

**Notice:** Pursuant to ch. 292, Wis. Stats., and chs. NR 726 and 746, Wis. Adm. Code, this form is required to be completed for case closure requests. The closure of a case means that the Department of Natural Resources (DNR) has determined that no further response is required at that time based on the information that has been submitted to the DNR. All sections of this form must be completed unless otherwise directed by the Department. DNR will consider your request administratively complete when the form and all sections are completed, all attachments are included, and the applicable fees required under ch. NR 749, Wis. Adm. Code, are included, and sent to the proper destinations. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Public Records Law (ss. 19.31 - 19.39, Wis. Stats.). Incomplete forms will be considered "administratively incomplete" and processing of the request will stop until required information is provided.

Site Information			
BRRTS No. 03-02-580226	VPLE No.		
Parcel ID No. 012-00292-0000			
FID No. 802025180	WTM Coordinates		
	X 475501.1	Y 629215.9	
BRRTS Activity (Site) Name Chippewa Quick Mart	WTM Coordinates Represent: <input type="checkbox"/> Source Area <input checked="" type="checkbox"/> Parcel Center		
Site Address 122 E Broadway	City Glidden	State WI	ZIP Code 54527
Acres Ready For Use 0.5			

Responsible Party (RP) Name Michael Dunlavy			
Company Name Dunlavy Pro LLC			
Mailing Address 77794 Hill Road	City Glidden	State WI	ZIP Code 54527
Phone Number (715) 663-0088	Email msdunlavy@yahoo.com		
<input checked="" type="checkbox"/> Check here if the RP is the owner of the source property.			

Environmental Consultant Name Erica Klingfus			
Consulting Firm MSA Professional Services, Inc.			
Mailing Address 332 W. Superior Street, Suite 600	City Duluth	State MN	ZIP Code 55802
Phone Number (218) 499-3171	Email eklingfus@msa-ps.com		

**Fees and Mailing of Closure Request**

- Send a copy of page one** of this form and the applicable ch. NR 749, Wis. Adm. Code, fee(s) to the DNR Regional EPA ( Environmental Program Associate) at <http://dnr.wi.gov/topic/Brownfields/Contact.html#tabx3>. Please see RR-997 Implementation of Wis. Admin. Code chs. NR 749 and NR 750 Fees (<https://dnr.wi.gov/DocLink/RR/RR997.pdf>) for additional information on what fees apply. Check all fees that apply:

  - \$1,050 Closure Fee
  - \$300 Database Fee for Soil, performance standard such as a cover, Structural impediment, or Industrial Soil Standard
  - \$350 Database Fee for Groundwater, Monitoring Wells (Not Abandoned), Vapor (7A-7E), Sediment, or Site-Specific Continuing Obligations (NR 749 Table 1 (d) 1, 3 and 4)

Total Amount of Payment \$ \$1,350.00

Resubmittal, Fees Previously Paid
- Submit a complete electronic copy of the entire closure package via the RR Submittal Portal** (<https://dnr.wisconsin.gov/topic/Brownfields/Submittal.html>) to the Regional Project Manager assigned to your site. Any subsequent revisions should also be sent via the RR Submittal Portal. For additional submittal instructions, please review RR-960 Guidance for Submitting Documents (<https://dnr.wi.gov/DocLink/RR/RR690.pdf>).

**Site Summary**

*If any portion of the Site Summary Section is not relevant to the case closure request, you must fully explain the reasons why in the relevant section of the form. All information submitted shall be legible. Providing illegible information will result in a submittal being considered incomplete until corrected.*

**1. General Site Information and Site History**

- A. Site Location: Describe the physical location of the site, both generally and specific to its immediate surroundings.  
The Site is located at 122 East Broadway in Glidden, Ashland County, Wisconsin at the northeast corner of the intersection of Wisconsin State Trunk Highway (STH) 13 and North Grant Street. The Site is identified as Ashland County parcel 012-00292-0000 and consists of 0.344 acres of commercial land.
- B. Prior and current site usage: Specifically describe the current and historic occupancy and types of use.  
The Site is currently occupied by an approximately 2,240-square foot, slab-on-grade, single story retail building on the northwest portion of the property and a dispenser canopy on the southeast portion of the property. The remaining portion of the Site consists of paved or gravel parking and drive areas.
- From at least 1939 and the mid- to late-1990's, a two-story building with commercial space on the ground floor and residential units on the second floor was located on the Site. The building currently occupying the Site was constructed in 1998 and contained a convenience store, dispenser islands and the associated petroleum underground storage tanks (USTs) that were subsequently removed in September 2017.
- C. Current zoning (e.g., industrial, commercial, residential) for the site and for neighboring properties, and how verified (Provide documentation in Attachment G).  
Ashland County and personnel with the Glidden Area Development Corporation were contacted to obtain a zoning map for the area, but both parties indicated that no such resources are available. Glidden/Town of Jacobs do not currently have zoning ordinances or a zoning map.
- D. Describe how and when site contamination was discovered.  
Soil contamination was identified at the site during Tank System Site Assessment (TSSA) sampling performed when the four underground storage tanks (USTs) and associated piping and dispensers were removed from the site on September 6, 2017.
- E. Describe the type(s) and source(s) or suspected source(s) of contamination.  
Soil contamination was detected in samples collected during the TSSA near the southern side of the 1,000-gallon diesel UST and the northern gasoline dispenser. The suspected source of contamination was either the piping or dispenser feature in this area.
- F. Other relevant site description information (or enter Not Applicable).  
Not applicable.
- G. List BRRTS activity/site name and number for BRRTS activities at this source property, including closed cases.  
Glidden Amoco (BRRTS #03-02-552129) - Opened August 6, 2008, closed June 2, 2009
- H. List BRRTS activity/site name(s) and number(s) for all properties immediately adjacent to (abutting) this source property.  
Glidden Food Mart (BRRTS #03-02-000979)

**2. General Site Conditions**

- A. Soil/Geology
- i. Describe soil type(s) and relevant physical properties, thickness of soil column across the site, vertical and lateral variations in soil types.  
Surficial geology is described as Pleistocene deposits of hummocky stream sediment overlain by silty materials (Clayton, 1985). Surficial deposits are expected to range in thickness from 100 to 300 feet bgs in the area of the Site. Bedrock geology consists of gneiss and amphibolite of late Archean age (Mudrey et al, 1982).
- Lithology at the Site encountered during investigatory boring activities included six inches to one foot of gravelly sand underlain by layers of brown sand and silty sand to the boring terminus at approximately 16 feet below ground surface (bgs). Groundwater at the Site has been historically identified between approximately five and sixteen feet bgs indicating groundwater may be residing in a perched condition. Based on topography and surface water flow, groundwater flow on the Site is interpreted to be to the north/northeast towards the East Branch of the Chippewa River.
- ii. Describe the composition, location and lateral extent, and depth of fill or waste deposits on the site.  
Fill materials exist in within the former tank basin (backfill sand) to a depth of approximately eleven feet bgs.

- iii. Describe the depth to bedrock, bedrock type, competency and whether or not it was encountered during the investigation. Surficial deposits are expected to range in thickness from 100 to 300 feet bgs in the area of the Site. Bedrock geology consists of gneiss and amphibolite of late Archean age (Mudrey et al, 1982). Bedrock was not encountered in soil borings advanced as part of this site investigation.
- iv. Describe the nature and locations of current surface cover(s) across the site (e.g., natural vegetation, landscaped areas, gravel, hard surfaces, and buildings).  
The convenience store building occupies the northwestern portion of the parcel. The canopy from the former dispenser area is located on the southeastern portion of the parcel. Gravel/asphalt/concrete driving and parking areas cover the remainder of the parcel.

**B. Groundwater**

- i. Discuss depth to groundwater and piezometric elevations. Describe and explain depth variations, including high and low water table elevation and whether free product affects measurement of water table elevation. Describe the stratigraphic unit(s) where water table was found or which were measured for piezometric levels.  
Depth to groundwater measurements ranged from 14.05 feet bgs in soil boring MSA-GP-1 and 14.69 feet bgs in soil boring MSA-GP-2. Depth to groundwater was measured in soil borings MSA-GP-1 through MSA-GP-3, after which point the meter malfunctioned and depth to groundwater measurements were not able to be collected.  
  
Groundwater at the Site has historically been identified between approximately five feet bgs in temporary well TW-2 located to the southwest of the Site and eighteen feet bgs in TW-6 to the northeast of the Site indicating groundwater may be residing in a perched condition.
- ii. Discuss groundwater flow direction(s), shallow and deep. Describe and explain flow variations, including fracture flow if present.  
No monitoring wells were installed as part of the current site investigation activities, however, flow maps from the previous site investigation under BRRTS #03-02-000979 indicated that groundwater flow direction was to the north/northeast toward the East Branch of the Chippewa River.
- iii. Discuss groundwater flow characteristics: hydraulic conductivity, flow rate and permeability, or state why this information was not obtained.  
No monitoring wells were installed as part of the current site investigation activities, therefore this data was not obtained.
- iv. Identify and describe locations/distance of potable and/or municipal wells within 1200 feet of the site. Include general summary of well construction (geology, depth of casing, depth of screened or open interval).  
Todd Schmidt, water operator/town foreman for the Town of Jacobs, indicated that Municipal Well #2 for the Town of Jacobs is located approximately 700 feet southwest of the Site. This well is 92 feet deep and was constructed in 1983 and renovated in 2007. No other wells were identified within 1,200 feet of the site.

**3. Site Investigation Summary****A. General**

- i. Provide a brief summary of the site investigation history. Reference previous submittals by name and date. Describe site investigation activities undertaken since the last submittal for this project and attach the appropriate documentation in Attachment C, if not previously provided.

Northern Environmental conducted a site investigation of the leaking tank system while under BRRTS# 03-02-552129. Investigation activities performed by Northern Environmental were initiated by a Phase II Environmental Site Assessment (ESA) report dated November 3, 2008. Six initial soil samples were collected from soil borings B100 through B600 and fourteen subsequent soil samples were collected from soil borings B700 through B2000 advanced by Northern Environmental. Soil analytical results indicated concentrations of petroleum compounds above WDNR groundwater pathway residual contaminant levels (RCLs) in soil borings B300, B900, B1000 and B1100. Soil sample B 900 also contained elevated concentrations of PAHs including benzo(a)pyrene at a concentration of 5,700 ug/kg. Northern Environmental also collected groundwater samples from five temporary wells at the site as part of Phase II ESA sampling activities. Benzene was detected above the preventive action limit (PAL) in the off-site, upgradient temporary well sample TW-1. There were no PAL or enforcement standard (ES) exceedances in any of the groundwater samples collected from the other temporary wells. Northern Environmental concluded that based on the location of the contaminated soils within the saturated zone between 6 and 10 feet bgs, contamination was likely from an off-site source and recommended site closure.

In December 2008, WDNR issued a letter in response to the Northern Environmental conclusion that site closure should be granted. The WDNR indicated that closure was not recommended considering the area downgradient of the tank basin required additional assessment and that the extent of shallow PAH contamination had not been delineated. Northern Environmental prepared an Additional Site Investigation Results Report in March 2009. Additional site work included the advancement of soil borings B2100 through B2500 in February 2009 to assess the extent of identified PAH contamination around soil borings B700 and B1900 and potential contamination downgradient of the tank basin. Laboratory analytical results detected benzo(a)pyrene at a concentration above the non-industrial groundwater pathway RCL but below the direct contact RCL in soil samples collected from soil borings B2100, B2200 and B2400. Northern Environmental indicated that benzo(a)pyrene was not a component of diesel or gasoline and suggested that the source may have been leaching from asphalt surfacing of the lot. Laboratory analytical results from a groundwater sample collected from soil boring B2500-TW-6 did not detect any PVOC or naphthalene concentrations above laboratory reported detection limits.

Northern Environmental determined that the shallow PAH contamination concentrations were relatively low and were covered by impervious surface. In addition, soil and groundwater samples collected downgradient of the tank basin in soil boring B2500 did not detect any significant contaminant concentrations, leading Northern Environmental to the conclusion that the tank system was not leaking. In April 2009, the site was transferred to the Department of Commerce for closure. Closure documentation was submitted to Department of Commerce by Northern Environmental and the site was closed in June 2009 with the condition that an impervious cap be maintained at the site by current and subsequent property owners to limit potential direct contact with shallow soils contaminated with benzo(a)pyrene on the southern portion of the Site.

Following the closure of the gas station in September 2015 and the death of the property owner in January 2016, a lien was recorded against the property by WDNR in an amount intended to cover the cost of the removal of the USTs, dispensers and piping. In September 2017, one 1,000-gallon off-road diesel UST, one 2,000-gallon on-road diesel UST, one 4,000-gallon gasoline UST and one 8,000-gallon gasoline UST and the associated dispensers and piping were removed by T&D Enterprises, Inc. with MSA Professional Services, Inc. (MSA) performing Tank System Site Assessment (TSSA) sampling and reporting. Nine tank basin bottom soil samples, fourteen tank basin sidewall soil samples, four dispenser soil samples and one piping soil sample were collected and submitted for laboratory analysis of PVOCs. Analytical testing detected concentrations of PVOCs above laboratory reported detection limits in bottom soil sample B-5, dispenser soil sample D-2 and sidewall soil sample S-5. These soil samples were collected from the southeastern corner of the UST basin near the south end of the 1,000-gallon diesel UST and the north dispenser used for gasoline dispensing. Because this contamination was not identified during the previous Glidden Amoco investigation, a new BRRTS site, Chippewa Quick Mart, was opened (BRRTS #03-02-580226).

Condition Services, LLC (Condition Services) prepared a Site Investigation Work Plan dated July 14, 2022 outlining additional work proposed to delineate the full horizontal and vertical extent of PVOC soil contamination identified during the 2017 tank removal and evaluate the potential for groundwater impacts and vapor intrusion. After a no fee review, the WDNR approved the Site Investigation Work Plan and Condition Services requested that MSA complete the investigation. On September 9, 2022, MSA personnel oversaw the advancement of soil borings MSA-GP-1 through MSA-GP-6 to delineate the extent and magnitude of contamination detected in soil samples collected during the TSSA. Soil gas vapor samples SV-1 and SV-2 were also advanced near the area of the petroleum contamination detected during TSSA sampling activities and sub-slab soil vapor samples SSVS-1 and SSVS-2 were also collected inside the onsite building to determine whether vapor intrusion represented a threat to air quality in the building. The field investigation data and subsequent laboratory analytical results indicated that residual petroleum contamination at the site was extremely limited and a Site Investigation Report was prepared and submitted to WDNR on November 9, 2022 recommending site closure.

- ii. Identify whether contamination extends beyond the source property boundary, and if so describe the media affected (e.g., soil, groundwater, vapors and/or sediment, etc.), and the vertical and horizontal extent of impacts.

Based on the current and historical investigation results, the extent of petroleum contamination appears to be limited to within the source property boundary. The detection of tetrachloroethylene (PCE) in soil gas vapor samples SV-1 and SV-2 and groundwater samples collected from soil borings MSA-GP-1 and MSA-GP-2, all collected to the west of the alleyway, appears to indicate that chlorinated contamination is present on the eastern portion of the source property and could potentially extend into the adjacent alleyway. It is unclear as to the source of this chlorinated contamination but considering PCE was only detected in groundwater samples collected on the eastern portion of the source property and at significantly lower concentrations in sub-slab soil gas samples collected during the investigation, it appears that this contamination did not originate on the source property.

- iii. Identify any structural impediments to the completion of site investigation and/or remediation and whether these impediments are on the source property or off the source property. Identify the type and location of any structural impediment (e.g., structure) that also serves as the performance standard barrier for protection of the direct contact or the groundwater pathway.

There were no structural impediments to the completion of this site investigation.

#### B. Soil

- i. Describe degree and extent of soil contamination. Relate this to known or suspected sources and known or potential receptors/migration pathways.

There does not appear to be significant residual petroleum contamination associated with the potential release identified during TSSA sampling activities. A limited extent of soil contamination with concentrations above groundwater pathway RCLs may remain in the area of TSSA samples B-5, S-5 and D-2 as shown on the Soil Contamination figure included as Attachment B.2.a.

- ii. Describe the concentration(s) and types of soil contaminants found in the upper four feet of the soil column.

Soil sample D-2 was collected at 4 feet bgs during the TSSA activities. Benzene was detected in this soil sample at a concentration of 0.0639 mg/k, which is above the soil to groundwater pathway RCL but below the direct contact RCL. No contaminant concentrations exceeding their laboratory reporting detection limits were detected in soil samples collected in any other soil samples collected from the 0-4 foot soil interval.

- iii. Identify the ch. NR 720, Wis. Adm. Code, method used to establish the soil cleanup standards for this site. This includes a soil performance standard established in accordance with s. NR 720.08, a Residual Contaminant Level (RCL) established in accordance with s. NR 720.10 that is protective of groundwater quality, or an RCL established in accordance with s. NR 720.12 that is protective of human health from direct contact with contaminated soil. Identify the land use classification that was used to establish cleanup standards. Provide a copy of the supporting calculations/information in Attachment C.

MSA compared contaminant concentrations to RCLs listed in the December 2018 table.

In 2009 when the previous site closure request was prepared, the Non-Industrial Direct Contact RCL for benzo(a)pyrene was 8.8 ug/kg. The current 2022 Non-Industrial Direct Contact RCL for benzo(a)pyrene is 115 ug/kg and the groundwater RCL is 470 ug/kg which would indicate only the benzo(a)pyrene detection at soil boring B900 at a concentration of 5,700 ug/kg would exceed either current RCL.

#### C. Groundwater

- i. Describe degree and extent of groundwater contamination. Relate this to known or suspected sources and known or potential receptors/migration pathways. Specifically address any potential or existing impacts to water supply wells or interception with building foundation drain systems.

Based on laboratory analytical results from grab groundwater samples collected from borings MSA-GP-1 through MSA-GP-6 it does not appear that there is any significant residual groundwater contamination from the suspected release location discovered during tank removal sampling activities. No petroleum-related groundwater constituents were detected in any of the groundwater samples collected from soil borings MSA-GP-1 through MSA-GP-6 during the September 2022 sampling event. Laboratory analytical results for the groundwater samples collected from soil borings are provided in Table 1.A.

Following the detection of PCE at concentrations above the WDNR Residential VRSL in the two soil gas vapor samples collected at the Site, a select number of groundwater samples were reanalyzed to include the full list of VOC constituents to determine whether PCE was present in groundwater across the Site. PCE was detected in groundwater samples collected from borings MSA-GP-1 and MSA-GP-2 advanced on the eastern portion of the property near the locations of soil vapor samples SV-1 and SV-2 at concentrations exceeding the WDNR PAL. No other VOC concentrations were detected above laboratory reported detection limits in samples collected from MSA-GP-1 or MSA-GP-2. Soil borings MSA-GP-1 or MSA-GP-2 were advanced along the eastern portion of the property and are adjacent to the alley containing the sanitary sewer corridor. No VOC concentrations were detected in groundwater samples collected from soil borings MSA-GP-4 or MSA-GP-6, which were advanced through the former tank basin and to the south of the former tank basin, respectively. PCE was also not detected above laboratory reported detection limits in any of the groundwater samples collected by Northern Environmental and analyzed for VOCs on October 1, 2008 as part of previous site investigation activities.

- ii. Describe the presence of free product at the site, including the thickness, depth, and locations. Identify the depth and location of the smear zone.

No free product has been encountered at the Site.

D. Vapor

- i. Describe how the vapor migration pathway was assessed, including locations where vapor, soil gas, or indoor air samples were collected. If the vapor pathway was not assessed, explain reasons why.

Soil gas vapor sample SV-1 was collected to the east of the dispenser area adjacent to the alley on the eastern property boundary and soil gas vapor sample SV-2 was collected to the east of the former tank basin to determine if vapor intrusion was a potential threat to the residential properties east of the Site. A third vapor sample was planned to be collected from the tank basin, but due to a sampling equipment malfunction, the sample was not able to be collected. Soil gas samples were collected from approximately eight feet bgs using one-liter batch certified Summa canisters equipped with 200 milliliter per minute regulators. The collected vapor samples were analyzed for VOCs using EPA Method TO-15.

Two sub-slab sampling points were installed in the 2,240-square-foot former Chippewa Quick Mart building to assess potential indoor vapor intrusion. Sample point SSVS-1 was installed in the utility room on the east side of the retail store and is the closest to the former tank system. Sample point SSVS-2 was installed on the west end of the building in the former office space. All vapor intrusion sampling activities conducted on September 9, 2022, comply with the guidance provided in WDNR Publication RR-800, "Addressing Vapor Intrusion at Remediation & Redevelopment Sites in Wisconsin". A vapor pin/water dam method was used to collect samples through a 5/8-inch hole drilled through the concrete slab. A single-use, disposable purge/sample manifold was used to collect samples through a vapor pin which was secured into the hole with a silicone sleeve. The water dam method was used to test for leaks. Upon passing the leak test, the manifold was purged and connected to a one-liter batch certified Summa canister equipped with a 200 milliliter per minute regulator to collect the vapor sample. Vapor samples were analyzed for VOCs using EPA Method TO-15.

- ii. Identify the applicable DNR action levels and the land use classification used to establish them. Describe where the DNR action levels were reached or exceeded (e.g., sub slab, indoor air or both).

The two exterior soil gas samples were compared to WDNR Residential Vapor Action Levels (VALs) and Vapor Risk Screening Levels (VRSLs) and the sub slab vapor sample results were compared to Small Commercial VALs/VRSLs.

None of the petroleum-related contaminant concentrations detected in the soil gas vapor samples exceeded their respective Residential VRSLs. In addition, none of the criteria for vapor intrusion screening were met according to WDNR Guidance Document RR-800, "Addressing Vapor Intrusion at Remediation and Redevelopment Sites in Wisconsin".

PCE was detected above the WDNR Residential VRSL at concentrations of 1,960 ug/m<sup>3</sup> and 2,190 ug/m<sup>3</sup> in soil gas vapor samples SV-1 and SV-2, respectively. After re-analyzing groundwater samples for all VOC constituents, PCE was only detected in the groundwater samples collected from soil borings MSA-GP-1 and MSA-GP-2 on the eastern portion of the Site adjacent to the alley but not in soil borings MSA-GP-4 and MSA-GP-6 advanced further west on the Site. Based on available site history information, the property has only been used as a fueling station, commercial retail and residential uses since at least 1939. The Site is not known to have been historically used for any purposes which would have potentially used or released chlorinated solvent compounds. PCE was also detected at significantly lower concentrations in the sub-slab soil gas vapor samples collected inside the building than in those samples collected outside near the alleyway indicating that significant PCE contamination is not present under the building. Based on this evidence, it is unclear as to the source of the PCE contamination but it appears that PCE is migrating onto the Site and is not related to the petroleum release or historical activities conducted at the Site.

1,3-Butadiene exceeded the WDNR Residential VRSL in soil gas vapor sample SV-2, however, this detection is not believed to be related to petroleum contamination at the site. Possible laboratory interferences with other compounds and a number of potential sources may explain the detection of 1,3-butadiene reported above the Residential VRSL in soil gas vapor sample SV-2. 1,3-Butadiene is primarily used in the manufacture of synthetic rubber and is found in rubber tires. In addition, a styrene-butadiene copolymer is a common ingredient in asphalt paving, patch and seal coat. 1,3-Butadiene also forms during combustion and is found in wood and cigarette smoke, oil burner emissions and exhaust from internal combustion engines. 1,3-Butadiene degrades readily in the atmosphere, with a half-life of a few hours to days, and as a result is rarely present at levels of concern in ambient air or soil vapor. Considering the limited concentrations of other contaminants in soil vapor samples SV-1 and SV-2 and potential alternate sources of the detection of 1,3-butadiene; it appears that the detection of 1,3-butadiene in soil vapor samples SV-1 and SV-2 are either naturally occurring, a product of misidentification, laboratory interference or related to preexisting compounds or conditions present on the Site.

There were several detections of petroleum compounds above laboratory detection limits but below WDNR Small Commercial VALs in the two sub-slab soil gas vapor samples collected at the Site. Chloroform was detected above the WDNR Small Commercial VAL but below the VRSL. Chloroform is not a petroleum-related contaminant and this detection is not considered to be related to the petroleum contamination at the property. There were no contaminant detections greater than WDNR Small Commercial VRSLs. Laboratory analytical results for vapor sample points are tabulated in Attachment A.4.

#### E. Surface Water and Sediment

- i. Identify whether surface water and/or sediment was assessed and describe the impacts found. If this pathway was not assessed, explain why.
- No surface water or sediment were sampled as part of this site investigation.
- ii. Identify any surface water and/or sediment action levels used to assess the impacts for this pathway and how these were derived. Describe where the DNR action levels were reached or exceeded.
- No surface water or sediment were sampled as part of this site investigation.

#### 4. Remedial Actions Implemented and Residual Levels at Closure

- A. General: Provide a brief summary of the remedial action history. List previous remedial action report submittals by name and date. Identify remedial actions undertaken since the last submittal for this project and provide the appropriate documentation in Attachment C.
- No remedial actions have been performed at the Site.
- B. Describe any immediate or interim actions taken at the site under ch NR 708, Wis. Adm. Code.
- No immediate or interim actions have taken place at the Site.

- C. Describe the *active* remedial actions taken at the source property, including: type of remedial system(s) used for each media affected; the size and location of any excavation or in-situ treatment; the effectiveness of the systems to address the contaminated media and substances; operational history of the systems; and summarize the performance of the active remedial actions. Provide any system performance documentation in Attachment A.7.

No active remedial actions have taken place at the Site.

- D. Describe the alternatives considered during the Green and Sustainable Remediation evaluation in accordance with NR 722.09 and any practices implemented as a result of the evaluation.

No Green and Sustainable Remediation evaluation was performed.

- E. Describe the nature, degree and extent of residual contamination that will remain at the source property or on other affected properties after case [closure](#).

Residual petroleum soil contamination at the Site appears to be extremely limited in extent and magnitude. No petroleum soil contamination was detected in the soil samples collected as part of site investigation activities. The estimated extent of residual petroleum soil contamination at the Site based on analytical results from soil samples collected during TSSA sampling activities extends from the northern dispenser island (D-2) northward along the former eastern tank basin sidewall (S-5) and beneath the southernmost 1,000-gallon diesel tank (B-5). Benzene, toluene, ethylbenzene, methyl tert-butyl ether, total trimethylbenzenes and xylenes exceeded their respective groundwater pathway RCLs in sidewall soil sample S-5; benzene and total trimethylbenzenes exceeded their respective groundwater pathway RCLs in tank basin bottom sample B-5, and benzene exceeded the groundwater pathway RCL in dispenser sample D-2.

Based on results from site investigation sampling activities, there do not appear to be residual petroleum groundwater or vapor impacts at the Site.

- F. Describe the residual soil contamination within four feet of ground surface (direct contact zone) that attains or exceeds RCLs established under s. NR 720.12, Wis. Adm. Code, for protection of human health from direct contact.

Benzene exceeded the groundwater pathway RCL at a concentration of 0.0639 mg/kg in dispenser sample D-2 collected at four feet bgs. There were no contaminant concentrations above direct contact RCLs detected in any of the soil samples collected at the Site as part of most recent site investigation activities.

In 2009 when the previous site closure request was prepared, the Non-Industrial Direct Contact RCL for benzo(a)pyrene was 8.8 ug/kg. A cap maintenance plan was put in place as part of the previous site closure package based on direct contact RCL exceedances for benzo(a)pyrene. The current 2022 Non-Industrial Direct Contact RCL for benzo(a)pyrene is 115 ug/kg and the groundwater RCL is 470 ug/kg. None of the surface soil samples collected during previous site investigation activities exceed these revised standards. Because there are no longer direct contact RCL exceedances at the site based on the revised benzo(a)pyrene standards, the cap maintenance plan is no longer needed and MSA recommends that it be removed from the site.

- G. Describe the residual soil contamination that is above the observed low water table that attains or exceeds the soil standard(s) for the groundwater pathway.

Residual soil contamination identified during the TSSA is located between 4 and 11 feet bgs and above the water table observed at approximately 14 feet bgs in soil borings advanced as part of site investigation activities. Benzene, toluene, ethylbenzene, methyl tert-butyl ether, total trimethylbenzenes and xylenes exceeded their respective groundwater pathway RCLs in sidewall soil sample S-5 (6 feet bgs); benzene and total trimethylbenzenes exceeded their respective groundwater pathway RCLs in tank basin bottom sample B-5 (11 feet bgs), and benzene exceeded the groundwater pathway RCL in dispenser sample D-2 (4 feet bgs).

- H. Describe how the residual contamination will be addressed, including but not limited to details concerning: covers, engineering controls or other barrier features; use of natural attenuation of groundwater; and vapor mitigation systems or measures.

Minor residual soil contamination exceeding groundwater pathway RCLs at the Site will be addressed via natural attenuation. Contaminants were not detected above laboratory detection limits in any of the soil samples collected from the six soil borings advanced as part of recent site investigation activities, including in soil boring MSA-GP-3, which was advanced directly adjacent to the location of soil sidewall sample S-5, indicating that contamination at the site is either extremely limited or has already begun to attenuate following tank and fueling component removal.

- I. If using natural attenuation as a groundwater remedy, describe how the data collected supports the conclusion that natural attenuation is effective in reducing contaminant mass and concentration (e.g., stable or receding groundwater plume).

Petroleum groundwater contamination was not detected at the site during recent site investigation activities.

- J. Identify how all exposure pathways (soil, groundwater, vapor) were removed and/or adequately addressed by immediate, interim and/or remedial action(s).

No immediate, interim, or remedial actions have been taken at the Site.

The direct contact exposure pathway is not considered a risk at the Site. There were no soils with contaminant concentrations exceeding direct contact standards encountered during TSSA or site investigation sampling activities.

The groundwater exposure pathway is not considered a risk at the Site. There were no detections of petroleum contaminants above laboratory detection limits in any of the groundwater samples collected from soil borings advanced at the Site. PCE was detected in groundwater samples collected from soil borings MSA-GP-1 and MSA-GP-2, advanced along the eastern portion of the property, at levels greater than the WDNR PAL after a number of groundwater samples collected at the Site were re-analyzed for the full list of VOCs after PCE was detected in the soil vapor samples collected along the eastern property boundary. PCE was not detected in groundwater samples MSA-GP-4 or MSA-GP-6, collected further west on the Site.

The vapor exposure pathway is not considered a risk at the Site. No petroleum-related compounds were detected above VRSLs in any of the vapor samples (soil gas or sub slab) collected at the Site, indicating the threat of vapor intrusion to nearby buildings is low. PCE and 1,3-butadiene were detected above WDNR VRSLs in one or both of the soil gas vapor samples collected adjacent to the alleyway on the eastern portion of the site, however, these detections do not appear to be related to the petroleum contamination at the Site. PCE was detected at significantly lower concentrations in the sub-slab vapor samples collected inside the building than in those samples collected outside near the alleyway, indicating that significant PCE contamination is not present beneath the onsite building. PCE was not detected in groundwater samples analyzed for VOCs during previous site investigation activities completed in 2008. The site operated as a fueling station and convenience store between 2008 and 2015. After closure of the fueling station/store, the site remained vacant until it was purchased by Dunlavy Pros LLC. There were no known uses of PCE at the site between the time that the site was last sampled in 2008 and site investigation activities performed in 2022. Since at least 1939, the site has been used as a fueling station and for commercial retail and residential occupation. The site is not known to have been historically used for any purposes which would have used or released chlorinated solvent compounds, including dry cleaning or automotive repair services.

Based on this evidence, it appears that the source of the PCE contamination is related to an offsite source or the adjacent sanitary sewer system and does not appear to be related to current or historical activities on the Site.

- K. Identify any system hardware anticipated to be left in place after site closure, and explain the reasons why it will remain.  
No remedial systems were installed at the site.
- L. Identify the need for a ch. NR 140, Wis. Adm. Code, groundwater Preventive Action Limit (PAL) or Enforcement Standard (ES) exemption, and identify the affected monitoring points and applicable substances.  
There were no petroleum compounds detected above PALs or ESs. PCE was detected above the WDNR PAL in groundwater samples collected from soil borings MSA-GP-1 and MSA-GP-2 advanced adjacent to the alleyway to the east of the site, however, these detections appear to be due to an offsite source. PCE was not detected in groundwater samples MSA-GP-4 or MSA-GP-6 advanced near the east side of the building and near the former dispenser canopy, respectively.
- M. If a DNR action level for vapor intrusion was exceeded (for indoor air, sub slab, or both) describe where it was exceeded and how the pathway was addressed.  
There were no contaminant detections in the sub slab vapor samples collected inside the onsite building which exceeded their respective VRSLs.
- N. Describe the surface water and/or sediment contaminant concentrations and areas after remediation. If a DNR action level was exceeded, describe where it was exceeded and how the pathway was addressed.  
No surface water/sediment is present at the Site.

**5. Continuing Obligations: Includes all affected properties and rights-of-way (ROWs). In certain situations, maintenance plans are also required, and must be included in Attachment D.**

Directions: For each of the 3 property types below, check all situations that apply to this closure request.

(NOTE: Monitoring wells to be transferred to another site are addressed in Attachment E.)

This situation applies to the following property or Right of Way (ROW):			Case Closure Situation - Continuing Obligation (database fees will apply, ii. - xiv.)	Maintenance Plan Required	
Property Type:					
Source Property	Affected Property (Off-Source)	ROW			
i.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	None of the following situations apply to this case closure request.	NA
ii.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Residual groundwater contamination exceeds ch. NR 140 ESs.	NA
iii.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Residual soil contamination exceeds ch. NR 720 RCLs.	NA
iv.				Monitoring Wells Remain:	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	• Not Abandoned (filled and sealed)	NA
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	• Continued Monitoring (requested or required)	Yes
v.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Cover/Barrier/Engineered Cover or Control for (soil) direct contact pathways (includes vapor barriers)	Yes
vi.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Cover/Barrier/Engineered Cover or Control for (soil) groundwater infiltration pathway	Yes
vii.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Structural Impediment: impedes completion of investigation or remedial action (not as a performance standard cover)	NA
viii.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Residual soil contamination meets NR 720 industrial soil RCLs, land use is classified as industrial	NA
ix.	<input type="checkbox"/>	<input type="checkbox"/>	NA	Vapor Mitigation System (VMS) required due to exceedances of vapor risk screening levels or other health based concern	Yes
x.	<input type="checkbox"/>	<input type="checkbox"/>	NA	Vapor: Dewatering System needed for VMS to work effectively	Yes
xi.	<input type="checkbox"/>	<input type="checkbox"/>	NA	Vapor: Compounds of Concern in use: full vapor assessment could not be completed	NA
xii.	<input type="checkbox"/>	<input type="checkbox"/>	NA	Vapor: Commercial/Industrial exposure assumptions used.	NA
xiii.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Vapor: Residual volatile contamination poses future risk of vapor intrusion	NA
xiv.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Site-specific situation: (e. g., fencing, methane monitoring, other) ( <i>discuss with project manager before submitting the closure request</i> )	Site specific

**6. Underground Storage Tanks**

- A. Were any tanks, piping or other associated tank system components removed as part of the investigation or remedial action?  Yes  No
- B. Do any upgraded tanks meeting the requirements of ch. ATCP 93, Wis. Adm. Code, exist on the property?  Yes  No
- C. If the answer to question 6.B. is yes, is the leak detection system currently being monitored?  Yes  No

**General Instructions**

All information shall be legible. Providing illegible information will result in a submittal being considered incomplete until corrected. For each attachment (A-G), provide a Table of Contents page, listing all 'applicable' and 'not applicable' items by Closure Form titles (e.g., A.1. Groundwater Analytical Table, A.2. Soil Analytical Results Table, etc.). If any item is 'not applicable' to the case closure request, you must fully explain the reasons why.

**Data Tables (Attachment A)****Directions for Data Tables:**

- Use **bold** and italics font for information of importance on tables and figures. Use **bold** font for ch. NR 140, Wis. Adm. Code ES attainments or exceedances, and *italicized font* for ch. NR 140, Wis. Adm. Code, PAL attainments or exceedances.
- Use **bold** font to identify individual ch. NR 720 Wis. Adm. Code RCL exceedances. Tables should also include the corresponding groundwater pathway and direct contact pathway RCLs for comparison purposes. Cumulative hazard index and cumulative cancer risk exceedances should also be tabulated and identified on Tables A.2 and A.3.
- Do not use shading or highlighting on the analytical tables.
- Include on Data Tables the level of detection for results which are below the detection level (i.e., do not just list as no detect (ND)).
- Include the units on data tables.
- Summaries of all data must include information collected by previous consultants.
- Do not submit lab data sheets unless these have not been submitted in a previous report. Tabulate all data required in s. NR 716.15 (3)(c), Wis. Adm. Code, in the format required in s. NR 716.15(4)(e), Wis. Adm. Code.
- Include in Attachment A all of the following tables, in the order prescribed below, with the specific Closure Form titles noted on the separate attachments (e.g., Title: A.1. Groundwater Analytical Table; A.2. Soil Analytical Results Table, etc.).
- For required documents, each table (e.g., A.1., A.2., etc.) should be a separate Portable Document Format (PDF).

**A. Data Tables**

- A.1. **Groundwater Analytical Table(s):** Table(s) showing the analytical results and collection dates for all groundwater sampling points (e.g., monitoring wells, temporary wells, sumps, extraction wells, potable wells) for which samples have been collected.
- A.2. **Soil Analytical Results Table(s):** Table(s) showing **all** soil analytical results and collection dates. Indicate if sample was collected above or below the observed low water table (unsaturated versus saturated).
- A.3. **Residual Soil Contamination Table(s):** Table(s) showing the analytical results of only the residual soil contamination at the time of closure. This table shall be a subset of table A.2 and should include only the soil sample locations that exceed an RCL. Indicate if sample was collected above or below the observed low water table (unsaturated versus saturated). Table A.3 is optional only if a total of fewer than 15 soil samples have been collected at the site.
- A.4. **Vapor Analytical Table(s):** Table(s) showing type(s) of samples, sample collection methods, analytical method, sample results, date of sample collection, time period for sample collection, method and results of leak detection, and date, method and results of communication testing.
- A.5. **Other Media of Concern (e.g., sediment or surface water):** Table(s) showing type(s) of sample, sample collection method, analytical method, sample results, date of sample collection, and time period for sample collection.
- A.6. **Water Level Elevations:** Table(s) showing all water level elevation measurements and dates from all monitoring wells. If present, free product should be noted on the table.
- A.7. **Other:** This attachment should include: 1) any available tabulated natural attenuation data; 2) data tables pertaining to engineered remedial systems that document operational history, demonstrate system performance and effectiveness, and display emissions data; and (3) any other data tables relevant to case closure not otherwise noted above. If this section is not applicable, please explain the reasons why.

**Maps, Figures and Photos (Attachment B)**

**Directions for Maps, Figures and Photos:**

- Provide on paper no larger than 11 x 17 inches, unless otherwise directed by the Department. Maps and figures may be submitted in a larger electronic size than 11 x 17 inches, in a PDF readable by the Adobe Acrobat Reader. However, those larger-size documents must be legible when printed.
- Prepare visual aids, including maps, plans, drawings, fence diagrams, tables and photographs according to the applicable portions of ss. NR 716.15(4), 726.09(2) and 726.11(3), (5) and (6), Wis. Adm. Code.
- Include all sample locations.
- Contour lines should be clearly labeled and defined.
- Include in Attachment B all of the following maps and figures, in the order prescribed below, with the specific Closure Form titles noted on the separate attachments (e.g., Title: B.1. Location Map; B.2. Detailed Site Map, etc).
- For the electronic copies that are required, each map (e.g., B.1.a., B.2.a, etc.,) should be a separate PDF.
- Maps, figures and photos should be dated to reflect the most recent revision.

**B.1. Location Maps**

- B.1.a. **Location Map:** A map outlining all properties within the contaminated site boundaries on a United States Geological Survey (U.S.G.S.) topographic map or plat map in sufficient detail to permit easy location of all affected and/or adjacent parcels. If groundwater standards are exceeded, include the location of all potable wells, including municipal wells, within 1200 feet of the area of contamination.
- B.1.b. **Detailed Site Map:** A map that shows all relevant features (buildings, roads, current ground surface cover, individual property boundaries for all affected properties, 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 attaining or exceeding a ch. NR 140 ES, and/or in relation to the boundaries of soil contamination attaining or exceeding a RCL. Provide parcel identification numbers for all affected properties.
- B.1.c. **RR Sites Map:** From RR Sites Map (<https://dnrmaps.wi.gov/H5/?viewer=rrsites>) attach a map depicting the source property, and all open and closed BRRTS sites within a half-mile radius or less of the property.

**B.2. Soil Figures**

- B.2.a. **Soil Contamination:** Figure(s) showing the location of all identified unsaturated soil contamination. Use a single contour to show the horizontal extent of each area of contiguous soil contamination that exceeds a soil to groundwater pathway RCL as determined under ch. NR 720.Wis. Adm. Code. A separate contour line should be used to indicate the horizontal extent of each area of contiguous soil contamination that exceeds a direct contact RCL exceedances (0-4 foot depth).
- B.2.b. **Residual Soil Contamination:** Figure(s) showing only the locations of soil samples where unsaturated soil contamination remains at the time of closure (locations represented in Table A.3). Use a single contour to show the horizontal extent of each area of contiguous soil contamination that exceeds a soil to groundwater pathway RCL as determined under ch. NR 720 Wis. Adm. Code. A separate contour line should be used to indicate the horizontal extent of each area of contiguous soil contamination that exceeds a direct contact RCL exceedance (0-4 foot depth).

**B.3. Groundwater Figures**

- B.3.a. **Geologic Cross-Section Figure(s):** One or more cross-section diagrams showing soil types and correlations across the site, water table and piezometric elevations, and locations and elevations of geologic rock units, if encountered. Display on one or more figures all of the following:
- Source location(s) and vertical extent of residual soil contamination exceeding an RCL. Distinguish between direct contact and the groundwater pathway RCLs.
  - Source location(s) and lateral and vertical extent if groundwater contamination exceeds ch. NR 140 ES.
  - Surface features, including buildings and basements, and show surface elevation changes.
  - Any areas of active remediation within the cross section path, such as excavations or treatment zones.
  - Include a map displaying the cross-section location(s), if they are not displayed on the Detailed Site Map (Map B.1.b.)
- B.3.b. **Groundwater Isoconcentration:** Figure(s) showing the horizontal extent of the post-remedial groundwater contamination exceeding a ch. NR 140, Wis. Adm. Code, PAL and/or an ES. Indicate the date and direction of groundwater flow based on the most recent sampling data.
- B.3.c. **Groundwater Flow Direction:** Figure(s) representing groundwater movement at the site. If the flow direction varies by more than 20° over the history of the site, submit two groundwater flow maps showing the maximum variation in flow direction.
- B.3.d. **Monitoring Wells:** Figure(s) showing all monitoring wells, with well identification number. Clearly designate any wells that: (1) are proposed to be abandoned; (2) cannot be located; (3) are being transferred; (4) will be retained for further sampling, or (5) have been abandoned.

**B.4. Vapor Maps and Other Media**

- B.4.a. **Vapor Intrusion Map:** Map(s) showing all locations and results for samples taken to investigate the vapor intrusion pathway in relation to residual soil and groundwater contamination, including sub-slab, indoor air, soil vapor, soil gas, ambient air, and communication testing. Show locations and footprints of affected structures and utility corridors, and/or where residual contamination poses a future risk of vapor intrusion.
- B.4.b. **Other media of concern (e.g., sediment or surface water):** Map(s) showing all sampling locations and results for other media investigation. Include the date of sample collection and identify where any standards are exceeded.
- B.4.c. **Other:** Include any other relevant maps and figures not otherwise noted above. (This section may remain blank).

- B.5. Structural Impediment Photos:** One or more photographs documenting the structural impediment feature(s) which precluded a complete site investigation or remediation at the time of the closure request. The photographs should document the area that could not be investigated or remediated due to a structural impediment. The structural impediment should be indicated on Figures B.2.a and B.2.b.

**Directions for Documentation of Remedial Action:**

- Include in Attachment C all of the following documentation, in the order prescribed below, with the specific Closure Form titles noted on the separate attachments (e.g., Title: C.1. Site Investigation Documentation; C.2. Investigative Waste, etc.).
- If the documentation requested below has already been submitted to the DNR, please note the title and date of the report for that particular document requested.
  - C.1. **Site investigation documentation**, that has not otherwise been submitted with the Site Investigation Report.
  - C.2. **Investigative waste** disposal documentation.
  - C.3. Provide a **description of the methodology** used along with all supporting documentation if the RCLs are different than those contained in the Department's RCL Spreadsheet available at:  
<https://dnr.wisconsin.gov/topic/Brownfields/Professionals.html#tabx2>.
  - C.4. **Construction documentation** or as-built report for any constructed remedial action or portion of, or interim action specified in s. NR 724.02(1), Wis. Adm. Code.
  - C.5. **Decommissioning of Remedial Systems**. Include plans to properly abandon any systems or equipment.
  - C.6. **Other**. Include any other relevant documentation not otherwise noted above (This section may remain blank).

**Maintenance Plan(s) and Photographs (Attachment D)**

**Directions for Maintenance Plans and Photographs:**

Attach a maintenance plan for each affected property (source property, each off-source affected property) with continuing obligations requiring future maintenance (e.g., direct contact, groundwater protection, vapor intrusion). See Site Summary section 5 for all affected property(s) requiring a maintenance plan. Maintenance plan guidance and/or templates for: 1) Cover/barrier systems; 2) Vapor intrusion; and 3) Monitoring wells, can be found at: <http://dnr.wi.gov/topic/Brownfields/Professionals.html#tabx3>

- D.1. **Descriptions of maintenance action(s) required for maximizing effectiveness of the engineered control, vapor mitigation system, feature or other action for which maintenance is required:**
  - Provide brief descriptions of the type, depth and location of residual contamination.
  - Provide a description of the system/cover/barrier/monitoring well(s) to be maintained.
  - Provide a description of the maintenance actions required for maximizing effectiveness of the engineered control, vapor mitigation system, feature or other action for which maintenance is required.
  - Provide contact information, including the name, address and phone number of the individual or facility who will be conducting the maintenance.
- D.2. **Location map(s) which show(s):** (1) the feature that requires maintenance; (2) the location of the feature(s) that require(s) maintenance - on and off the source property; (3) the extent of the structure or feature(s) to be maintained, in relation to other structures or features on the site; (4) the extent and type of residual contamination; and (5) all property boundaries.
- D.3. **Photographs** for site or facilities with a cover or other performance standard, a structural impediment or a vapor mitigation system, include one or more photographs documenting the condition and extent of the feature at the time of the closure request. Pertinent features shall be visible and discernible. Photographs shall be submitted with a title related to the site name and location, and the date on which it was taken.
- D.4. **Inspection log**, to be maintained on site, or at a location specified in the maintenance plan or approval letter. The inspection and maintenance log is found at: <http://dnr.wi.gov/files/PDF/forms/4400/4400-305.pdf>.

**Monitoring Well Information (Attachment E)**

**Directions for Monitoring Well Information:**

For all wells that will remain in use, be transferred to another party, or that could not be located; attach monitoring well construction and development forms (DNR Form 4400-113 A and B: [http://dnr.wi.gov/topic/groundwater/documents/forms/4400\\_113\\_1\\_2.pdf](http://dnr.wi.gov/topic/groundwater/documents/forms/4400_113_1_2.pdf))

**Select One:**

- No monitoring wells were installed as part of this response action.
- All monitoring wells have been located and will be properly abandoned upon the DNR granting conditional closure to the site
- Select One or More:**
  - Not all monitoring wells can be located, despite good faith efforts. Attachment E must include a description of efforts made to locate the wells.
  - One or more monitoring wells will be transferred to another owner upon case closure being granted. Attachment E should include documentation identifying the name, address and email for the new owner(s). Provide documentation from the party accepting future responsibility for monitoring well(s).
  - One or more wells will remain in use at the site after this closure. Attachment E must include documentation as to the reason(s) the well(s) will remain in use. When one or more monitoring wells will remain in use this is considered a continuing obligation and a maintenance plan will be required and must be included in Attachment D.

**Source Legal Documents (Attachment F)**

**Directions for Source Legal Documents:**

Label documents with the specific closure form titles (e.g., F.1. Deed, F.2. Certified Survey Map, etc.). Include all of the following documents, in the order listed:

- F.1. **Deed:** The most recent deed with legal description clearly listed.

*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.*

- F.2. **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. In cases where the certified survey map or recorded plat map are not legible or are unavailable, a copy of a parcel map from a county land information office may be substituted. A copy of a parcel map from a county land information office shall be legible, and the parcels identified in the legal description shall be clearly identified and labeled with the applicable parcel identification number.

- F.3. **Verification of Zoning:** Documentation (e.g., official zoning map or letter from municipality) of the property's or properties' current zoning status.

- F.4. **Signed Statement:** A statement signed by the Responsible Party (RP), which states that he or she believes that the attached legal description(s) accurately describe(s) the correct contaminated property or properties. This section applies to the source property only. Signed statements for Other Affected Properties should be included in Attachment G.

**Notifications to Owners of Affected Properties (Attachment G)**

**Directions for Notifications to Owners of Affected Properties:**

Complete the table on the following page for sites which require notification to owners of affected properties pursuant to ch. 292, Wis. Stats. and ch. NR 725 and 726, Wis. Adm. Code. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Public Records law [ss. 19.31- 19.39, Wis. Stats.]. The DNR's "Guidance on Case Closure and the Requirements for Managing Continuing Obligations" (PUB-RR-606) lists specific notification requirements <https://dnr.wi.gov/DocLink/RR/RR606.pdf>.

State law requires that the responsible party provide a 30-day, written advance notification to certain persons prior to applying for case closure. This requirement applies if: (1) the person conducting the response action does not own the source property; (2) the contamination has migrated onto another property; and/or (3) one or more monitoring wells will not be abandoned. Use form 4400-286, Notification of Continuing Obligations and Residual Contamination, at <http://dnr.wi.gov/files/PDF/forms/4400/4400-286.pdf>

Include a copy of each notification sent and accompanying proof of delivery, i.e., return receipt or signature confirmation.

Include the following documents for each property, keeping each property's documents grouped together and labeled with the letter G and the corresponding ID number from the table on the following page. (Source Property documents should only be included in Attachment F):

- **Deed:** The most recent deed with legal descriptions clearly listed for all affected properties.  
*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. In cases where the certified survey map or recorded plat map are not legible or are unavailable, a copy of a parcel map from a county land information office may be substituted. A copy of a parcel map from a county land information office shall be legible, and the parcels identified in the legal description shall be clearly identified and labeled with the applicable parcel identification number.
- **Verification of Zoning:** Documentation (e.g., official zoning map or letter from municipality) of the property's or properties' current zoning status.
- **Signed Statement:** A statement signed by the Responsible Party (RP), which states that he or she believes the attached legal description(s) accurately describe(s) the correct contaminated property or properties.



**Signatures and Findings for Closure Determination**

*This page has been updated as of February 2019 to comply with the requirements of Wis. Admin. Code ch. NR 712.*

Check the correct box for this case closure request and complete the corresponding certification statement(s) listed below to demonstrate that the requirements of Wis. Admin. Code ch. NR 712 have been met. The responsibility for signing the certification may not be delegated per Wis. Admin. Code § NR 712.09 (1). Per Wis. Admin. Code § 712.05 (1), the work must be conducted or

- The investigation and/or response action(s) for this site evaluated and/or addressed groundwater (including natural attenuation remedies). Both a professional engineer and a hydrogeologist must sign this document per Wis. Admin. Code ch. NR 712.
- The investigation and the response action(s) for this site did not evaluate or address groundwater. A professional engineer must sign this document per Wis. Admin. Code ch. NR 712.

**Engineering Certification**

I, Jeffrey K. Anderson, P.E., hereby certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with the requirements of ch. A-E 4, Wis. Adm. Code; that this document has been prepared in accordance with the Rules of Professional Conduct in ch. A-E 8, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Signature 

P. E. #

35940

Title Senior Team Leader

P.E. Stamp



**Hydrogeologist Certification**

I, Mark Davidson, hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03 (1), Wis. Adm. Code, am registered in accordance with the requirements of ch. GHSS 2, Wis. Adm. Code, or licensed in accordance with the requirements of ch. GHSS 3, Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Signature 

Title Senior Project Hydrogeologist

Date 04/18/2023