-Source Property" attachment.    | per individual property and label each group a                                                                                                                                                                                                     | according to alphabetic listing on the           | e "Impacted       |
| X   | Not Applicable                                                     |                                                                                                                                                                                                                                                    |                                                  |                   |
|     | groundwater exceeding an Er under s. 292.12, Wis. Stats.           | erty Owners: Copies of all letters sent by the inforcement Standard (ES), and to owners of presponding residual contamination means                                                                                                                | operties that will be affected by a lar          | nd use control    |
|     | Number of "Off-Source" Let                                         | ters:                                                                                                                                                                                                                                              |                                                  |                   |
|     | Return Receipt/Signature Coproperty owner.                         | onfirmation: Written proof of date on which                                                                                                                                                                                                        | confirmation was received for notifyi            | ng any off-source |
|     | <b>property(ies).</b> This does not                                | rty: The most recent deed(s) as well as legal d apply to right-of-ways.  archased with a land contract and the purchaser                                                                                                                           | •                                                |                   |

which includes the legal description shall be submitted instead of the most recent deed. If the property has been inherited, written

Letter To "Governmental Unit/Right-Of-Way" Owners: Copies of all letters sent by the Responsible Party (RP) to a city, village, municipality, state agency or any other entity responsible for maintenance of a public street, highway, or railroad right-of-way, within or partially within the contaminated area, for contamination exceeding a groundwater Enforcement Standard (ES) and/or

Number of "Governmental Unit/Right-Of-Way Owner" Letters:

documentation of the property transfer should be submitted along with the most recent deed.

soil exceeding a Residual Contaminant Level (RCL) or a Site Specific Residual Contaminant Level (SSRCL).

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
Northeast Region Headquarters
2984 Shawano Avenue
Green Bay WI 54313-6727

Scott Walker, Governor Cathy Stepp, Secretary Jean Romback-Bartels, Regional Director Telephone 920-662-5100 FAX 920-662-5413 TTY Access via relay - 711



January 20, 2012

VPLE #06-36-556282

(sent via email to Ken.Kazmierczak@skanaaluminum.com)

Kenneth Kazmierczak CFO, VP Administration Skana Aluminum Company PO Box 1477 Manitowoc, WI 54220

### KEEP THIS DOCUMENT WITH YOUR PROPERTY RECORDS

Subject:

Final Case Closure with Continuing Obligations Skana Aluminum (K&V) Sumps (chlorinated solvents) Building 5C at 2009 Mirro Drive, Manitowoc Wisconsin WDNR Environmental Repair Activity # 02-36-544601

Dear Mr. Kazmierczak:

The Department of Natural Resources (DNR) considers the "sumps" (chlorinated solvents) case closed, with continuing obligations. No further investigation or remediation is required at this time. However, you and future property owners must comply with the continuing obligations as explained in the conditions of closure in this letter. Please read over this letter closely to ensure that you comply with all conditions and other on-going requirements. Provide this letter and the attached maintenance plan to anyone who purchases this property from you.

This final closure decision is based on the correspondence and data provided, and is issued under ch. NR 726, Wisconsin Administrative Code. The Northeast Region Closure Committee reviewed the request for Closure on December 2, 2011. The Closure Committee reviews environmental remediation cases for compliance with state laws and standards to maintain consistency in the closure of these cases. A conditional closure letter was issued by the DNR on December 6, 2011and documentation that the conditions in that letter were met was received on January 9, 2012. The following documentation was received:

- NR 141 Wis Adm. Code well abandonment forms: MW-06.16, MW-06.05, MW-06.08, MW-06.11, MW-06.19, MW-08.22, MW-08.24, MW-08.26, TW-06.18, TW-06.19, TW-06.20, TW-06.21, TW-06.22, TW-06.23, TW-06.24, TW-06.25, TW-06.26
- Cap Maintenance Plan
- DOT specifications for concrete pavement and asphaltic surfaces
- VOC contour map for GIS Registry documentation

The "Sumps" case is an apparent historic release of chlorinated solvents (primarily trichloroethylene) in the vicinity of Building 5C of this former Mirro facility now owned and operated by Skana Aluminum. The conditions of closure and continuing obligations required were based on the property being used for **Industrial purposes.** 



# **Continuing Obligations**

The continuing obligations for this site are summarized below. Further details on actions required are found in the section <u>Closure Conditions</u>.

- Groundwater contamination is present above ch. NR 140 enforcement standards.
- Residual soil contamination exists that must be properly managed should it be excavated or removed.
- Building 5C and the surrounding pavement must be maintained over contaminated soil and the state must approve any changes to this barrier.
- Before the land use may be changed from industrial to non-industrial, additional environmental work must be completed.
- Site-specific exposure assumptions were used. Current industrial land or property use must be maintained to be protective. If changes to the current property use or land use are planned, an assessment must be made of whether the closure is still protective.
- Remaining soil contamination could result in vapor intrusion if future construction activities occur. If new building construction is planned, vapor control technologies will be required for occupied buildings, unless the property owner assesses the potential for vapor intrusion, and the DNR agrees that conditions are protective of the new use.

# GIS Registry

This site will be listed on the Remediation and Redevelopment Program's internet accessible Geographic Information System (GIS) Registry, to provide notice of residual contamination and of any continuing obligations. DNR approval prior to well construction or reconstruction is required for all sites shown on the GIS Registry, in accordance with s. NR 812.09(4) (w), Wis. Adm. Code. To obtain approval, complete and submit Form 3300-254 to the DNR Drinking and Groundwater program's regional water supply specialist. This form can be obtained on-line at <a href="http://dnr.wi.gov/org/water/dwg/3300254.pdf">http://dnr.wi.gov/org/water/dwg/3300254.pdf</a> or at the web address listed below for the GIS Registry.

All site information is also on file at the Northeast Regional DNR office, at 2984 Shawano Avenue in Green Bay. This letter and information that was submitted with your closure request application, including the maintenance plan, will be included on the GIS Registry in a PDF attachment. To review the site on the GIS Registry web page, visit the RR Sites Map page at <a href="http://dnr.wi.gov/org/aw/rr/gis/index.htm">http://dnr.wi.gov/org/aw/rr/gis/index.htm</a>.

#### **Prohibited Activities**

Certain activities are prohibited at closed sites because maintenance of a barrier is intended to prevent contact with any remaining contamination. When a barrier is required, the condition of closure requires notification of the DNR before making a change, in order to determine if further action is needed to maintain the protectiveness of the remedy employed. The following activities are prohibited on any portion of the property where pavement and the building foundation are required, as shown on the shaded area of attached Figure 2, unless prior written approval has been obtained from the DNR:

- removal of the existing barrier;
- · replacement with another barrier;
- excavating or grading of the land surface;
- filling on covered or paved areas;
- plowing for agricultural cultivation;
- construction or placement of a building or other structure;

• changing the use or occupancy of the property to a residential exposure setting, which may include certain uses, such as single or multiple family residences, a school, day care, senior center, hospital, or similar residential exposure settings;

### **Closure Conditions**

Compliance with the requirements of this letter is a responsibility to which the current property owner, and any subsequent property owners must adhere. DNR staff will conduct periodic prearranged inspections to ensure that the conditions included in this letter and the attached maintenance plans are met. If these requirements are not followed, the DNR may take enforcement action under s. 292.11, Wisconsin Statutes to ensure compliance with the specified requirements, limitations or other conditions related to the property.

### Residual Groundwater Contamination (ch. NR 140, Wis. Adm. Code)

Groundwater contamination greater than enforcement standards is present on this contaminated property as shown on the **attached Figure 12**. If you intend to construct a new well, or reconstruct an existing well, you'll need prior DNR approval.

Residual Soil Contamination (ch. NR 718, or ch. 289, Stats.; chs. 500 to 536, Wis. Adm. Code) Residual soil contamination remains under Building 5C. If soil under Building 5C is excavated in the future, the property owner at the time of excavation must sample and analyze the excavated soil to determine if contamination remains. If sampling confirms that contamination is present, the property owner at the time of excavation will need to determine whether the material is considered solid or hazardous waste and ensure that any storage, treatment or disposal is in compliance with applicable standards and rules. In addition, all current and future owners and occupants of the property need to be aware that excavation of the contaminated soil may pose an inhalation or other direct contact hazard and as a result special precautions may need to be taken to prevent a direct contact health threat to humans.

# Cover or Barrier (s. 292.12 (2) (a), Wis. Stats)

The pavement and building that exists in the shaded areas shown on the **attached Figure 2** shall be maintained in compliance with the **attached maintenance plan** in order to minimize the infiltration of water and prevent additional groundwater contamination that would violate the groundwater quality standards in ch. NR 140, Wis. Adm. Code, and to prevent direct contact with residual soil contamination that might otherwise pose a threat to human health.

A cover or barrier for industrial land uses, or certain types of commercial land uses may not be protective if use of the property were to change such that a residential exposure would apply. This may include, but is not limited to single or multiple family residences, a school, day care, senior center, hospital or similar settings. Before using the property for such purposes, you must notify the DNR to determine if additional response actions are warranted. A request may be made to modify or replace a cover or barrier. The replacement or modified cover or barrier must be protective of the revised use of the property, and must be approved in writing by the DNR prior to implementation. The **attached maintenance plan and inspection log** are to be kept up-to-date and on-site. Submit the inspection log to the DNR only upon request.

#### Vapor Mitigation or Evaluation

Vapor intrusion is the movement of vapors coming from volatile chemicals in the soil or groundwater, into buildings where people may breathe air contaminated by the vapors. Vapor mitigation systems are used to interrupt the pathway, thereby reducing or preventing vapors from moving into the building.

Chlorinated solvents remain in subslab and groundwater beneath building 5C, as shown on the **attached Figure 12**, at levels that may be of concern for vapor intrusion in the future, depending on construction and occupancy of a building. Currently the building is used for industrial purposes, therefore, before a new

building is constructed, the property owner must notify the DNR. Vapor control technologies are required for construction of occupied buildings unless the property owner assesses the vapor pathway and DNR concurs that conditions at the property are protective of the new use.

In addition, depending on site-specific conditions, construction over contaminated materials may result in vapor migration of contaminants into enclosed structures or migration along newly placed underground utility lines. The potential for vapor inhalation and means of mitigation should be evaluated when planning any future redevelopment, and measures should be taken to ensure the continued protection of public health, safety, welfare and the environment at the site.

The following DNR fact sheet, "Continuing Obligations for Environmental Protection", RR-819, was included with this letter, to help explain a property owner's responsibility for continuing obligations on their property. If the fact sheet is lost, you may obtain a copy at <a href="http://dnr.wi.gov/org/aw/rr/archives/pubs/RR819.pdf">http://dnr.wi.gov/org/aw/rr/archives/pubs/RR819.pdf</a>.

Please send written notifications in accordance with the above requirements to the Northeast Regional Headquarters, to the attention of RR Program Environmental Associate.

We appreciate your efforts to restore the environment at this site and enroll the property in the Voluntary Party Liability Exemption (VPLE) process. Your Certificate of Completion will be issued in the next several weeks. If you have any questions regarding this closure decision or anything outlined in this letter, please contact Annette Weissbach at 920-662-5165.

Sincerely,

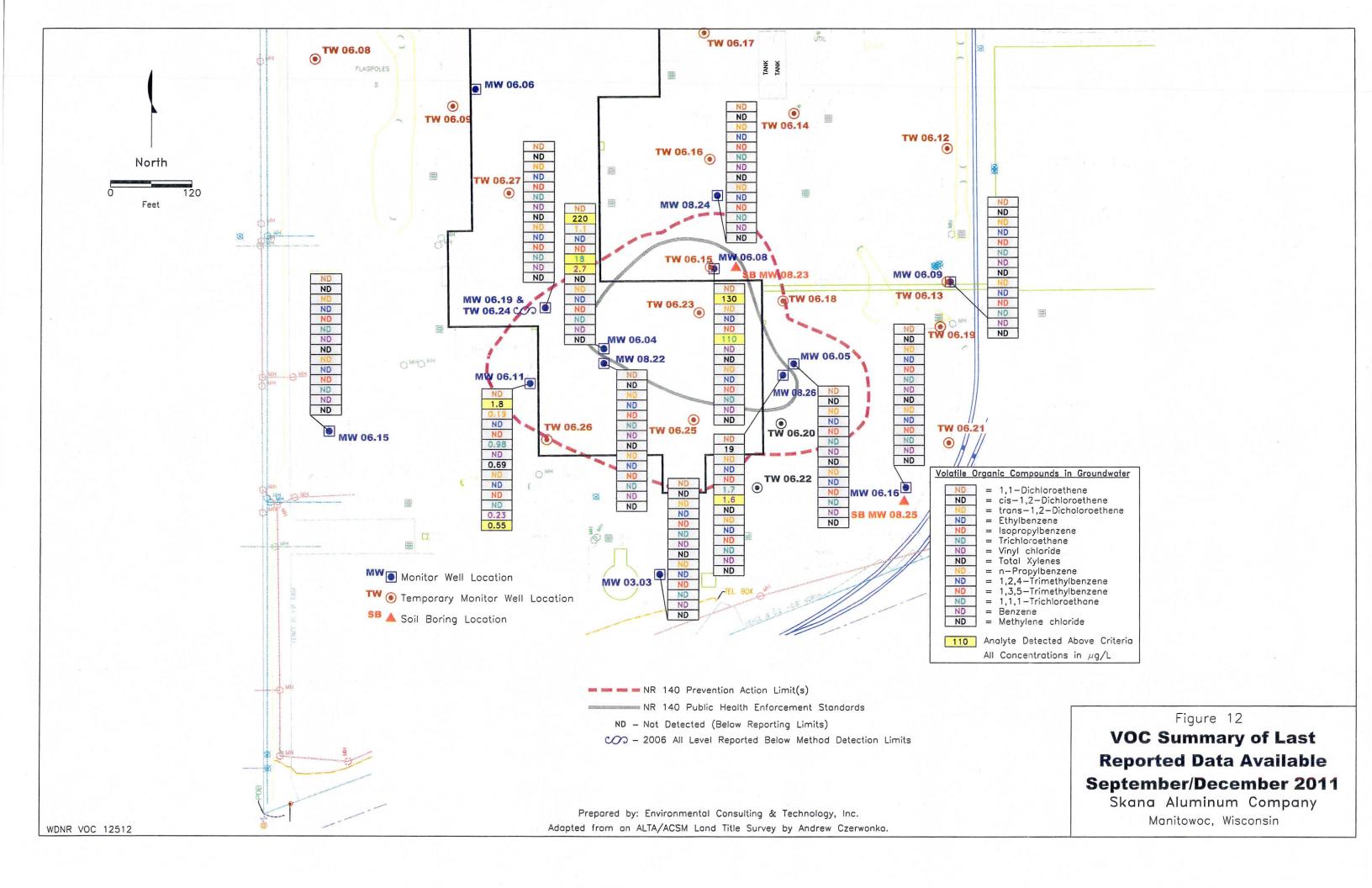
Bruce Urben, Air and Waste Division Leader Northeast Region

BGL

#### Attachments:

- Barrier/Cap Maintenance Plan
- Figure 12 remaining groundwater contamination map
- Publication RR 819 Continuing Obligations

e-cc: Paul Kuplic – paulk@communitybankandtrust.com James Bolger – JBI Inc., jim@jbidata.com Michael Hebert – ECT, Inc., MHebert@ectinc.com Michael Prager – RR/5





BARRIER/CAP MAINTENANCE PLAN

Date of Preparation:

25 January 2012

Date of Initiation:

15 February 2012

**Subject Property:** 

SKANA ALUMINUM COMPANY

2009 Mirro Drive

Manitowoc, Wisconsin 54221

VLPE #06-36-556282

WI DNR Environmental Repair Activity # 02-36-544601/02-36-550138

Facility ID# 436106110

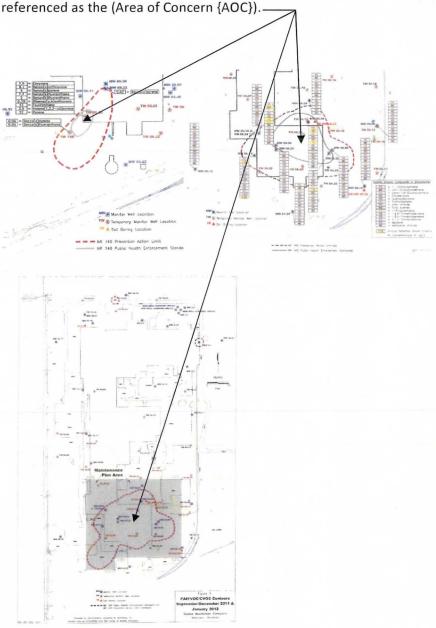
**Legal Description:** All that part of the Southeast Quarter (SE ¼) of Section Nine (9) North, Range Twenty-four (24) East, lying North of the Chicago and Northwestern Railway Company right of way, partially in the City of Manitowoc and partially in the Town of Manitowoc, County of Manitowoc, State of Wisconsin, EXCEPTING THEREFROM Lot One (1) of a Certified Survey recorded in Volume 24 of Certified Survey Maps, Page 63 as Document No.967193. ALSO EXCEPTING portion conveyed for street purposes by Quit Claim Deeds recorded in Volume 1995, Page 230, Document No. 969539 and in Volume 1995, Page 231 as Document No. 969540.

The Southwest Quarter (SW ¾) of the Northeast Quarter (NE ¾) and the South Half (S ½) of the Northwest Quarter (NW ¾) of the Northeast Quarter (NE ¾) of Section Nine (9), Township Nineteen (19) North, Range Twenty-four (24) East, in the City of Manitowoc, County of Manitowoc, State of Wisconsin. EXCEPTING portion conveyed for street purposes by Quit Claim Deed recorded in Volume 1995, Page 230, as Document No. 969539.



#### **Introduction**

This document (BARRIER/CAP MAINTENANCE PLAN) is herein referenced as the **Maintenance Plan** for the existing concrete floors associated with Building 5C and those existing asphalt pavement areas surrounding Building 5C. These structures (concrete floors/asphalt pavement) are referenced as engineering controls (vapor-contact barrier/water infiltration cover) at the referenced subject property in accordance with the requirements of NR 724.13(2), Wisconsin Administrative Code. The maintenance activities relate to the existing (concrete floors associated with Building 5C and those asphalt pavement areas surrounding Building 5C) occupying the area over the residual contaminated groundwater/soil regimes associated with WI DNR Repair Activities #02-36-544601/02-36-550138, is hereafter



No contamination associated with this Maintenance Plan has extended off site is likely to migrate off site under the current conditions.

More site-specific information about this property may be found in:

The case-file retained by the regulatory agency

State of Wisconsin
Department of Natural Resources
Northeast Regional Headquarters
2984 Shawano Avenue
Green Bay, WI 54313-6727

BRRTS on the Web (WI DNR's internet based data base of contaminated sites): http://dnr.wi.gov/botw/SetUpBasicSearchForm.do

|                                            |                  | 02-36-544                    | 601 SKANA                     |             | MPS)                  |                     |
|--------------------------------------------|------------------|------------------------------|-------------------------------|-------------|-----------------------|---------------------|
| Location Nar                               | ne Click Nam     | County                       | WDNR Region                   |             |                       |                     |
| SKANA ALU                                  | MINUM CO         |                              |                               |             | MANITOWOC             | NORTHEAST           |
| Address                                    |                  |                              |                               |             | Municipality          |                     |
| 2009 MIRR                                  | O DR             |                              |                               |             | MANITOWOC CIT         | Y                   |
| Public Land Survey System                  |                  |                              |                               | Latitude    | Google Maps™          | RR Sites Map        |
| NW 1/4 of the SE 1/4 of Sec 09, T19N, R24E |                  |                              |                               | 44.128693   | CLICK TO VIEW         | CLICK TO VIEW       |
| Additional Lo                              | cation Descr     | ription                      |                               | Longitude   | Facility ID           | Size (Acres)        |
| NONE                                       |                  |                              |                               | -87.6286078 | 436106110             | >100 Acres          |
| Jurisdiction                               | P                | ECFA No.                     | EPA Cerclis ID                | Start Date  | End Date              | Last Action         |
| DNR RR                                     | 1                |                              |                               | 2005-12-12  |                       | 2011-12-02          |
| ***************************************    |                  |                              | Characterist                  | ics         | ·                     |                     |
| EPA NPL<br>Site?                           | DSPS<br>Tracked? | Eligible for<br>PECFA Funds? | Above Ground<br>Storage Tank? | Drycleaner? | Co-<br>Contamination? | On GIS<br>Registry? |
| No                                         | No               | No                           | No                            | No          | No                    | No                  |

|                  |                  | 02-36-55                     | 0138 SKAN                     |                | TEWIDE            |                     |
|------------------|------------------|------------------------------|-------------------------------|----------------|-------------------|---------------------|
| Location Nar     | me Olick Nam     | ne to View Details and       | Other Activities              | OPEN House     | County            | WDNR Region         |
| SKANA ALL        | MINUM CO         | )                            |                               |                | MANITOWOC         | NORTHEAST           |
| Address          |                  |                              |                               |                | Municipality      |                     |
| 2009 MIRR        | O DR             |                              |                               | MANITOWOC CITY |                   |                     |
| Public Land      | Survey Syst      | em                           |                               | Latitude       | Google Maps™      | RR Sites Map        |
| NW 1/4 of 1      | the SE 1/4       | of Sec 09, T19               | N, R24E                       | 44.12948       | CLICK TO VIEW     | CLICK TO VIEW       |
| Additional Lo    | cation Desc      | ription                      |                               | Longitude      | Facility ID       | Size (Acres)        |
| NONE             |                  |                              |                               | -87.6273142    | 436106110         | >100 Acres          |
| Jurisdiction     | PE               | CFA No.                      | EPA Cerclis ID                | Start Date     | End Date          | Last Action         |
| DNR RR           |                  |                              |                               | 2005-12-12     |                   | 2011-12-05          |
|                  |                  |                              | Characte                      | eristics       |                   |                     |
| EPA NPL<br>Site? | DSPS<br>Tracked? | Eligible for<br>PECFA Funds? | Above Ground<br>Storage Tank? | Drycleaner?    | Co-Contamination? | On GIS<br>Registry? |
| No               | No               | No                           | No                            | No             | No                | No                  |

- ➤ GIS Registry PDF file for further information on the nature and extent of contamination: <a href="http://dnrmaps.wisconsin.gov/imf/imf.jsp?site=brrts2">http://dnrmaps.wisconsin.gov/imf/imf.jsp?site=brrts2</a>; and
- The WI DNR project manager for Manitowoc County (County Code 36):

State of Wisconsin
Department of Natural Resources
Northeast Regional Headquarters
Remediation & Redevelopment Program

2984 Shawano Avenue Green Bay, WI 54313-6727

Phone: (920) 662-5100

### **Description of Contamination**

The shallow <u>unconsolidated/vadose zone soils</u> and <u>saturated zone(s)</u> within the AOC have been identified as contaminated by one or more of the following:

| CAS 56553    | Benzo(a)anthracene      | CAS 50328  | Benzo(a)pyrene         |
|--------------|-------------------------|------------|------------------------|
| CAS 205992   | Benzo(b)fluoranthene    | CAS 207089 | Benzo(k)fluoranthene   |
| CAS 107-06-2 | Cis-1, 2-Dichloroethene | CAS 218019 | Chrysene               |
| CAS 53703    | Dibenzo(a,h)anthacene   | CAS 193395 | Indeno(1,2,3-cd)pyrene |
| CAS 129000   | Pyrene                  | CAS 79016  | Trichloroethylene      |
| CAS 75014    | Vinyl Chloride          |            |                        |

The <u>unconsolidated vadose zone soils</u> are defined as those soils in the AOC which are not saturated with groundwater below the elevation of (+/- 605 ft MSL) and limited to a maximum depth of 30 ft below ground surface or 575 ft MSL). <u>Saturated zone(s)</u> or those sediments which have the potential to produce non-potable and/or potable water (groundwater) within the AOC defined in the unconsolidated soils above the elevation of 575 ft MSL.

The following figures are presented as Exhibit A to support and define the AOC:

- Well Locations, Screen Depths & Soil Sample Locations
   (All wells points within the AOC have been sealed before the Initiation date of this Maintenance Plan)
- VOC Contour September 2011
   No. 142 Public Hearth, Sufference

NR 140 Pubic Heath Enforcement Standards

NR 140 Prevention Action Limits

- Summary of PAH Concentrations Groundwater Regime -2011
   NR 140 Pubic Heath Enforcement Standards
   NR 140 Prevention Action Limits
- PAH/VOC/CVOC Contour September/December 2011 & January 2012
   Inspection Area for this Maintenance Plan, (Light Grey)

#### Description of the Surface Structures to be Maintained

The concrete floor/surface structures supporting Building 5C and those existing asphalt pavement areas surrounding Building 5C are herein described and consists of the following matrix:

#### **Building 5C Floor/Surface Structures Supporting Building 5C**

**Existing Floors** 

(typical 8-12 inches of concrete {3,200 psi}) (minimum maintained cover 6 inch of concrete)

Effective February 15, 2012, an inspection of the concrete floors within the AOC will be conducted and any voids not occupied by sealed equipment will be sealed to comply with the minimum 6 inch maintained concrete cover.

Concrete surfaces will be maintained/repaired in accordance with the Wisconsin Department of Transportation Specifications for Concrete Pavement (Section 415), reference Annotated 2012 Edition of Standard Specifications. (Attachment No. 1)

#### Asphalt Pavement Areas Surrounding Building 5C

**Asphalt Pavement** 

(typical 4 inches of asphalt cover)

(minimum thickness 4 inches of asphalt)

Effective June 15, 2012, an inspection of the asphalt pavement within the AOC will be conducted and any voids through the pavement will be repaired and/or sealed before August 15, 2012 to comply with the minimum 4 inch maintained asphalt cover.

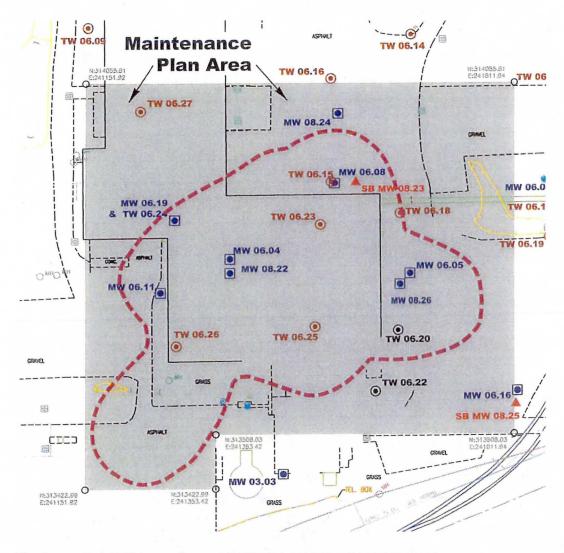
Asphalt surfaces will be maintained/repaired in accordance with the Wisconsin Department of Transportation Specifications for Asphaltic Pavement/Surface (Sections 450 and 465), reference Annotated 2012 Edition of Standard Specifications. (Attachment No. 2)

Existing surface structures (concrete for Building 5C and those asphalt areas surrounding Building 5C) as defined within the AOC are those structures that cover earth within the area shown on the Figure entitled: PAH/VOC/CVOC Contour September/December 2011 & January 2012 (Light Grey). These surface structures are subject to the controls as referenced, and may not be removed with written receipt of authorization from the WI DNR.

The concrete/asphalt over the contaminated groundwater and soil regimes serve as a barrier to prevent direct human contact with residual soil contamination that might otherwise pose a threat to human health. These concrete/asphalt cover(s) also act as a partial infiltration barrier to minimize future soil-to-groundwater contamination migration that would violate the groundwater standards in ch. NR 140, Wisconsin Administrative Code. In addition, the concrete floor within Building 5C acts as a barrier to prevent accumulation of chlorinated solvents/PAHs within the ambient air space of said Building 5C. Based on the current and future use of the property, the barrier(s) should function as intended unless disturbed.

## **Annual Inspection**

The concrete/asphalt structures overlying the contaminated groundwater and soil regimes as depicted in the flowing figures entitled (VOC Contour September 2011, and Summary of PAH Concentrations Groundwater Regime -2011) and/or as outlined in light grey on the figure entitled (PAH/VOC/CVOC Contour September/December 2011 & January 2012,) will be inspected once a year, normally in the spring after all snow and ice is gone (i.e. no later than June 15 of each year), for deterioration, cracks and other potential problems that can cause additional surface water infiltration/subsurface erosion/ or allow human exposure to the underlying soils.



The inspections will be performed by SKANA ALUMINUM COMPANY (property owner) or their designated engineering representative. The inspection(s) will be performed to evaluate damage due to settling, exposure to the weather, wear from traffic, increasing age and other factors. Any area where soils have become or are likely to become exposed and/or where surface water infiltration is being or likely to become acerbated will be documented. A log of the inspections and any repairs will be maintained by the SKANA ALUMINUM COMPANY. The Inspection Log is included as Exhibit B. The Inspection Log will include recommendations for necessary repair of any areas where underlying soils are exposed [and] where infiltration from the surface will not be effectively minimized. Once repairs are completed, (i.e. before August 15 of each year) they will be documented/photographed and incorporated in the Inspection Log/ Maintenance Plan. A copy of the Inspection Log will be kept at the subject property (SKANA ALUMINUM COMPANY, 2009 Mirro Drive, Manitowoc, WI) and be available for inspection by WI DNR representatives upon their request. In addition, no later than September 1 of each year a copy of the Inspection Log, photographic documentation of repairs/condition of the barrier(s)/cover(s)/surface structure(s) and general statement

documenting the condition of said barrier(s)/cover(s)/surface structure(s) will be forward by SKANA ALUMINUM COMPANY to the WI DNR:

State of Wisconsin
Department of Natural Resources
Northeast Regional Headquarters
Remediation & Redevelopment Program
2984 Shawano Avenue
Green Bay, WI 54313-6727
Phone: (920) 662-5100

If problems are noted during the annual inspections or at any other time during the year, repairs will be scheduled as soon as practical.

- Exterior Repairs can include patching and filling or larger resurfacing or construction operations.
- Interior Repairs can include industrial epoxy crack sealing (full depth), patching or larger resurfacing or construction.

In the event that necessary maintenance activities expose the underlying soil, or maintenance crews enter into a defined confined space which is below the ground surface elevation, SKANA ALUMINUM COMPANY will inform maintenance workers of the direct contact exposure hazard, vapor potential and provide them with appropriate personal protection equipment ("PPE"). The SKANA ALUMINUM COMPANY will also sample any soil that is excavated from the AOC prior to conducting off-site disposal activities to ascertain data concerning the levels of any residual contamination. The soil will be treated, stored and disposed of by SKANA ALUMINUM COMPANY in accordance with applicable local, state and federal law.

In the event the concrete/asphalt materials overlying the contaminated groundwater/soil regimes are removed or required replacement, the replacement barrier must be of equal impervious and consistent with the minimum thickness specified in this document. Any replacement barrier will be subject to the same maintenance and inspection guidelines as outlined in this Maintenance Plan unless indicated otherwise by the WI DNR or its successor. SKANA ALUMINUM COMPANY, in order to maintain the integrity of the concrete/asphalt barrier(s), will maintain a copy of this Maintenance Plan on-site and make it available to all interested parties (i.e. on-site employees, contractors, future property owners, etc.) for viewing.

#### **Prohibition of Activities and Notification of WI DNR**

These prohibitions may not be violated unless prior written approval has been obtained from the **WI DNR** on any portion of the property defined as part of the AOC which supports a surface cover/barrier structure which limits human exposure to the underlying residual contaminated and limits surface water infiltration:

- removal of the existing barrier
- > replacement with another barrier (that does not comply with this Maintenance Plan)
- > excavating or grading of the land surface
- filling on capped or paved areas
- plowing for agriculture
- > installation of wells for the purpose of generating a water source

It is herein noted that this written approval requirement, does not justify the owner/responsible parties to not undertake actions should an immediate dangerous environment/condition develop in the AOC which poses an immediate risk to the general public or the environment. Under these conditions emergency trained personnel may take actions to protect the general public and the environment, but concurrently SKANA ALUMINUM COMPANY administration (property owner) must take immediate actions (defined as 24 hours) to notify the WI DNR of said emergency condition.

# **Amendment or Withdrawal of Maintenance Plan**

This Maintenance Plan can be amended or withdrawn by the SKANA ALUMINUM COMPANY (current property owner) and its successors with the written approval of WI DNR.

#### **Maintenance Plan Contact Information**

The following contact information is herein provided to WI DNR. In the event the contact information must be amendments, the existing property owner or the contact listed below is responsible for notifying the WI DNR within +/-15 days of the amendment.

#### **Contact Information**

[January 2012 - \_

Site Owner and Operator:

SKANA ALUMINUM COMPANY 2009 Mirro Drive, P.O. Box 1477

Manitowoc, WI 54221 USA

Phone: 920.482.0599 / Fax: 920.482.1039

Name: Kenneth Kazmierczak Title: CFO, VP Administration

Email: Ken.Kazmierczak@skanaaluminum.com

**Environmental Consultant:** 

**Cardinal Environmental** 

3303 Paine Ave

Sheboygan, WI 53081 Phone: 800.413.7225

Scott Hanson

Environmental Consulting & Technology, Inc.

3125 Sovereign Drive Lansing, Michigan 48911 Phone: 517.272.9200

Michael T. Hebert, CPG, CHMM, PG, CUSTP

WI DNR Project Manager:

(Manitowoc County)

Annette Weissbach State of Wisconsin

**Department of Natural Resources** Northeast Regional Headquarters

Remediation & Redevelopment Program

2984 Shawano Avenue Green Bay, WI 54313-6727 Phone: 920.662.5100 or (5165)

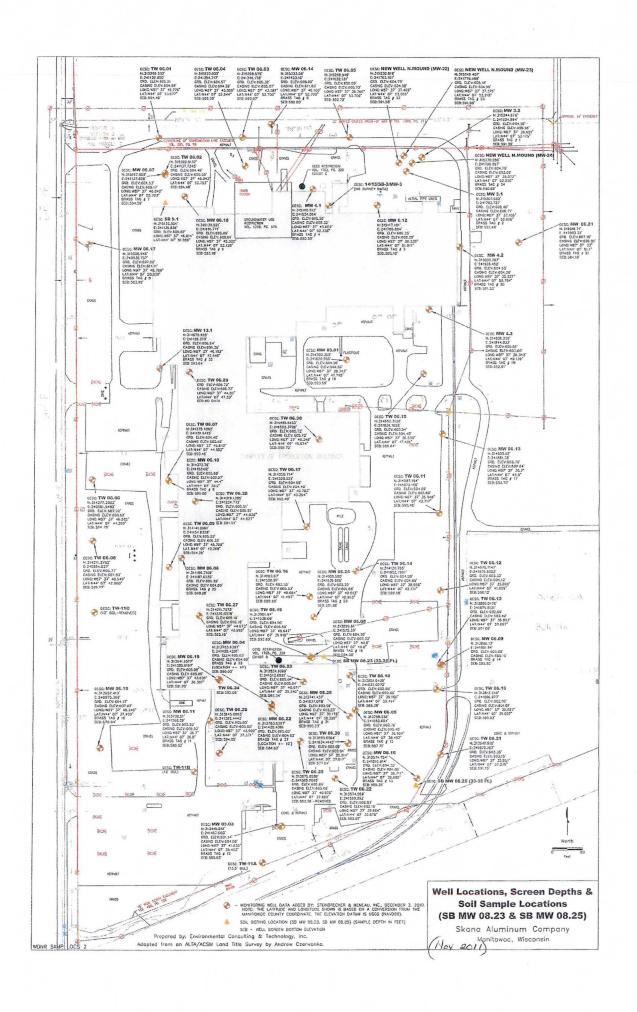
# **EXHIBIT A**

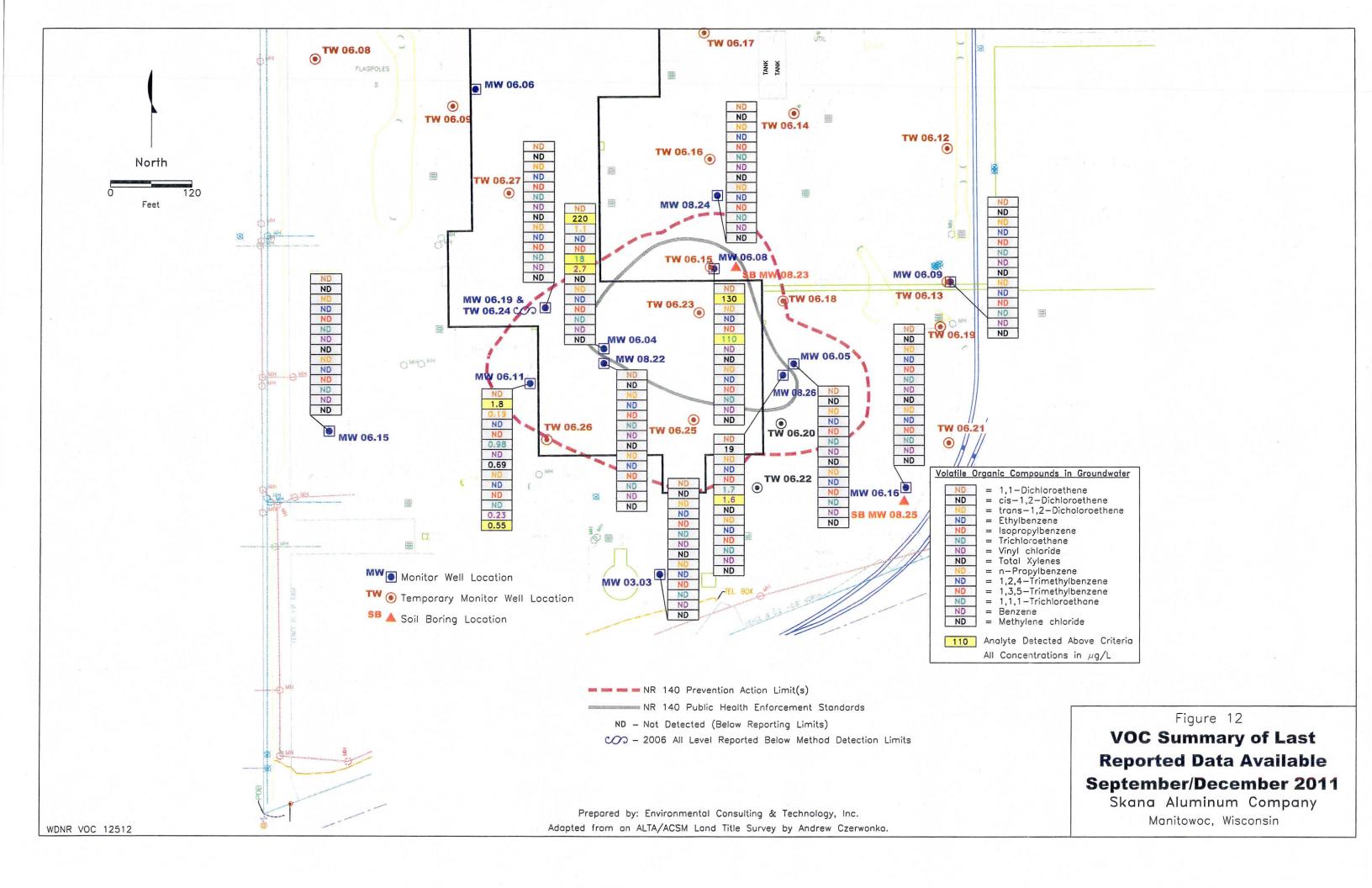
Well Locations, Screen Depths & Soil Sample Locations

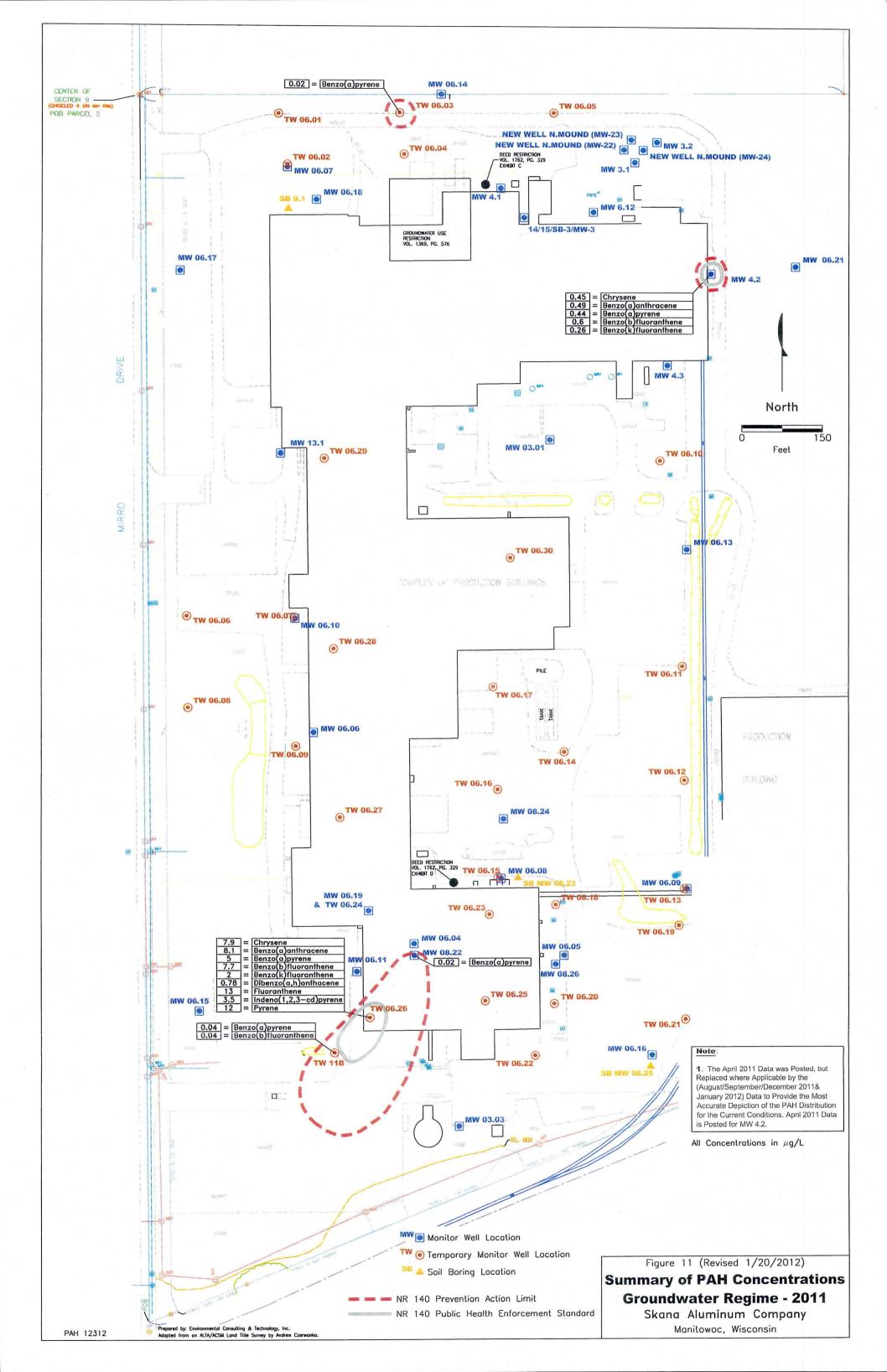
VOC summary of Last Reported Data Available

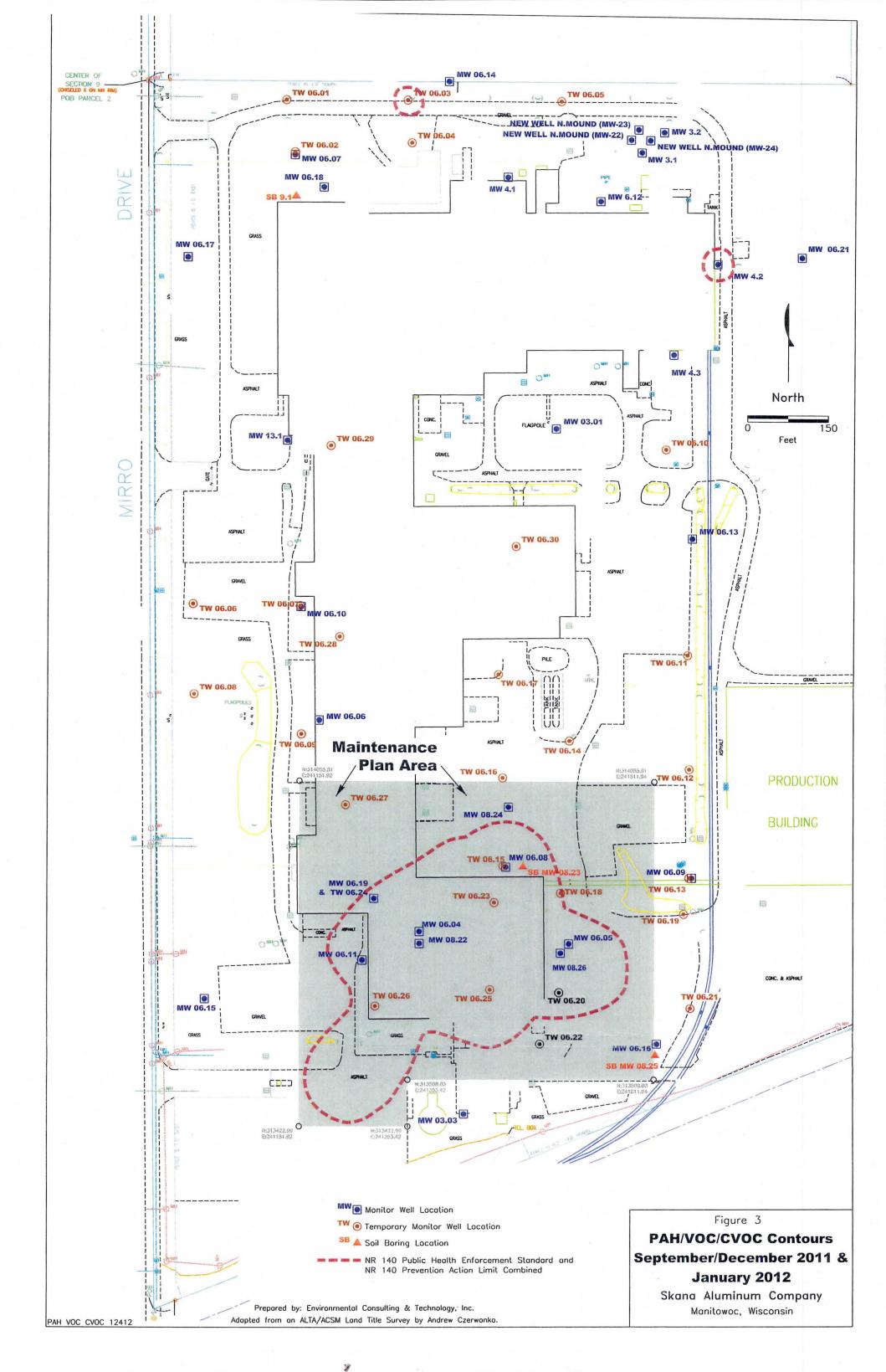
Summary of PAH Concentrations Groundwater Regime 2011

PAH/VOC/CVOC Contour September/December 2011 & January 2012









# **EXHIBIT B**

Inspection Log



# **INSPECTION LOG**

|                                                                     |                                     |       |                | Date: / /20                                                                                                                  |                                       |
|---------------------------------------------------------------------|-------------------------------------|-------|----------------|------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| SKANA ALUMINUM<br>2009 Morro Drive<br>Manitowoc, Wisco<br>INSPECTOR |                                     | W     | I DNR En       | VLPE #06-36-556282  avironmental Repair Activity # 02-36-544601/02-36-550138  Facility ID# 436106110  Concrete - Building SC |                                       |
| NAME:                                                               | (May Attach Business C              |       |                | Asphalt - Exterior Building 5C                                                                                               |                                       |
|                                                                     | ON and MAINTENANC<br>eral Area      | E LOG |                | Item No.#  Condition of Surface                                                                                              | Τ                                     |
| Interior/Exterior                                                   | Location Marked w/Paint<br>Yes / No | Good  | Need<br>Repair | Describe Condition (crack/void/settling,)                                                                                    | New or Old<br>Condition<br>(location) |
|                                                                     |                                     |       |                |                                                                                                                              |                                       |
| Describe Location:                                                  | •                                   |       |                |                                                                                                                              |                                       |
| Recommended Repair:                                                 | 33.6.10                             |       |                |                                                                                                                              |                                       |
| Date Repair was Condu                                               | cted: / / 20                        |       |                | Name Documenting Repair Completed:                                                                                           |                                       |
| Barrier INSPECTI                                                    | ON and MAINTENANC                   | E LOG |                | Item No.#                                                                                                                    |                                       |
| Gen                                                                 | eral Area                           |       |                | Condition of Surface                                                                                                         | New or Old                            |
| Interior/Exterior                                                   | Location Marked w/Paint<br>Yes / No | Good  | Need<br>Repair | Describe Condition (crack/void/settling,)                                                                                    | Condition<br>(location)               |
|                                                                     |                                     |       |                |                                                                                                                              |                                       |
|                                                                     |                                     |       |                |                                                                                                                              |                                       |
| Describe Location:                                                  |                                     |       |                |                                                                                                                              |                                       |
| Recommended Repair:                                                 |                                     |       |                |                                                                                                                              |                                       |
| Date Repair was Condu                                               | cted: / / 20                        |       |                | Name Documenting Repair Completed:                                                                                           |                                       |
| Barrier INSPECTI                                                    | ON and MAINTENANC                   | E LOG |                | Item No.#                                                                                                                    |                                       |
| Gen                                                                 | eral Area                           |       |                | Condition of Surface                                                                                                         | New or Old                            |
| Interior/Exterior                                                   | Location Marked w/Paint<br>Yes / No | Good  | Need<br>Repair | Describe Condition (crack/void/settling,)                                                                                    | Condition<br>(location)               |
|                                                                     |                                     |       |                |                                                                                                                              |                                       |
|                                                                     |                                     |       |                |                                                                                                                              |                                       |
| Describe Location:                                                  |                                     |       |                |                                                                                                                              |                                       |
| Recommended Repair:                                                 |                                     |       |                |                                                                                                                              |                                       |
| Date Repair was Condu                                               | cted: / / 20                        |       |                | Name Documenting Repair Completed:                                                                                           |                                       |



# **INSPECTION LOG**

| The state of the s | <b>观题</b> 5                                                                                                      | Date: | / /20                   |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-------|-------------------------|--|
| SKANA ALUMINUM COMPANY<br>2009 Morro Drive<br>Manitowoc, Wisconsin S4221                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | VLPE #06-36-556282<br>WI DNR Environmental Repair Activity # 02-36-544601/02-36-550138<br>Facility ID# 436106110 | 2410. | , , , , ,               |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Condition At Time of Inspection                                                                                  | Repai | r Conducted (if needed) |  |
| ítem No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                  |       |                         |  |
| f subcontractor used for repairs (attach Invoice)<br>VI DNR Approval Required (attach Approval Letter)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                  |       |                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                  |       |                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Condition At Time of Inspection                                                                                  | Repai | r Conducted (if needed) |  |
| Item No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                  |       |                         |  |
| f subcontractor used for repairs (attach Invoice)<br>VI DNR Approval Required (attach Approval Letter)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                  |       |                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                  |       |                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Condition At Time of Inspection                                                                                  | Repai | r Conducted (if needed) |  |
| ltem No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                  |       |                         |  |
| f subcontractor used for repairs (attach Invoice)<br>VI DNR Approval Required (attach Approval Letter)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                  |       |                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                  |       |                         |  |

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
Northeast Region Headquarters
2984 Shawano Avenue
Green Bay WI 54313-6727

Scott Walker, Governor Cathy Stepp, Secretary Jean Romback-Bartels, Regional Director Telephone 920-662-5100 FAX 920-662-5413 TTY Access via relay - 711



December 6, 2011

VPLE #06-36-556282

(sent via email to Ken.Kazmierczak@skanaaluminum.com)

Kenneth Kazmierczak CFO, VP Administration Skana Aluminum Company PO Box 1477 Manitowoc, WI 54220

Subject:

Conditional Closure Decision with Requirements to Achieve Final Closure

Skana Aluminum (K&V) Sumps (chlorinated solvents) Building 5C at 2009 Mirro Drive, Manitowoc Wisconsin WDNR Environmental Repair Activity # 02-36-544601

Dear Mr. Kazmierczak:

On December 2, 2011, the Northeast Region Closure Committee reviewed your request for closure of the case described above. The Committee reviews environmental remediation cases for compliance with state rules and statutes to maintain consistency in the closure of these cases. After careful review of the closure request, the Closure Committee has determined that the chlorinated solvent contamination on the site from the historic use of trichloroethylene solvents in the Building 5C vicinity appears to have been investigated for soil, vapor and groundwater conditions to the extent practicable under site conditions.

You should be aware that contaminated soil, vapor, and groundwater remain under and near building 5C. The building is acting as a "cap" to prevent infiltration of water that could cause spreading of the currently static contaminant plume, therefore the "cap" has to be maintained. The sumps in building 5C are artificially lowering the water table otherwise the contaminated soil would likely be saturated. Anyone planning any future excavation activity in the building 5C vicinity should know that contaminated soil and groundwater may be encountered and appropriate action should be taken. Regarding the vapors below the building, the Department has reviewed the sub slab vapor sampling that was completed and concurs with your consultant that no additional action is need to characterize or mitigate the vapors in building 5C.

A site specific closure letter will be written once the conditions in this letter are met. Furthermore, since you are enrolled in Wisconsin's Voluntary Party Liability Exemption Process, a Certificate of Completion (COC) will be issued for the Property after all contamination cases on the property are closed. As we discussed on the phone on November 28<sup>th</sup>, Skana will be relying on natural attenuation to restore groundwater quality as part of this Closure. Because you will receive a COC prior to achieving compliance with the groundwater enforcement standards, Skana will be paying an environmental insurance fee. This insurance fee is in addition to the required VPLE application and oversight fees.

The chlorinated solvents case in Building 5C has been addressed to Department standards in accordance with s. NR 726.05, Wis. Adm. Code and will be closed if the following conditions are satisfied:



# MONITORING WELL ABANDONMENT

The monitoring wells at the site must be properly abandoned in accordance with ch. NR 141, Wis. Adm. Code. Documentation of well abandonment must be submitted to me on Form 3300-005, found at <a href="http://dnr.wi.gov/org/water/dwg/gw/">http://dnr.wi.gov/org/water/dwg/gw/</a> or provided by the Department of Natural Resources. Any remaining purge water and investigative wastes generated as part of the site investigation must be disposed of or treated in accordance with Department of Natural Resources' rules. Please confirm in the cover letter submitted with the abandonment forms that all remaining purge waters and investigative wastes have been properly addressed.

### **BUILDING "CAP" MAINTENANCE PLAN**

This case will be closed with ch. NR 140 Wis. Adm. Code groundwater Enforcement Standard exceedances and will require a "cap" maintenance plan for Building 5C and the asphalt pavement surrounding it. The building is acting as a cap to prevent infiltration of water that could cause migration of the contaminant plume, therefore the "cap" has to be maintained. Please submit a Maintenance Plan that describes how you intend to maintain the existing cap (facility building) at the site. The "cap" covers the remaining residual soil and groundwater contamination at the site and allows the site to be closed despite exceedances of standards. The Cap is to be maintained in accordance with a plan prepared and submitted to the Department pursuant to s. NR 724.13(2), Wis. Adm. Code. An example plan can be found at http://dnr.wi.gov/org/aw/rr/technical/maintenance-plan.pdf

When the above conditions have been satisfied, please submit the appropriate documentation to verify that applicable conditions have been met, and your case will be closed. Your site will be listed on the DNR's Remediation and Redevelopment GIS Registry. Information that was submitted with your closure request application will be included on the GIS Registry. To review the site on the GIS Registry web page, visit the RR Sites Map page at: <a href="http://dnr.wi.gov/org/aw/rr/gis/index.htm">http://dnr.wi.gov/org/aw/rr/gis/index.htm</a>.

We appreciate your efforts to restore the environment at this site. If you have any questions regarding this letter, please contact me at 920-662-5165.

Sincerely,

Annette Weissbach

Hydrogeologist

Remediation & Redevelopment Program

e-cc: James Bolger – JBI Inc., jim@jbidata.com

Michael Hebert - Environmental Consulting & Technology, Inc., MHebert@ectinc.com

Michael Prager - RR/5

BRRTS #: 02-36-544601 FID #: 436106110

**SITE NAME:** SKANA (K&V) (SUMPS)

# **Associated VPLE Site**

To view the Certificate of Completion (COC) for this site click on the link below:

BRRTS # SITE NAME

06-36-556282 <u>SKANA ALUMINUM CO (VPLE)</u>

# State Bar of Wisconsin Form 3-2003 QUIT CLAIM DEED

DOC# 1081280

QUIT CLAIM DEED

\*Type name below signatures.

Document Name

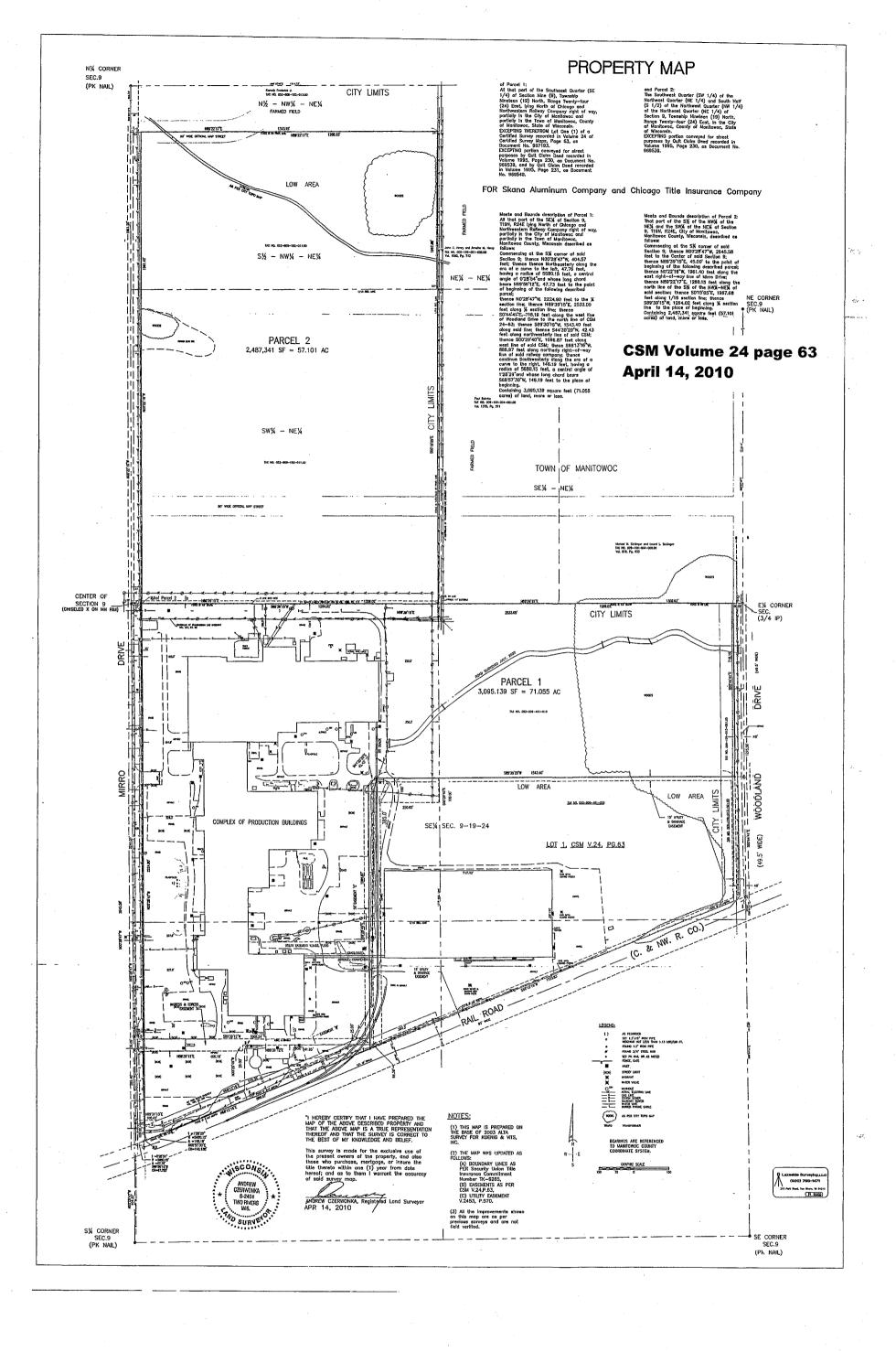


FORM NO. 3-2003

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| THIS DEED, made between Michael S. Polsky as Inc.                                                                                                                           | Receiver fo       | or Koenig & Vits,         |                                                     |                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|---------------------------|-----------------------------------------------------|-----------------------------------------|
|                                                                                                                                                                             |                   |                           |                                                     |                                         |
| ("Grantor," whether one or more), and Skana Alum corporation                                                                                                                | inum Comp         | oany, a Wisconsin         | STATE OF WI                                         | MTWC CO                                 |
| Corporation                                                                                                                                                                 |                   |                           | PRESTON JONES<br>RECEIVED FO                        | REG/DEEDS                               |
| ("Grantee," whether one or more).                                                                                                                                           |                   |                           | 04/30/2010 3                                        |                                         |
| Grantor quit claims to Grantee the following descri<br>rents, profits, fixtures and other appurtenant interes                                                               | ts, in <u>Man</u> | itowoc                    | Recording Area 13+6                                 |                                         |
| County, State of Wisconsin ("Property") (if more space                                                                                                                      | is needed, p      | lease attach addendum):   | Name and Return Address 77                          |                                         |
|                                                                                                                                                                             |                   |                           | Godfrey & Kahr S. G.                                |                                         |
|                                                                                                                                                                             |                   |                           | TOON, Water Stylet<br>Milwen Kee, WI 53/            | 102/3590                                |
| TRANS                                                                                                                                                                       | FER               |                           | 052-809-401-010.00, 052-                            |                                         |
| \$ 607                                                                                                                                                                      | <u>5.∞</u>        | ,                         | 052-809-103-011.00, 009-<br>Parcel Identification N |                                         |
|                                                                                                                                                                             | FEG               |                           | This is not homestead (is) (is not)                 | • •                                     |
| See legal description attached.                                                                                                                                             |                   |                           |                                                     | 1 6 7                                   |
|                                                                                                                                                                             |                   |                           |                                                     | W-1                                     |
|                                                                                                                                                                             |                   |                           | •                                                   | •                                       |
| Dated April 14 ,2010.                                                                                                                                                       | (SEAL             | ) MEI                     | s Receiver for Koenig & V                           | (SEAL)                                  |
| *                                                                                                                                                                           | <del></del>       | *Michael S. Volsky,       | Receiver                                            |                                         |
|                                                                                                                                                                             | (SEAL             | )                         |                                                     | (SEAL)                                  |
| *                                                                                                                                                                           | <del></del>       | *                         | · · · · · · · · · · · · · · · · · · ·               | *************************************** |
| AUTHENTICATION Signature(s)                                                                                                                                                 |                   | AC<br>STATE OF Wisconsi   | KNOWLEDGMENT                                        |                                         |
| authenticated on                                                                                                                                                            |                   | Milwaukee                 | ) ss<br>COUNTY )                                    | <b>.</b>                                |
|                                                                                                                                                                             | •                 | Personally came before    | reme on April 14                                    | , 2010 ,                                |
| *                                                                                                                                                                           |                   | the above-named M         | ichael S. Polsky as Receive                         | er for Koenig &                         |
| * TITLE: MEMBER STATE BAR OF WISCONSIN (If not, authorized by Wis. Stat. § 706.06) THIS INSTRUMENT DRAFTED BY: Michael R. Stein, Esq. Beck, Chaet, Bamberger & Polsky, S.C. | A 7 BEAN          | Vits, Inc.                | the percon(s) who every                             | ed the foregoing                        |
| authorized by Wis. Stat. § 706.06)                                                                                                                                          |                   | instrument and ackno      | wledged the same.                                   | ed the loregoing                        |
|                                                                                                                                                                             | NOTARY            | [ally                     | 1 Deyel                                             |                                         |
| THIS INSTRUMENT DRAFTED BY: Michael R. Stein, Esq.                                                                                                                          | PUBLIC            | * Cathy J. Beyer          | f Winner                                            |                                         |
| Beck, Chaet, Bamberger & Polsky, S.C.                                                                                                                                       | •                 | : Mosary Public, State of | Wisconsip/                                          | er 16, 2012                             |
| (Signatures may be said                                                                                                                                                     | hentitaled ox     | acknowledged. Both are no | t necessary.)                                       | )                                       |
| NOTE: THIS IS A STANDARD FORM. ANY                                                                                                                                          | MUDDINEAT         | TION TO THIS FORM SHO     | OULD BE CLEARLY IDENTIFI                            | ED.                                     |

©2003 STATE BAR OF WISCONSIN



#### SIGNED STATEMENT / CERTIFICATION

The purpose of this certification is to verify that the provided legal description for each of the contaminated properties has been submitted. The signatory is not required to attest to the accuracy of the attached legal description.

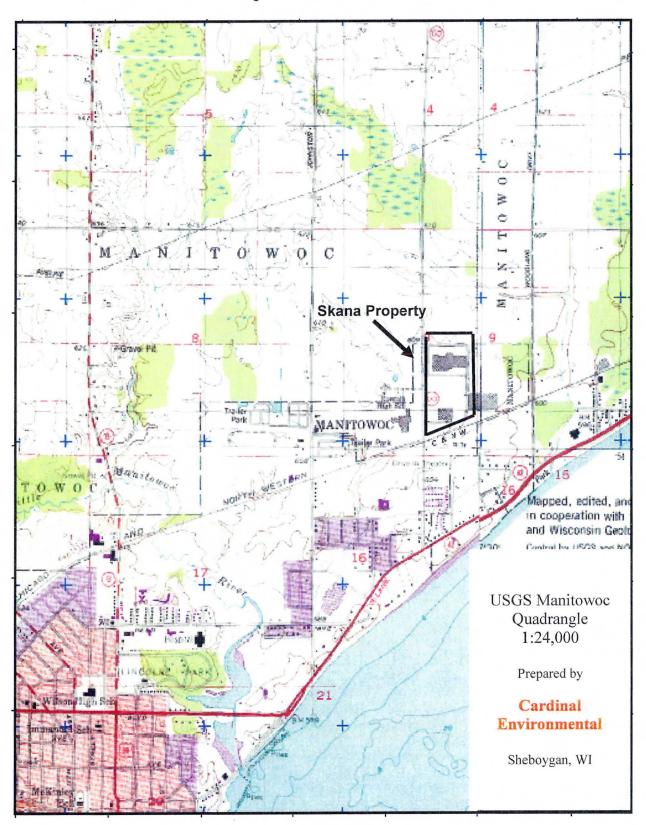
I, Kenneth J. Kazmierczak, Agent of or Responsible Party (RP) for the site investigation and remediation at the Skana Aluminum Company property located at 2009 Mirro Drive, Manitowoc, Wisconsin (WDNR BRRTS: #02-36-544601, #02-36-550138, and #02-36-555268), do hereby certify that to the best of my knowledge the legal description has been attached for each property that is within, or partially within, the contaminant site boundary.

Signature of RP or Agent

CFO



Figure 1 – Skana Location



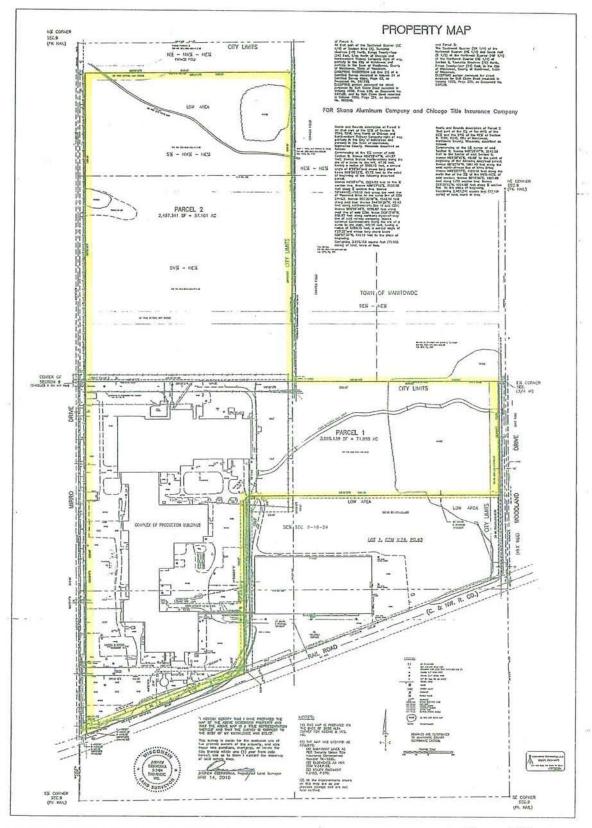
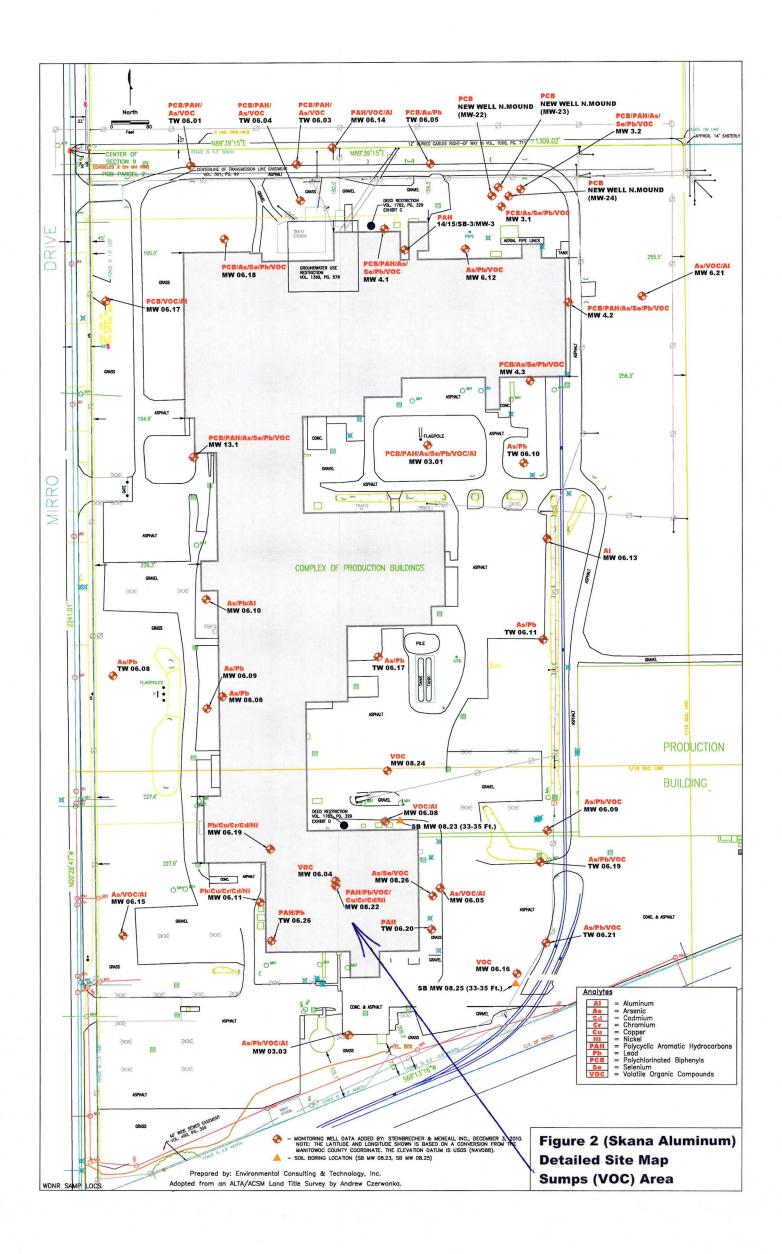
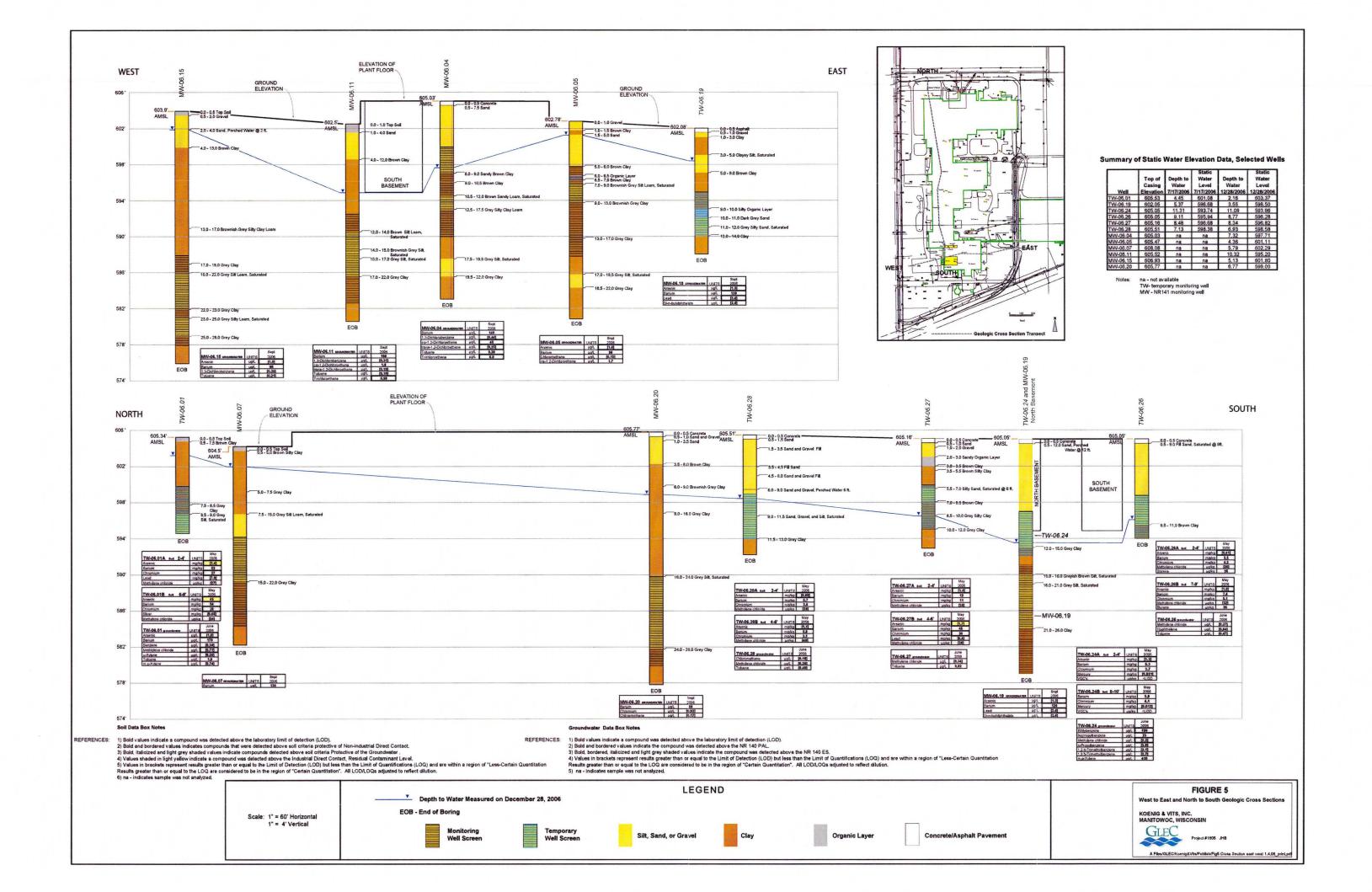
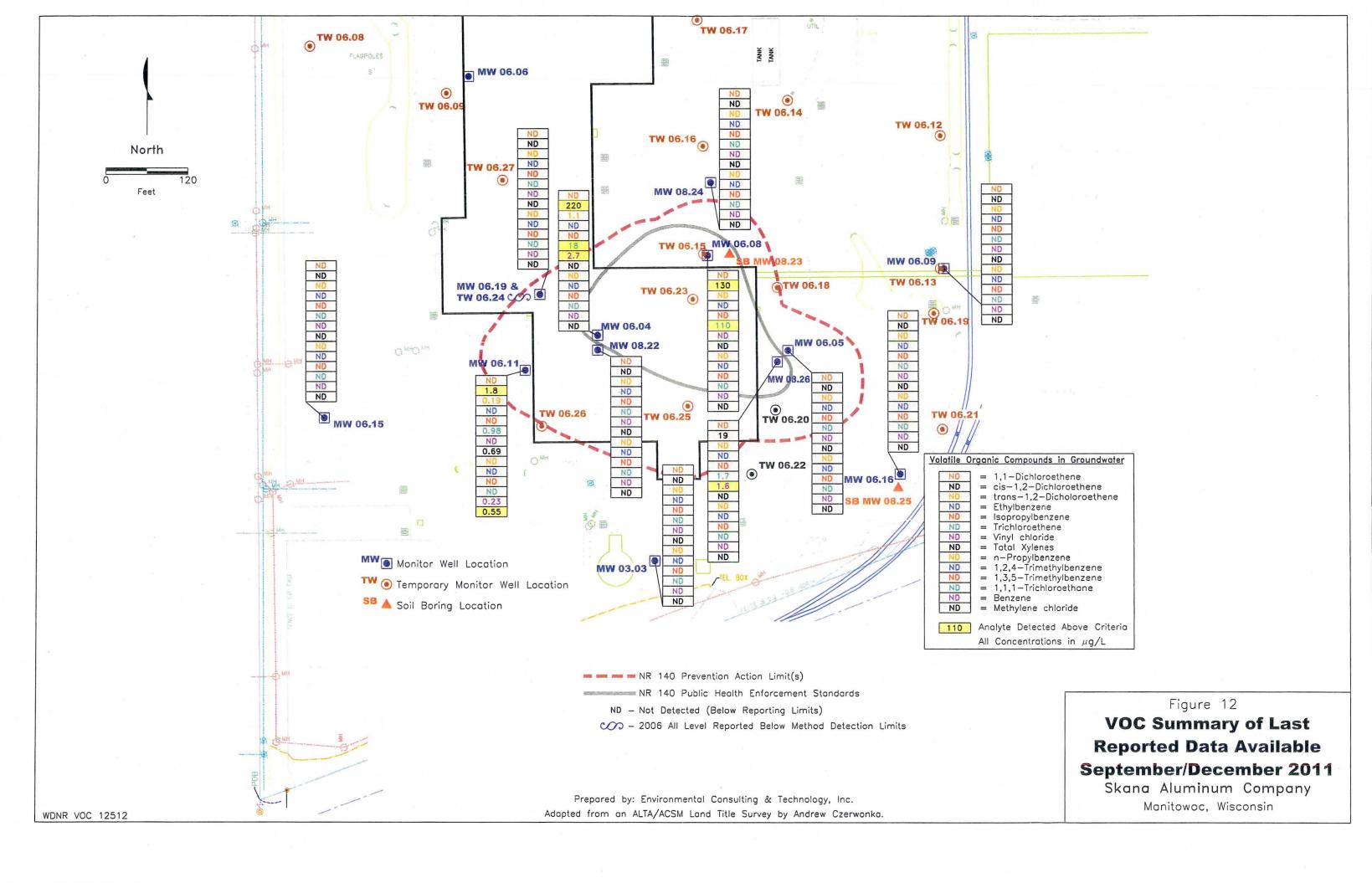


Figure 2 - Property Map of Skana







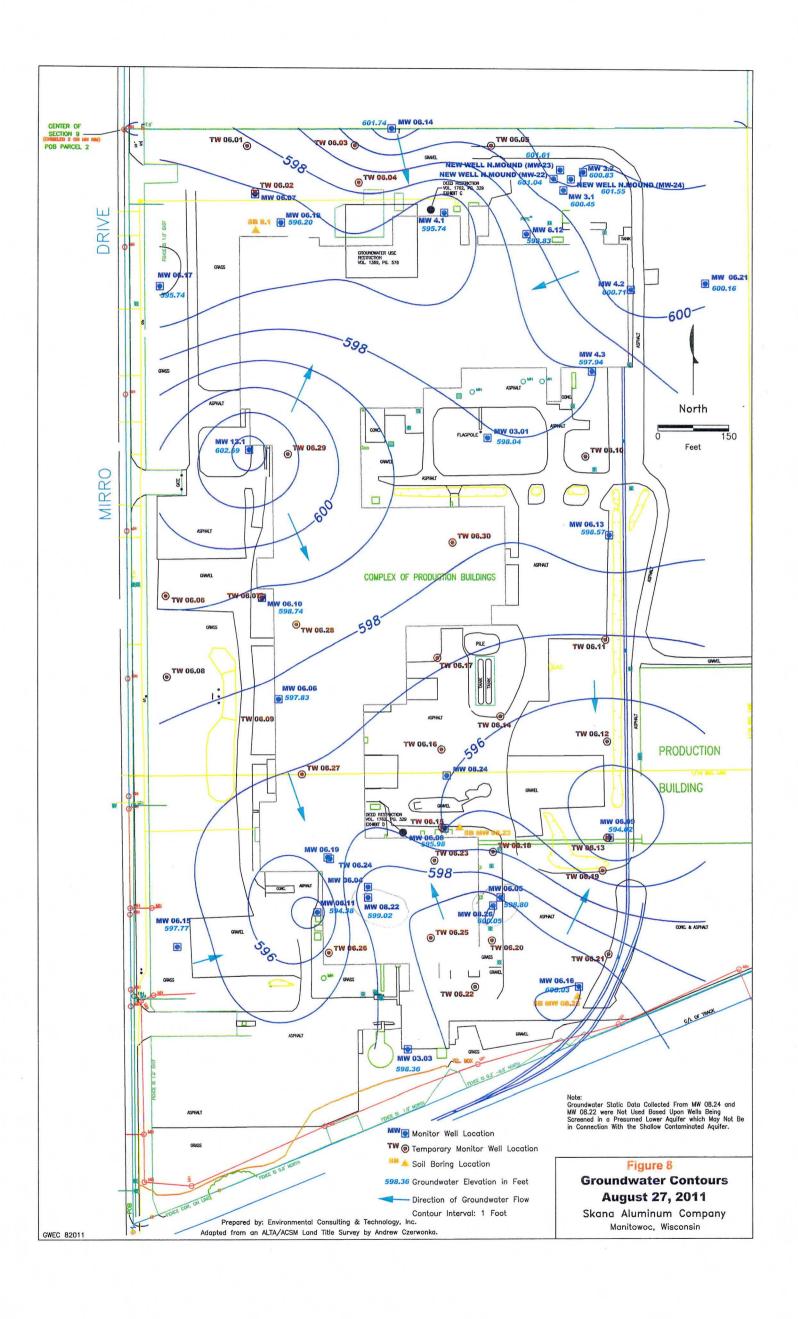


Table 1 – Wells Sampled to Characterize the Sump Area for VOC's

| <u> </u>           |                                                                                              | ·                                  |                                                  |
|--------------------|----------------------------------------------------------------------------------------------|------------------------------------|--------------------------------------------------|
| Well /<br>Location | Results<br>Round 1                                                                           | Results<br>Round 2                 | Results<br>Round 3                               |
| MW-03.03           | VOC = ND<br>Phthalates = ND                                                                  | VOC =ND<br>Phthalates = ND         |                                                  |
| MW-06.04           | VOC = ND                                                                                     | Cis 1,2 DCE = 190<br>TCE = 25      | VC=2.7<br>Cis-1,2-DCE=220<br>TCE=18              |
| MW-06.05           | VOC = ND                                                                                     | VOC = ND                           |                                                  |
| MW-06.08           | 1,1 -DCE = 1.6<br>Cis-1,2 DCE = 340<br>Trans-1,2 DCE = 18<br>TCE = 170<br>Vinyl Chloride = 6 | Cis-1,2 DCE = 130<br>TCE = 110     |                                                  |
| MW-06.16           | VOC = ND                                                                                     | VOC = ND                           | Pb=<1                                            |
| MW-08.22           | VOC's=ND                                                                                     | VOC's = ND<br>Benzo(a)pyrene =0.02 |                                                  |
| MW-08.24           | VOC = ND                                                                                     | VOC = ND                           |                                                  |
| MW-08.26           | Cis-1,2-DCE=66<br>Trans-1,2-DCE=1.9<br>TCE=3.4<br>Vinyl Chloride= 2.5                        | Cis-1,2-DCE = 7.8<br>TCE = 0.8     | Cis-1,2-DCE=19<br>TCE=1.7<br>Vinyl Chloride= 1.6 |

| Well ID    | Northing    | Easting     | Top of Casing<br>Elevation | Ground Elevation | Longitude        | Latitude         | Static Water Level (TOC) | Groundwater Elevation | ALTA/ACSM Land Title Survey by Andrew Czerwonka     |
|------------|-------------|-------------|----------------------------|------------------|------------------|------------------|--------------------------|-----------------------|-----------------------------------------------------|
| MW - 03.03 | 313445.641' | 241457.603' | 604.08                     | 601.14           | W87° 37' 41.635" | N44° 07' 35.403" | 5.72                     | 598.36                | Static Water Level Date: August 27,2011 (1030-1230) |

| Installation (Year): | 2003             |
|----------------------|------------------|
| Installed by:        | JBI/Quantum Env. |

### Only Detected Concentrations Exceeding NR 140 Preventive Action Limits (PAL) are Reported

"Analyzed - RL" Indicates No Parameters Above Reported LOD/Reporting Limit

NR 140 Enforcement Standard (ES)

### **Summary of Analytical Data**

| Sample         | Lab     | Me       | tals          | PAL | ES  | PCB'    | 's        | PAL  | ES  | VOC's              |         | PAL | ES   | DRO, SVOC's & PAH's |              | PAL  | ES  |
|----------------|---------|----------|---------------|-----|-----|---------|-----------|------|-----|--------------------|---------|-----|------|---------------------|--------------|------|-----|
| Analysis Date  | Lab     | Metal    | μ\L           | μ\L | μ\L | Aroclor | μ\L       | μ\L  | μ\L | Compound           | μ\L     | μ\L | μ\L  | Compound            | μ\L          | μ\L  | μ\L |
|                |         |          |               |     |     |         |           |      |     | Benzene            | 0.76    | 0.5 | 5    | Analyzed for PAH's  | Extended     | List |     |
|                |         |          |               |     |     |         |           |      |     | sec-Butlbenzene    | 0.54    |     |      | Diethylphthalate    | 17           |      |     |
|                |         |          |               |     |     |         |           |      |     | Ethybenzene        | 0.46    | 140 | 700  |                     |              |      |     |
|                |         |          |               |     |     |         |           |      |     | p-Isopropyltoluene | 0.89    |     |      |                     |              |      |     |
| 9/25/2003      | Quantum |          | Not Analyzed  |     |     |         | Not Analy | yzed |     | Naphthalene        | 1.2     | 10  | 100  |                     |              |      |     |
|                |         |          |               |     |     |         |           | 7.   |     | Xylene             | 0.56    | 400 | 2000 |                     |              |      |     |
|                |         |          |               |     |     |         |           |      |     | Toluene            | 0.66    | 160 | 800  |                     |              |      |     |
|                |         |          |               |     |     |         |           |      |     | 1.2.4-TMB          | 2       | 96  | 480  |                     |              |      |     |
|                |         |          |               |     |     |         |           |      |     | MTBE               | 37      | 12  | 60   |                     |              |      |     |
| 6/5/2006       |         |          | Not Analyzed  |     |     |         | Not Anal  | yzed |     | Not An             | alyzed  |     |      | Not Anal            | yzed         |      |     |
|                |         |          | Analyzed - NF | 3   |     |         |           |      |     | Toluene            | 0.18    | 160 | 800  |                     |              |      |     |
| 9/29/2006      |         | Arsenic  | 1.1           | 1   | 10  |         | Not Anal  | yzed |     |                    |         |     |      | Not Anal            | yzed         |      |     |
|                |         | Barium   | 70            | 1.5 | 15  |         |           |      |     |                    |         |     |      |                     |              |      |     |
|                |         | Arsenic  | <5            | 1   | 10  |         |           |      |     |                    |         |     |      |                     |              |      |     |
| 10/24/2010     | BV      | Lead     | <3            | 1.5 | 15  |         | Not Anal  | yzed |     | Analyze            | ed - KL |     |      | Analyzed for Pht    | halates - Ri | L    |     |
|                |         | Aluminum | 520           | 20  | 200 |         | -         |      |     |                    |         |     |      |                     |              |      |     |
| 4/5/2011       | BV      | Arsenic  | <5            | 1   | 10  |         | Not Anal  | yzed |     | Analyze            | ed - RL |     |      | Analyzed for Phi    | halates - R  | L    |     |
|                |         | Lead     | <3            | 1.5 | 15  |         |           |      |     |                    |         |     |      |                     |              |      |     |
|                |         | Aluminum | 14            | 20  | 200 |         |           |      |     |                    |         |     |      |                     |              |      |     |
| September 2011 | NLS     | Arsenic  | 7.8           | 1   | 10  |         | Not Anal  | yzed |     | Not An             | nalyzed |     |      | Not Anal            | yzed         |      |     |
|                |         | Lead     | <1            | 1.5 | 15  |         |           |      |     |                    |         |     |      |                     |              |      |     |

#### Narrative:

This well was installed during 2003 Initial ESA for Koenig & Vits (MW-3). Renamed MW-03.03. The sampling done in October 2010 and April 2011 (Rounds 1 & 2) showed non-detectable concentrations for lead and arsenic; aluminum was non-detectable in April. However, the DL's established by Bureau Veritas' QA/QC system were above the PAL for the three metals. BV reviewed the QC data in July but was unable to adjust the DL for lead or arsenic. This well was sampled in August for aluminum, lead and arsenic (Filtered Levels Posted 9/2011); methods used achieved legitimate detection levels at or below the state PALs.

| Well ID    | Northing     | Easting     | Top of Casing<br>Elevation | <b>Ground Elevation</b> | Longitude | Latitude | Static Water Level (TOC) | Groundwater Elevation | ALTA/ACSM Land Title Survey by Andrew Czerwonka     |
|------------|--------------|-------------|----------------------------|-------------------------|-----------|----------|--------------------------|-----------------------|-----------------------------------------------------|
| MW - 06.04 | 313763.6397' | 241429.4291 | 604.6                      | 605.03                  |           |          | 5.58                     | 599.02                | Static Water Level Date: August 27,2011 (1030-1230) |

| Installation (Year): | 2006                         |
|----------------------|------------------------------|
| Installed by:        | Envirotech Contracting - NLS |

### Only Detected Concentrations Exceeding NR 140 Preventive Action Limits (PAL) are Reported

"Analyzed - RL" Indicates No Parameters Above Reported LOD/Reporting Limit

NR 140 Enforcement Standard (ES)

### **Summary of Analytical Data**

| Sample         | Lab    | Me      | etals         | PAL | ES   | PCB     | s's     |        | PAL | ES  | VOC's                  |      | PAL  | ES   | DRO, SVOC's & PAH's PAL ES |
|----------------|--------|---------|---------------|-----|------|---------|---------|--------|-----|-----|------------------------|------|------|------|----------------------------|
| Analysis Date  | Lab    | Metal   | μ\L           | μ\L | μ\L  | Aroclor | μ\      | L      | μ\L | μ\L | Compound               | μ\L  | μ\L  | μ\L  | Compound μ\L μ\L μ\I       |
|                |        | Arsenic | 7.3           | 1   | 10   |         |         |        |     |     | Ethybenzene            | 170  | 140  | 700  |                            |
|                |        |         |               |     |      |         |         |        |     |     | Isopropylbenzene       | 22   |      |      |                            |
| 6/5/2006       | NLS    |         |               |     |      |         | Not Ana | alyzed |     |     | n-propylbenzene        | 4    |      |      | Not Analyzed               |
|                |        |         |               |     |      |         |         |        |     |     | ТМВ                    | 7    | 96   | 480  |                            |
|                |        |         |               |     |      |         |         |        |     |     | Xylene                 | 0.56 | 400  | 2000 |                            |
|                |        | Barium  | 140           | 400 | 2000 |         |         |        |     |     | cis-1,2-Dichloroethene | 45   | 7    | 70   |                            |
|                | NLS    |         |               |     |      |         |         |        |     |     | TCE                    | 6    | 0.5  | 5    |                            |
| 9/29/2006      | INLS   |         |               |     | 1    |         | Not Ana | alyzed |     |     | 1,3-DCB                | 0.44 |      |      | Analyzed - RL              |
|                |        |         |               |     | 1    |         |         |        |     |     | Trans-1,2- DCE         | 0.25 | 20   | 100  |                            |
|                |        |         |               |     |      |         |         |        |     |     | Toluene                | 0.3  | 160  | 800  |                            |
| 10/24/2010     | BV     |         | Not Analyzed  | 1   |      |         | Not Ana | haod   |     |     | cis-1,2-Dichloroethene | 170  | 7    | 70   | Not Analyzed               |
| 10/24/2010     | DV     |         | NOT Analyzed  | 1   |      |         | NOT ATT | aiyzeu |     |     | TCE                    | 20   | 0.5  | 5    | Not Analyzed               |
| 4/5/2011       | BV     |         | Not Analyzed  | 4   |      |         | Not Ana | alvzed |     |     | cis-1,2-Dichloroethene | 190  | 7    | 70   | Not Analyzed               |
| 4/3/2011       |        |         | 140t Anaryzet | •   |      |         | NOCALI  | aryzeu |     |     | TCE                    | 25   | 0.5  | 5    | Not Analyzed               |
|                |        | Arsenic | 1.4           | 1   | 10   |         |         |        |     |     | Vinyl chloride         | 2.7  | 0.02 | 0.2  |                            |
| September 2011 | BV/NLS |         |               |     |      |         | Not Ana | alyzed |     |     | cis-1,2-Dichloroethene | 220  | 7    | 70   | Not Analyzed               |
|                |        |         |               |     |      |         |         |        |     |     | TCE                    | 18   | 0.5  | 5    |                            |

#### Narrative

This well was installed during the Phase 2 ESA for Koenig & Vits. The well was constructed as a permanent NR 140 well, labeled MW-06.04, and was sampled in September 2006. The results for metals were all ND; aresenic was reported as ND with an LOD of 0.57 ug/L and and LOQ of 2.0 ug/L; lead was reported as ND with with an LOD of 1.3 ug/L and a LOQ of 4.3 ug/l. Cis-1,2-dichlorothene was detected at 45 ug/L. The well was resampled in October 2010, and again in April 2011, as part of the first and second round of sampling planned for the site under the VPLE program. Cis-1,2-dichlorothene was detected at 45 ug/L and trichloroethylene was detected at 6 ug/L. The well was resampled in October 2010, and again in April 2010. Cis-1,2-dichlorothene and trichloroethylene were detected in both samples, as shown in the table above. No further sampling for VOC's is proposed. The well will be included in the attempt during the final round of sampling to better define the extent of aluminum contamination throughout the site. The sampling done in October 2010 and April 2011 (Rounds 1 & 2) showed non-detectable concentrations for lead and arsenic; aluminum was non-detectable in April. However, the DL's established by Bureau Veritas' QA/QC system were above the PAL for the three metals. BV reviewed the QC data in July and was able to adjust the DL for lead to 1.0 ppb, but the DL for arsenic could not be adjusted. This well was sampled in September for arsenic (Filtered Data Posted 9/2011) and VOC; methods used to achieved legitimate detection levels at or below the state PALs.

| Well ID    | Northing    | Easting     | Top of Casing<br>Elevation | Ground<br>Elevation | Longitude        | Latitude         | Static Water Level (TOC) | Groundwater Elevation | ALTA/ACSM Land Title Survey by Andrew Czerwonka     |
|------------|-------------|-------------|----------------------------|---------------------|------------------|------------------|--------------------------|-----------------------|-----------------------------------------------------|
| MW - 06.05 | 313758.236' | 241652.684' | 605.4                      | 602.76              | W87° 37' 38.964" | N44° 07' 38.492" | 6.6                      | 598.8                 | Static Water Level Date: August 27,2011 (1030-1230) |

| Installation (Year): | 2006                         |  |
|----------------------|------------------------------|--|
| Installed by:        | Envirotech Contracting - NLS |  |

### Only Detected Concentrations Exceeding NR 140 Preventive Action Limits (PAL) are Reported

"Analyzed - RL" Indicates No Parameters Above Reported LOD/Reporting Limit

NR 140 Enforcement Standard (ES)

### **Summary of Analytical Data**

| Sample         | Lab    | Me       | tals | PAL | ES   | PCB's        | PAL  | ES  | VOC's              |      | PAL | ES  | DRO, SVOC's & PAH's | PAL | ES  |
|----------------|--------|----------|------|-----|------|--------------|------|-----|--------------------|------|-----|-----|---------------------|-----|-----|
| Analysis Date  | Lab    | Metal    | μ\L  | μ\L | μ\L  | Aroclor μ\L  | μ\L  | μ\L | Compound           | μ\L  | μ\L | μ\L | Compound µ\L        | μ\L | μ\L |
| 6/5/2006       | NLS    | Aesenic  | 3.5  | 1   | 10   |              |      |     | Ethybenzene        | 0.21 | 140 | 700 |                     |     |     |
|                |        | Lead     | 2.7  | 1.5 | 15   | Not Analyze  | ed   |     | Methylrnr chloride | 0.19 | 0.5 | 5   | Not Analyzed        |     |     |
|                |        | Barium   | 96   | 400 | 2000 |              |      |     | Toluene            | 0.3  | 160 | 800 |                     |     |     |
| 9/29/2006      | NLS    | Aesenic  | 1.4  | 1   | 10   | Not Analysis | . al |     | Not Apply          |      |     |     | Analysed DI         |     |     |
| 9/29/2006      | INLS   | Barium   | 86   | 400 | 2000 | Not Analyze  | ea   |     | Not Analy          | zea  |     |     | Analyzed - RL       |     |     |
| 10/24/2010     | BV     | Aesenic  | <5   | 1   | 10   | Not Analyze  | لد   |     | Analyzed           | DI   |     |     | Not Analyzed        |     |     |
| 10/24/2010     | bv     | Lead     | <3   | 1.5 | 15   | NOT Analyze  | eu   |     | Allalyzeu          | - KL |     |     | Not Analyzed        |     |     |
| 4/5/2011       | BV     | Aluminum | 120  | 20  | 200  | Not Analyze  | nd.  |     | Analyzed           | DI   |     |     | Not Analyzed        |     |     |
| 4/3/2011       | DV     | Aesenic  | <5   | 1   | 10   | NOT Analyze  | zu . |     | Allalyzeu          | - NL |     |     | Not Allalyzeu       |     |     |
|                |        | Lead     | <1   | 1.5 | 15   |              |      |     |                    |      |     |     |                     |     |     |
| September 2011 | BV/NLS | Aluminum | 10   | 40  | 200  | Not Analyze  | ed   |     | Not Analy          | zed  |     |     | Not Analyzed        |     |     |
|                |        | Aesenic  | 4.1  | 1   | 10   |              |      |     |                    |      |     |     |                     |     |     |

#### Narrative

This well was installed during the Phase 2 ESA for Koenig & Vits. The sampling done in October 2010 and April 2011 (Rounds 1 & 2) showed non-detectable concentrations for lead and arsenic; aluminum was non-detectable in April. However, the DL's established by Bureau Veritas' QA/QC system were above the PAL for the three metals. BV reviewed the QC data in July but was unable to adjust the DL for lead or arsenic (Filtered Data Posted 9/2011). This well was sampled in August for aluminum, lead and arsenic; methods used achieved legitimate detection levels at or below the state PALs.

| Well ID    | Northing   | Easting    | Top of Casing<br>Elevation | Ground<br>Elevation | Longitude      | Latitude       | Static Water Level (TOC) | Groundwater Elevation | ALTA/ACSM Land Title Survey by Andrew Czerwonka     |
|------------|------------|------------|----------------------------|---------------------|----------------|----------------|--------------------------|-----------------------|-----------------------------------------------------|
| MW - 06.08 | 313899.61' | 241535.33' | 607.33                     | 604.3               | W87° 37' 40.8" | N44° 07' 40.0" | 11.35                    | 595.98                | Static Water Level Date: August 27,2011 (1030-1230) |

| Installation (Year): | 2006                         |
|----------------------|------------------------------|
| Installed by:        | Envirotech Contracting - NLS |

### Only Detected Concentrations Exceeding NR 140 Preventive Action Limits (PAL) are Reported

"Analyzed - RL" Indicates No Parameters Above Reported LOD/Reporting Limit

NR 140 Enforcement Standard (ES)

## **Summary of Analytical Data**

| Sample         | Lab  | Me       | tals           | PAL | ES          | PCB          | 's           | PAL            | ES  | VOC's                  |        | PAL            | ES  | DRO, SVOC's & PAH's | PAL | ES  |
|----------------|------|----------|----------------|-----|-------------|--------------|--------------|----------------|-----|------------------------|--------|----------------|-----|---------------------|-----|-----|
| Analysis Date  | Lab  | Metal    | μ\L            | μ\L | μ\L         | Aroclor      | μ\L          | μ\L            | μ\L | Compound               | μ\L    | μ\L            | μ\L | Compound μ\L        | μ\L | μ\L |
| 6/5/2006       | NLS  | Lead     | 3.7            | 1.5 | 15          |              | Not Analyz   | od             |     | Toluene                | 0.53   | 160            | 800 | Not Analyzed        |     |     |
| 0/5/2000       | INLS | Barium   | 54             | 400 | 2000        |              | NOT Allaly2  | eu             |     |                        |        |                |     | Not Analyzed        |     |     |
|                |      |          |                |     |             |              |              |                |     | cis-1,2-Dichloroethene | 200    | 7              | 70  |                     |     |     |
| 9/29/2006      | NLS  |          | Analyzed - NR  | ,   |             |              | Not Analyz   | od             |     | Trans-1,2- DCE         | 10     | 20             | 100 | Analyzed - NR       |     |     |
| 3/23/2000      | INLS |          | Allayzed - Nit |     | NOT Allalyz | eu           |              | Vinyl chloride | 3.3 | 0.02                   | 0.2    | Allalyzeu - NK |     |                     |     |     |
|                |      |          |                |     |             |              |              |                |     | TCE                    | 120    | 0.5            | 5   |                     |     |     |
|                |      |          |                |     |             |              |              |                |     | 1,1-Dichloroethene     | 1.6    | 0.7            | 7   |                     |     |     |
|                |      |          |                |     |             |              |              |                |     | cis-1,2-Dichloroethene | 340    | 7              | 70  |                     |     |     |
| 10/24/2010     | BV   |          | Not Analyzed   |     |             |              | Not Analyz   | od             |     | TCE                    | 170    | 0.5            | 5   | Not Analyzed        |     |     |
| 10/24/2010     | bv   |          | NOT Allalyzed  |     |             |              | NOT Allalyz  | eu             |     | 1,1-DCE                | 1.6    | 0.7            | 7   | Not Allalyzed       |     |     |
|                |      |          |                |     |             |              |              |                |     | Trans-1,2- DCE         | 18     | 20             | 100 |                     |     |     |
|                |      |          |                |     |             |              |              |                |     | Vinyl chloride         | 6      | 0.02           | 0.2 |                     |     |     |
| 4/5/2011       | BV   | Aluminum | 1,900          | 40  | 200         |              | Not Analyzed |                |     | cis-1,2-Dichloroethene | 130    | 7              | 70  | Not Analyzed        |     |     |
| 7,5,2011       | 54   | Aluminum | 1,300          | 40  | 200         |              | NOT Allalyz  | cu             |     | TCE                    | 110    | 0.5            | 5   | Not Allalyzed       |     |     |
| September 2011 | NLS  | Aluminum | 220            | 40  | 200         | Not Analyzed |              |                |     | Not An                 | alyzed |                |     | Not Analyzed        |     |     |

### Narrative:

This well was installed during the Phase 2 ESA for Koenig & Vits. Samples collected in September 2006, October 2010, and April show a consistent level of TCE and degradtion products. No addition sampling for VOC's is planned. A high level of aluminum was detected in April 2011; the well will be included in the attempt during the final round of sampling to better define the extent of aluminum contamination throughout the site (Filtered Data Posted 9/2011).

| 1 | Well ID    | Northing  | Easting    | Top of Casing<br>Elevation | Ground Elevation | Longitude      | Latitude       | Static Water Level (TOC) | Groundwater Elevation | ALTA/ACSM Land Title Survey by Andrew Czerwonka     |
|---|------------|-----------|------------|----------------------------|------------------|----------------|----------------|--------------------------|-----------------------|-----------------------------------------------------|
|   | MW - 06.11 | 313728.51 | 241268.29' | 605.52                     | 602.5            | W87* 37' 36.7" | N44° 07' 36.8" | 11.14                    | 594.38                | Static Water Level Date: August 27,2011 (1030-1230) |

Installation (Year): 2006
Installed by: Envirotech Contracting - NLS

Only Detected Concentrations Exceeding NR 140 Preventive Action Limits (PAL) are Reported

"Analyzed - RL" Indicates No Parameters Above Reported LOD/Reporting Limit

NR 140 Enforcement Standard (ES)

#### **Summary of Analytical Data**

| Sample        | Lab                          | Me     | tals        | PAL | ES   | PCB's        | MIST &   | PAL                             | ES    | VOC's                   |         | PAL | ES           | DRO, SVOC's, PAH's, Phthalates | PAL | ES |
|---------------|------------------------------|--------|-------------|-----|------|--------------|----------|---------------------------------|-------|-------------------------|---------|-----|--------------|--------------------------------|-----|----|
| Analysis Date | Lau                          | Metal  | μ\L         | μ\L | μ\L  | Aroclor      | μ\L      | μ\L                             | μ\L   | Compound                | μ\L     | μ\L | μ\L          | Compound µ\L                   | μ\L | μ\ |
| 6/5/2006      | NLS                          | Lead   | 2.1         | 1.5 | 15   |              |          |                                 |       | Methylene chloride      | 0.55    | 0.5 | 5            |                                |     |    |
|               |                              | Barium | 39          | 400 | 2000 | No. A        | Analyzed |                                 |       | Benzene                 | 0.23    | 0.5 | 5            | Not Analyzed                   |     |    |
|               |                              |        |             |     |      | NOT A        | Analyzeo |                                 |       | Xylene                  | 0.69    | 400 | 2000         | Not Analyzed                   |     |    |
|               |                              |        |             |     |      |              |          |                                 |       | Toluene                 | 1.6     | 160 | 800          |                                |     |    |
|               |                              | Barium | 39          | 400 | 2000 |              |          |                                 |       | 1,3-DCB                 | 0.31    | 120 | 600          |                                |     |    |
|               |                              |        |             |     |      |              |          | cis-1,2-Dichloroethene 1.8 7 70 |       |                         |         |     |              |                                |     |    |
| 9/29/2006     | NLS                          |        |             |     |      | Not A        | Analyzed |                                 |       | Trans-1, 2-DCE          | 0.19    | 20  | 100          | Analyzed for PAH's - RL        |     |    |
|               |                              |        |             |     |      |              |          |                                 |       | Toluene                 | 1.6     | 160 | 800          |                                |     |    |
|               |                              |        |             |     |      |              |          |                                 |       | TCE                     | 0.98    | 0.5 | 5            |                                |     |    |
| 4/5/2011      | BV                           | Nickel | 6           | 20  | 100  | Not Analyzed |          |                                 | Not A | nalyzed                 |         |     | Not Analyzed |                                |     |    |
| 12/13/2011    | BV Not Analyzed Not Analyzed |        |             |     |      | Not A        | nalyzed  |                                 |       | Analyzed for PAH's - RL |         |     |              |                                |     |    |
| 12/15/2011    | 8V                           |        | NOT Analyze | u   |      | NOT A        | Maryzea  |                                 |       | Not A                   | manyzed |     |              | Analyzed for Phthalates - R    | L   |    |

#### Narrative

This well was installed during the Phase 2 ESA for Koenig & Vits. The sampling done in 2006 indicated that all parameters were non-detectable at stated DL's that were at or below the PALs. No additional sampling of this well is planned.

| Well ID    | Northing    | Easting     | Top of Casing<br>Elevation | Ground<br>Elevation | Longitude        | Latitude         | Static Water Level (TOC) | Groundwater Elevation | ALTA/ACSM Land Title Survey by Andrew Czerwonka     |
|------------|-------------|-------------|----------------------------|---------------------|------------------|------------------|--------------------------|-----------------------|-----------------------------------------------------|
| MW - 06.15 | 313657.413' | 240975.369' | 607.07                     | 604.17              | W87° 37' 48.249" | N44° 07' 37.490" | 9.3                      | 597.77                | Static Water Level Date: August 27,2011 (1030-1230) |

| Installation (Year): | 2006                         |
|----------------------|------------------------------|
| Installed by:        | Envirotech Contracting - NLS |

## Only Detected Concentrations Exceeding NR 140 Preventive Action Limits (PAL) are Reported

"Analyzed - RL" Indicates No Parameters Above Reported LOD/Reporting Limit

NR 140 Enforcement Standard (ES)

### **Summary of Analytical Data**

| Sample         | Lab               | Me       | tals | PAL | ES   | PCB's            |            | PAL     | ES      | VOC's                 |              | PAL                     | ES          | DRO, SVOC's & PAH | l's     | PAL | ES  |
|----------------|-------------------|----------|------|-----|------|------------------|------------|---------|---------|-----------------------|--------------|-------------------------|-------------|-------------------|---------|-----|-----|
| Analysis Date  | Lau               | Metal    | μ\L  | μ\L | μ\L  | Aroclor          | μ\L        | μ\L     | μ\L     | Compound              | μ\L          | μ\L                     | μ\L         | Compound          | μ\L     | μ\L | μ\L |
| 6/5/2006       | NLS               | Arsenic  | 0.85 | 1   | 10   |                  |            |         |         | cis1,2-Dichloroethene | 690          | 7                       | 70          |                   |         |     |     |
|                |                   | Barium   | 56   | 400 | 2000 | Not Analyzed TCE | TCE        | 110     | 0.5     | 5                     | Not An       | alyzed                  |             |                   |         |     |     |
|                |                   |          |      |     |      |                  |            |         |         | Trans-1,2- DCE        | 20           | 20                      | 100         |                   |         |     |     |
| 0/20/2006      | 9/29/2006 NLS     | Arsenic  | 1    | 1   | 10   | N                | d          |         | 1,3-DCB | 0.2                   |              |                         | Analyzed fo | r DAU's DI        |         |     |     |
| 9/29/2006      | INLS              | Barium   | 99   | 400 | 2000 | Not Analyzed     |            | Toluene | 0.21    | 160                   | 800          | Analyzed for PAH's - RL |             |                   |         |     |     |
| 10/24/2010     | BV                | Arsenic  | <5   | 1   | 10   | N                | ot Analyze | d       |         | Not Analyzed          |              |                         |             | Not An            | alyzed  |     |     |
| 4/5/2011       | BV                | Aluminum | <100 | 40  | 200  | N                | ot Analyze | d       |         | Not Ana               | Not Analyzed |                         |             | Not An            | alvzed  |     |     |
| 4/3/2011       | υV                | Arsenic  | <5   | 1   | 10   | 1                | ot Analyze | :u      |         | NOTATIO               | ilyzeu       |                         |             | Not All           | latyzeu |     |     |
| September 2011 | NLS               | Aluminum | 10   | 40  | 200  | N                | ot Analyze | nd      |         | Not Ana               | lyzed        |                         |             | Not An            | alyzed  |     |     |
| September 2011 | eptember 2011 NLS | Arsenic  | 1.8  | 1   | 10   | Not Analyzed     |            | ·u      |         | III NOT ATTE          | nyzcu        |                         |             | Not All           | diyecu  |     |     |

#### **Narrative**

This well was installed during the Phase 2 ESA for Koenig & Vits. The sampling done in October 2010 and April 2011 (Rounds 1 & 2) showed non-detectable concentrations of arsenic;. however, the DL established by Bureau Veritas' QA/QC system was above the PAL. BV reviewed the QC data in July but the DL for arsenic could not be adjusted. This well was sampled in August for aluminum and arsenic (Filtered Data Posted 9/2011) to achieve legitimate detection levels at or below the state PALs, and to better define the aluminum contamination across the site.

| Well ID    | Northing    | Easting     | Top of Casing<br>Elevation | Ground<br>Elevation | Longitude        | Latitude         | Static Water Level (TOC) | Groundwater Elevation | ALTA/ACSM Land Title Survey by Andrew Czerwonka     |
|------------|-------------|-------------|----------------------------|---------------------|------------------|------------------|--------------------------|-----------------------|-----------------------------------------------------|
| MW - 06.16 | 313574.754' | 241816.914' | 604.05                     | 604.33              | W87° 37' 36.711" | N44° 07' 36.682" | 4.02                     | 600.03                | Static Water Level Date: August 27,2011 (1030-1230) |

| Installation (Year): | 2006                         |  |
|----------------------|------------------------------|--|
| Installed by:        | Envirotech Contracting - NLS |  |

## Only Detected Concentrations Exceeding NR 140 Preventive Action Limits (PAL) are Reported

"Analyzed - RL" Indicates No Parameters Above Reported LOD/Reporting Limit

NR 140 Enforcement Standard (ES)

## **Summary of Analytical Data**

| Sample         | Lab | Me     | etals        | PAL | ES   | PCB's        | PCB's PAL ES |     | VOC's         |          | PAL           | ES  | DRO, SVOC's & PAH's |          | PAL  | ES  |     |
|----------------|-----|--------|--------------|-----|------|--------------|--------------|-----|---------------|----------|---------------|-----|---------------------|----------|------|-----|-----|
| Analysis Date  | Lab | Metal  | μ\L          | μ\L | μ\L  | Aroclor      | μ\L          | μ\L | μ\L           | Compound | μ\L           | μ\L | μ\L                 | Compound | μ\L  | μ\L | μ\L |
| 6/5/2006       | NLS | Barium | 74           | 400 | 2000 | V            | Not Analyzed |     |               | Not Anal | yzed          |     | Not Anal            | yzed     |      |     |     |
| 9/29/2006      | NLS | Barium | 65           | 400 | 2000 | N            | Not Analyzed |     |               | Analyzed | I - RL        |     |                     | Not Anal | yzed |     |     |
| 10/24/2010     | BV  |        | Not Analyzed |     |      | V            | Not Analyzed |     |               | Analyzed | Analyzed - RL |     |                     | Not Anal | yzed |     |     |
| 4/5/2011       | BV  |        | Not Analyzed |     |      | Not Analyzed |              |     | Analyzed - RL |          |               |     | Not Anal            | yzed     |      |     |     |
| September 2011 | BV  | Lead   | <1           | 1.5 | 15   | Not Analyzed |              |     | Not Analyzed  |          |               |     | Not Anal            | yzed     |      |     |     |

#### Narrative

This well was installed during the Phase 2 ESA for Koenig & Vits. It was analyzed for metals and VOC's in 2006; all results were ND. However, a sample collected at TW-06.21 contained lead at a concentration slightly above the PAL. This well, the closest permenant well to TW-06.21, was tested in August for lead (Filtered Data Posted 9/2011) to establish credible data for the GW in the area.

| Well ID    | Northing     | Easting      | Top of Casing<br>Elevation | Ground<br>Elevation | Longitude | Latitude | Static Water Level (TOC) | Groundwater Elevation | ALTA/ACSM Land Title Survey by Andrew Czerwonka |
|------------|--------------|--------------|----------------------------|---------------------|-----------|----------|--------------------------|-----------------------|-------------------------------------------------|
| MW - 08.22 | 313763.6397' | 241429.4301' | 604.62                     | 605.03              |           |          | 8.11                     | 596.51                | Static Water Level Date: April 2011             |

Installation (Year): 2010
Installed by: Cardinal Env./JBI

Only Detected Concentrations Exceeding NR 140 Preventive Action Limits (PAL) are Reported

"Analyzed - NR" indicates no parameters detected above the PAL

NR 140 Enforcement Standard (ES)

## **Summary of Analytical Data**

|               |     |         |                  |        |      | non!    |             | _   |     | ES VOC'S PAL ES |     |     |                     | -         |      |     |
|---------------|-----|---------|------------------|--------|------|---------|-------------|-----|-----|-----------------|-----|-----|---------------------|-----------|------|-----|
| Sample        | Lab |         | etals            | PAL    | ES   | PCB's   |             | PAL | ES  |                 | PAL | ES  | DRO, SVOC's & PAH's |           | PAL  | ES  |
| Analysis Date |     | Metal   | μ\L              | μ\L    | μ\L  | Aroclor | μ\L         | μ\L | μ\L | Compound μ\L    | μ\L | μ\L | Compound            | μ\L       | μ\L  | μ\L |
| 10/24/2010    | BV  |         | Not Analyzed     |        |      | N       | Not Analyze | d   |     | Analyzed - NR   |     |     | Not Analy           | zed       |      |     |
|               |     | Lead    | <1               | 1.5    | 15   |         |             |     |     |                 |     |     | Benzo(a)pyrene      | 0.02      | 0.02 | 0.2 |
| 4/5/2011      | BV  | Arsenic | <5               | 1      | 10   | l l     | Not Analyze | d   |     | Analyzed - NR   |     |     | Applyand All Ot     | hore ND   |      |     |
|               |     | An      | alyzed All Other | s - NR |      |         |             |     |     |                 |     |     | Analyzed All Ot     | ners - NK |      |     |
|               |     |         |                  |        |      |         |             |     |     |                 |     |     |                     |           |      |     |
|               |     | -       |                  |        |      |         |             |     |     |                 | -   | -   |                     |           |      |     |
|               |     |         |                  |        |      |         |             |     |     |                 | -   |     |                     |           | _    |     |
|               |     |         |                  |        |      |         |             |     |     |                 | +   | -   |                     |           |      |     |
|               |     |         |                  |        |      |         |             |     |     |                 | 1   |     |                     |           |      |     |
|               |     |         |                  |        |      |         |             |     |     |                 |     |     |                     |           |      |     |
|               |     |         |                  |        |      |         |             |     |     |                 |     |     |                     |           |      |     |
|               |     |         |                  |        |      |         |             |     |     |                 |     |     |                     |           |      |     |
|               |     |         |                  |        |      |         |             |     |     |                 |     |     |                     |           |      |     |
|               |     |         |                  |        |      |         |             |     |     |                 |     |     |                     |           |      |     |
|               |     |         |                  |        |      |         |             |     |     |                 | -   | -   |                     |           |      |     |
|               |     |         |                  |        |      |         |             |     |     |                 | -   | -   |                     |           |      | -   |
|               |     |         |                  | -      |      |         | -           |     | -   |                 | -   | _   |                     |           |      |     |
|               |     | -       |                  | -      | 1000 |         | -           |     |     |                 | -   | _   |                     |           |      | _   |
|               |     |         |                  |        |      |         |             |     |     |                 |     |     |                     |           |      |     |
|               |     |         |                  |        |      |         |             |     |     |                 |     |     |                     |           |      |     |
|               |     |         |                  |        |      |         |             |     |     |                 |     |     |                     |           |      |     |

## Narrative:

This well was installed during 2011 to further evaluate vertical groundwater migration in the vicility of MW-06.04. While MW-06.04 showed consistent concentrations of cis-1,2,-dichloroethylene and TCE, MW-08.22 was ND for all VOC's. No additional sampling is planned for this well.

| Well ID    | Northing    | Easting     | Top of Casing<br>Elevation | Ground<br>Elevation | Longitude        | Latitude         | Static Water Level (TOC) | Groundwater Elevation | ALTA/ACSM Land Title Survey by Andrew Czerwonka     |
|------------|-------------|-------------|----------------------------|---------------------|------------------|------------------|--------------------------|-----------------------|-----------------------------------------------------|
| MW - 08.24 | 314008.580' | 241539.995' | 601.88                     | 602.22              | W87° 37' 40.513" | N44° 07' 40.963" | 5.63                     | 596.25                | Static Water Level Date: August 27,2011 (1030-1230) |

| Installation (Year): | 2010              |
|----------------------|-------------------|
| Installed by:        | Cardinal Env./JBI |

Only Detected Concentrations Exceeding NR 140 Preventive Action Limits (PAL) are Reported

"Analyzed - NR" indicates no parameters detected above the PAL

NR 140 Enforcement Standard (ES)

## **Summary of Analytical Data**

| Sample         | Lab | Metals       |  | PAL | ES           | PCB's   |             | PAL           | ES  | VOC's    |      | PAL          | ES  | DRO, SVOC's & PAH | s      | PAL | ES  |
|----------------|-----|--------------|--|-----|--------------|---------|-------------|---------------|-----|----------|------|--------------|-----|-------------------|--------|-----|-----|
| Analysis Date  | 205 | Metal μ\L    |  | μ\L | μ\L          | Aroclor | μ\L         | μ\L           | μ\L | Compound | μ\L  | μ\L          | μ\L | Compound          | μ\L μ\ | μ\L | μ\L |
| 10/24/2010     | BV  | Not Analyzed |  |     | Not Analyzed |         |             | Analyzed - RL |     |          |      | Not Analyzed |     |                   |        |     |     |
| 4/5/2011       | BV  | Not Analyzed |  |     |              | N       | lot Analyze | d             |     | Analyzed | - RL |              |     | Not Analyzed      |        |     |     |
| September 2011 |     | Not Analyzed |  |     | Not Analyzed |         |             | Not Analyzed  |     |          |      | Not Analyzed |     |                   |        |     |     |

### Narrative:

This well was installed during 2011 to evaluate vertical groundwater migration. The well was sampled in October 2010 and April 2011; all results were below DL's. No further sampling is being planned for this well.

| Well ID    | Northing    | Easting     | Top of Casing<br>Elevation | Ground<br>Elevation | Longitude        | Latitude         | Static Water Level (TOC) | Groundwater Elevation | ALTA/ACSM Land Title Survey by Andrew Czerwonka     |
|------------|-------------|-------------|----------------------------|---------------------|------------------|------------------|--------------------------|-----------------------|-----------------------------------------------------|
| MW - 08.26 | 313741.437' | 241637.078' | 602.23                     | 602.59              | W87° 37' 39.178" | N44° 07' 38.326" | 2.18                     | 600.05                | Static Water Level Date: August 27,2011 (1030-1230) |

| Installation (Year): | 2010              |
|----------------------|-------------------|
| Installed by:        | Cardinal Env./JBI |

Only Detected Concentrations Exceeding NR 140 Preventive Action Limits (PAL) are Reported

"Analyzed - NR" indicates no parameters detected above the PAL

NR 140 Enforcement Standard (ES)

### **Summary of Analytical Data**

| Sample<br>Analysis Date | Lab | Metals  |               | PAL          | ES  | PCB's                        |                        | PAL | ES                     | VOC's                     |              | PAL  | ES           | DRO, SVOC's & PAH's |              | PAL | ES  |
|-------------------------|-----|---------|---------------|--------------|-----|------------------------------|------------------------|-----|------------------------|---------------------------|--------------|------|--------------|---------------------|--------------|-----|-----|
|                         |     | Metal   | μ\L           | μ\L          | μ\L | Aroclor                      | μ\L                    | μ\L | μ\L                    | Compound                  | μ\L          | μ\L  | μ\L          | Compound            | Compound µ\L | μ\L | μ\1 |
| 10/24/2010              |     | Arsenic | <5            | 1            | 10  |                              |                        |     |                        | cis-1,2-Dichloroethene    | 66           | 7    | 70           |                     |              |     |     |
|                         | BV  | Lead    | <3            | 1.5          | 15  | 5 Not Analyzed TCE 3.4 0.5 5 |                        |     |                        |                           |              | 5    | Not Analyzed |                     |              |     |     |
|                         | bv  |         |               |              |     |                              | NOT Allalyze           | :u  |                        | Vinyl chloride            | 2.5          | 0.02 | 0.2          | Not Analyzed        |              |     |     |
|                         |     |         |               |              |     |                              |                        |     |                        | trans-1, 2-Dichloroethene | 1.9          | 20   | 100          |                     |              |     |     |
| 4/4/2011                | BV  |         | Not Analyzed  | Not Analyzed |     |                              | cis-1,2-Dichloroethene | 7.8 | 7                      | 70                        | Not Analyzed |      |              |                     |              |     |     |
|                         | DV  |         | NOT Allalyzeu |              |     |                              | NUL Allalyze           | u   |                        | TCE                       | 0.8          | 0.5  | 5            | NOTAL               |              |     |     |
| September 2011          |     |         |               |              |     |                              |                        |     | cis-1,2-Dichloroethene | 19                        | 7            | 70   |              |                     |              |     |     |
|                         | BV  |         | Not Analyzed  | Not Analyzed |     |                              | TCE                    | 1.7 | 0.5                    | 5                         | Not Analyzed |      |              |                     |              |     |     |
|                         |     |         |               |              |     |                              |                        |     | Vinyl chloride         | 1.6                       | 0.02         | 0.2  |              |                     |              |     |     |

#### Narrative

This well was installed during 2011 to evaluate vertical groundwater migration in the vicinity of MW-06.05. The well exhibited very low concentrations of cis-1,2,dichloroethene and TCE, just above the PAL, while MW-06.05 was ND for all compounds. This well was sampled to better understand conditions in the screened zone.