

Notice: Use this form to request a **written response (on agency letterhead)** from the Department of Natural Resources (DNR) regarding technical assistance, a post-closure change to a site, a specialized agreement or liability clarification for Property with known or suspected environmental contamination. A fee will be required as is authorized by s. 292.55, Wis. Stats., and NR 749, Wis. Adm. Code., unless noted in the instructions below. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records law [ss. 19.31 - 19.39, Wis. Stats.].

Definitions

"Property" refers to the subject Property that is perceived to have been or has been impacted by the discharge of hazardous substances.

"Liability Clarification" refers to a written determination by the Department provided in response to a request made on this form. The response clarifies whether a person is or may become liable for the environmental contamination of a Property, as provided in s. 292.55, Wis. Stats.

"Technical Assistance" refers to the Department's assistance or comments on the planning and implementation of an environmental investigation or environmental cleanup on a Property in response to a request made on this form as provided in s. 292.55, Wis. Stats.

"Post-closure modification" refers to changes to Property boundaries and/or continuing obligations for Properties or sites that received closure letters for which continuing obligations have been applied or where contamination remains. Many, but not all, of these sites are included on the GIS Registry layer of RR Sites Map to provide public notice of residual contamination and continuing obligations.

Select the Correct Form

This form should be used to request the following from the DNR:

- Technical Assistance
- Liability Clarification
- Post-Closure Modifications
- Specialized Agreements (tax cancellation, negotiated agreements, etc.)

Do not use this form if one of the following applies:

- Request for an **off-site liability exemption or clarification** for Property that has been or is perceived to be contaminated by one or more hazardous substances that originated on another Property containing the source of the contamination. Use DNR's Off-Site Liability Exemption and Liability Clarification Application Form 4400-201.
- Submittal of an Environmental Assessment for the **Lender Liability Exemption**, s 292.21, Wis. Stats., **if no response or review by DNR is requested**. Use the Lender Liability Exemption Environmental Assessment Tracking Form 4400-196.
- Request for an **exemption to develop on a historic fill site** or licensed landfill. Use DNR's Form 4400-226 or 4400-226A.
- **Request for closure** for Property where the investigation and cleanup actions are completed. Use DNR's Case Closure - GIS Registry Form 4400-202.

All forms, publications and additional information are available on the internet at: dnr.wi.gov/topic/Brownfields/Pubs.html.

Instructions

1. Complete sections 1, 2, 6 and 7 for all requests. Be sure to provide adequate and complete information.
2. Select the type of assistance requested: Section 3 for technical assistance or post-closure modifications, Section 4 for a written determination or clarification of environmental liabilities; or Section 5 for a specialized agreement.
3. Include the fee payment that is listed in Section 3, 4, or 5, unless you are a "Voluntary Party" enrolled in the Voluntary Party Liability Exemption Program **and** the questions in Section 2 direct otherwise. Information on to whom and where to send the fee is found in Section 8 of this form.
4. Send the completed request, supporting materials and the fee to the appropriate DNR regional office where the Property is located. See the map on the last page of this form. A paper copy of the signed form and all reports and supporting materials shall be sent with an electronic copy of the form and supporting materials on a compact disk. For electronic document submittal requirements see: <http://dnr.wi.gov/files/PDF/pubs/rr/RR690.pdf>

The time required for DNR's determination varies depending on the complexity of the site, and the clarity and completeness of the request and supporting documentation.

Technical Assistance, Environmental Liability Clarification or Post-Closure Modification Request

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Section 1. Contact and Recipient Information

Requester Information

This is the person requesting technical assistance or a post-closure modification review, that his or her liability be clarified or a specialized agreement and is identified as the requester in Section 7. DNR will address its response letter to this person.

Last Name Mohr	First Jim	MI	Organization/ Business Name Tidy, Inc.
Mailing Address 818 S. Broadway Avenue		City Green Bay	State WI
		ZIP Code 54304	
Phone # (include area code) (920) 432-7738	Fax # (include area code)	Email Jmohr5@new.rr.com	

The requester listed above: (select all that apply)

- | | |
|---|--|
| <input checked="" type="checkbox"/> Is currently the owner | <input type="checkbox"/> Is considering selling the Property |
| <input type="checkbox"/> Is renting or leasing the Property | <input type="checkbox"/> Is considering acquiring the Property |
| <input type="checkbox"/> Is a lender with a mortgagee interest in the Property | |
| <input type="checkbox"/> Other. Explain the status of the Property with respect to the applicant: | |

Contact Information (to be contacted with questions about this request) Select if same as requester

Contact Last Name Mohr	First Jim	MI	Organization/ Business Name Tidy Cleaners & Laundry
Mailing Address 818 S. Broadway Avenue		City Green Bay	State WI
		ZIP Code 54304	
Phone # (include area code) (920) 432-7738	Fax # (include area code)	Email Jmohr5@new.rr.com	

Environmental Consultant (if applicable)

Contact Last Name Dahlem	First Matt	MI	Organization/ Business Name Fehr Graham
Mailing Address 909 N. 8th Street, Suite 101		City Sheboygan	State WI
		ZIP Code 53081	
Phone # (include area code) (920) 453-0700	Fax # (include area code)	Email mdahlem@fehr-graham.com	

Section 2. Property Information

Property Name Tidy Cleaners & Laundry	FID No. (if known) 405009220
BRRTS No. (if known) 02-05-552220	Parcel Identification Number 2-172
Street Address 818 S. Broadway Avenue	City Green Bay
	State WI
	ZIP Code 54304
County Brown	Municipality where the Property is located <input checked="" type="radio"/> City <input type="radio"/> Town <input type="radio"/> Village of Green Bay
	Property is composed of: <input checked="" type="radio"/> Single tax parcel <input type="radio"/> Multiple tax parcels
	Property Size Acres 0

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1. Is a response needed by a specific date? (e.g., Property closing date) Note: Most requests are completed within 60 days. Please plan accordingly.

- No Yes

Date requested by: _____

Reason: _____

2. Is the "Requester" enrolled as a Voluntary Party in the Voluntary Party Liability Exemption (VPLE) program?

- No. **Include the fee that is required for your request in Section 3, 4 or 5.**
 Yes. **Do not include a separate fee.** This request will be billed separately through the VPLE Program.

Fill out the information in Section 3, 4 or 5 which corresponds with the type of request:

Section 3. Technical Assistance or Post-Closure Modifications;

Section 4. Liability Clarification; or Section 5. Specialized Agreement.

Section 3. Request for Technical Assistance or Post-Closure Modification

Select the type of technical assistance requested: [Numbers in brackets are for WI DNR Use]

- No Further Action Letter (NFA) (Immediate Actions) - NR 708.09, [183] - **Include a fee of \$350.** Use for a written response to an immediate action after a discharge of a hazardous substance occurs. Generally, these are for a one-time spill event.
- Review of Site Investigation Work Plan - NR 716.09, [135] - **Include a fee of \$700.**
- Review of Site Investigation Report - NR 716.15, [137] - **Include a fee of \$1050.**
- Approval of a Site-Specific Soil Cleanup Standard - NR 720.10 or 12, [67] - **Include a fee of \$1050.**
- Review of a Remedial Action Options Report - NR 722.13, [143] - **Include a fee of \$1050.**
- Review of a Remedial Action Design Report - NR 724.09, [148] - **Include a fee of \$1050.**
- Review of a Remedial Action Documentation Report - NR 724.15, [152] - **Include a fee of \$350**
- Review of a Long-term Monitoring Plan - NR 724.17, [25] - **Include a fee of \$425.**
- Review of an Operation and Maintenance Plan - NR 724.13, [192] - **Include a fee of \$425.**

Other Technical Assistance - s. 292.55, Wis. Stats. [97] (For request to build on an abandoned landfill use Form 4400-226)

- Schedule a Technical Assistance Meeting - **Include a fee of \$700.**
- Hazardous Waste Determination - **Include a fee of \$700.**
- Other Technical Assistance - **Include a fee of \$700.** Explain your request in an attachment.

Post-Closure Modifications - NR 727, [181]

- Post-Closure Modifications: Modification to Property boundaries and/or continuing obligations of a closed site or Property; sites may be on the GIS Registry. This also includes removal of a site or Property from the GIS Registry. **Include a fee of \$1050, and:**
 - Include a fee of \$300 for sites with residual soil contamination; and
 - Include a fee of \$350 for sites with residual groundwater contamination, monitoring wells or for vapor intrusion continuing obligations.

Attach a description of the changes you are proposing, and documentation as to why the changes are needed (if the change to a Property, site or continuing obligation will result in revised maps, maintenance plans or photographs, those documents may be submitted later in the approval process, on a case-by-case basis).

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Skip Sections 4 and 5 if the technical assistance you are requesting is listed above and complete Sections 6 and 7 of this form.

Section 5. Request for a Specialized Agreement

Select the type of agreement needed. Include the appropriate draft agreements and supporting materials. Complete Sections 6 and 7 of this form. More information and model draft agreements are available at: dnr.wi.gov/topic/Brownfields/lgu.html#tabx4.

- Tax cancellation agreement - s. 75.105(2)(d), Wis. Stats. [654]
 - ❖ **Include a fee of \$700, and the information listed below:**
 - (1) Phase I and II Environmental Site Assessment Reports,
 - (2) a copy of the Property deed with the correct legal description.
- Agreement for assignment of tax foreclosure judgement - s.75.106, Wis. Stats. [666]
 - ❖ **Include a fee of \$700, and the information listed below:**
 - (1) Phase I and II Environmental Site Assessment Reports,
 - (2) a copy of the Property deed with the correct legal description.
- Negotiated agreement - Enforceable contract for non-emergency remediation - s. 292.11(7)(d) and (e), Wis. Stats. [630]
 - ❖ **Include a fee of \$1400, and the information listed below:**
 - (1) a draft schedule for remediation; and,
 - (2) the name, mailing address, phone and email for each party to the agreement.

Section 6. Other Information Submitted

Identify all materials that are included with this request.

Send both a paper copy of the signed form and all reports and supporting materials, and an electronic copy of the form and all reports, including Environmental Site Assessment Reports, and supporting materials on a compact disk.

Include one copy of any document from any state agency files that you want the Department to review as part of this request. The person submitting this request is responsible for contacting other state agencies to obtain appropriate reports or information.

- Phase I Environmental Site Assessment Report - Date: _____
- Phase II Environmental Site Assessment Report - Date: _____
- Legal Description of Property (required for all liability requests and specialized agreements)
- Map of the Property (required for all liability requests and specialized agreements)
- Analytical results of the following sampled media: Select all that apply and include date of collection.
 - Groundwater Soil Sediment Other medium - Describe: _____
- Date of Collection: _____
- A copy of the closure letter and submittal materials
- Draft tax cancellation agreement
- Draft agreement for assignment of tax foreclosure judgment
- Other report(s) or information - Describe: PFAS Site Investigation Work Plan

For Property with newly identified discharges of hazardous substances only: Has a notification of a discharge of a hazardous substance been sent to the DNR as required by s. NR 706.05(1)(b), Wis. Adm. Code?

- Yes - Date (if known): _____
- No

Note: The Notification for Hazardous Substance Discharge (non-emergency) form is available at: dnr.wi.gov/files/PDF/forms/4400/4400-225.pdf.

Section 7. Certification by the Person who completed this form

- I am the person submitting this request (requester)
- I prepared this request for: Mr. Jim Mohr
Requester Name

I certify that I am familiar with the information submitted on this request, and that the information on and included with this request is true, accurate and complete to the best of my knowledge. I also certify I have the legal authority and the applicant's permission to make this request.

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Signature

2-3-2020

Date Signed

Branch Manager

Title

(920) 453-0700

Telephone Number (include area code)

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Section 8. DNR Contacts and Addresses for Request Submittals

Send or deliver one paper copy and one electronic copy on a compact disk of the completed request, supporting materials, and fee to the region where the property is located to the address below. Contact a [DNR regional brownfields specialist](#) with any questions about this form or a specific situation involving a contaminated property. For electronic document submittal requirements see: <http://dnr.wi.gov/files/PDF/pubs/rr/RR690.pdf>.

DNR NORTHERN REGION

Attn: RR Program Assistant
Department of Natural Resources
223 E Steinfest Rd Antigo, WI 54409

DNR NORTHEAST REGION

Attn: RR Program Assistant
Department of Natural Resources
2984 Shawano Avenue
Green Bay WI 54313

DNR SOUTH CENTRAL REGION

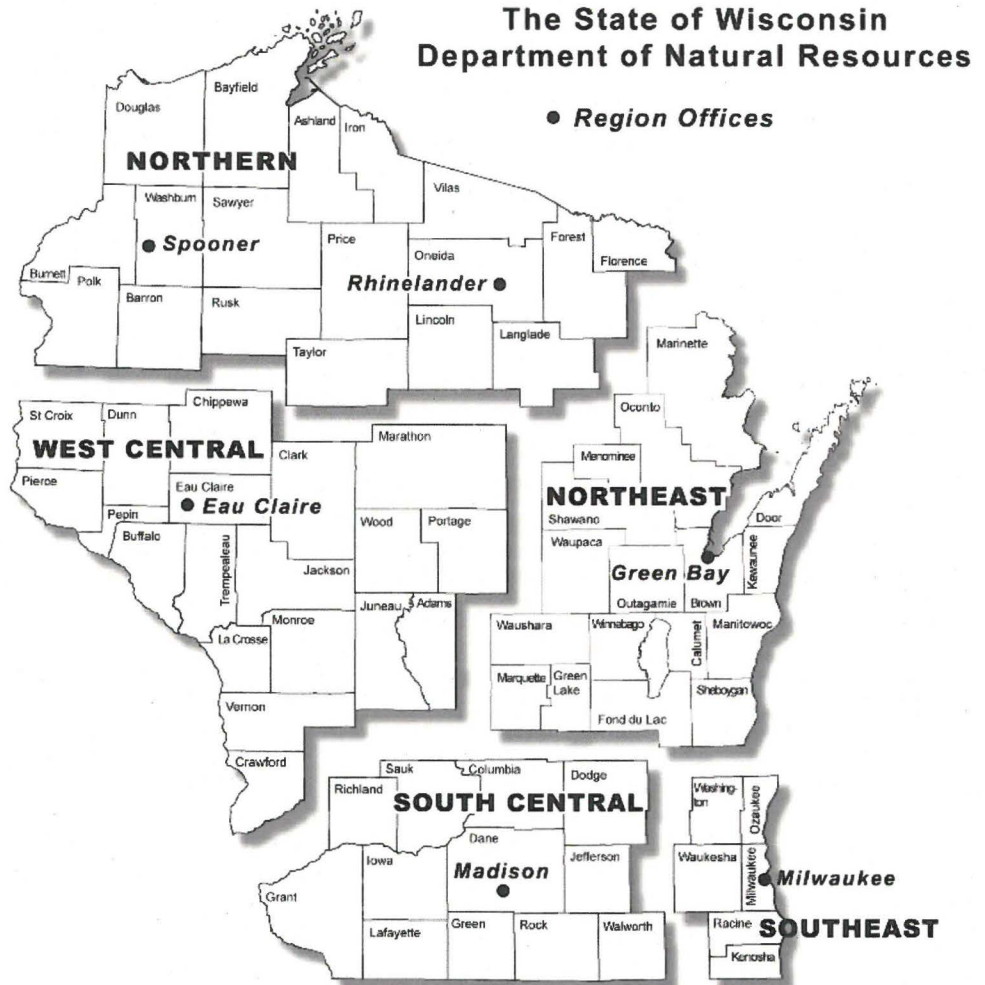
Attn: RR Program Assistant
Department of Natural Resources
3911 Fish Hatchery Road
Fitchburg WI 53711

DNR SOUTHEAST REGION

Attn: RR Program Assistant
Department of Natural Resources
2300 North Martin Luther King Drive
Milwaukee WI 53212

DNR WEST CENTRAL REGION

Attn: RR Program Assistant
Department of Natural Resources
1300 Clairemont Ave.
Eau Claire WI 54702



Note: These are the Remediation and Redevelopment Program's designated regions. Other DNR program regional boundaries may be different.

DNR Use Only			
Date Received	Date Assigned	BRRTS Activity Code	BRRTS No. (if used)
DNR Reviewer		Comments	
Fee Enclosed? <input type="radio"/> Yes <input type="radio"/> No	Fee Amount \$	Date Additional Information Requested	Date Requested for DNR Response Letter
Date Approved	Final Determination		

PFAS SITE INVESTIGATION WORK PLAN

Tidy Cleaners & Laundry
818 South Broadway Avenue
Green Bay, WI 54304

Project No.: 14-1144A
BRRTS # 02-05-552220
FID # 405009220

February 3, 2020



909 N. 8th Street, Suite 101

Sheboygan, Wisconsin 53081

Prepared for:

Ms. Josie Schultz

Wisconsin Department of Natural Resources

Department of Remediation and
Redevelopment

2984 Shawano Avenue

Green Bay, Wisconsin 54313-6727

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I, Matt Dahlem, PG, hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03 (1), 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.



Matt Dahlem, PG
Branch Manager

February 3, 2020

Date

1.0 INTRODUCTION

Tidy Cleaners & Laundry (Tidy) (the Site) received a letter from the Wisconsin Department of Natural Resources (WDNR) on October 30, 2019, stating that the Tidy site has been identified as a potential source for per- and polyfluoroalkyl substances (PFAS).

This site has been occupied by a dry-cleaning and fabricare facility since the 1960s. An open contamination case with the WDNR's Remediation and Redevelopment Program titled "Tidy Cleaners & Laundry" is tracked as Bureau of Remediation and Redevelopment Tracking System (BRRTS) #02-05-552220. Soil and groundwater contamination resulted from a discharge of chlorinated volatile organic compounds (CVOCs). The use of PFAS has been associated with dry-cleaning and fabricare operations both nationally and in Wisconsin; this site may be a source of PFAS contamination.

This Site Investigation Work Plan (SIWP) presents available information on whether any products containing PFAS were used in any process services, the duration of PFAS use, the type of PFAS used, and any areas of the site where PFAS may have been used, stored, or discarded. The SIWP also includes a groundwater sampling program for evaluating PFAS compounds at the site.

1.1 Contacts

The project contacts are as follows:

R
esponsible Party Contact and Property
Owner:
Mr. Jim Mohr
818 S. Broadway Avenue
Green Bay, WI 54304
920.432.7738
Jmohr5@new.rr.com

Regulatory Project Manager:
Ms. Josie Schultz
Wisconsin Department of Natural Resources
2984 Shawano Avenue
Green Bay, WI 54313-6727
920.662.5424
josie.schultz@wisconsin.gov

Consultant:
Mr. Matt Dahlem, PG
Fehr Graham
909 N. 8th Street, Suite 101
Sheboygan, WI 53081
920.453.0700
mdahlem@fehr-graham.com

Laboratory:
Mr. Chris Hyska
Pace Analytical Services
1241 Bellevue Street, Suite 9
Green Bay, WI 54302
920.469.2436

1.2 Site Location

The Site is located at 818 S. Broadway Avenue in Green Bay, Wisconsin. The Site is bounded on the west and north by vacant lots, to the south by an unoccupied storage building, and to the east by S. Broadway Avenue.

The site is in Brown County in the City of Green Bay, Wisconsin at the NW ¼ of the SW ¼ of Section 36, T24N, R20E. The Wisconsin Transverse Mercator coordinates for the release location from the WDNR BRRTS on the web are 676868 X and 450303 Y.

The site elevation is approximately 785-feet above mean sea level and the ground surface slopes slightly to the north and west.

1.3 Site Description and History

The approximately 0.266-acre site is located on the southwest corner of W. Mason Street (along off-ramp) and S. Broadway with all access from Broadway. The single story, slab-on-grade building is located on the southwestern part of the Site with driveway and parking areas to the east and north of the building. The Site history is not fully known. Information from the City of Green Bay web site indicates the building was constructed in 1960 and was expanded to the north in 1986.

Tidy has been owned by the Mohr family for approximately 40 years. Mr. Jim Mohr is the current owner and operator and has been affiliated with the site since 1972 and considers himself generally familiar with operations since that time. Tetrachloroethene (PCE) is the cleaning agent that has historically been used for dry-cleaning at the facility.

The dry-cleaning machine has historically been located in the southwestern part of the building (Figure 1). A new dry-cleaning machine was installed circa 1994 in essentially the same location as the old machine. Prior to regulations regarding disposal, dry-cleaning lint and filters were discarded in the garbage with other general waste. All chemicals enter the building through doors located on the east side of the building.

Two vacant lots owned by the Green Bay Redevelopment Authority are located to the west of the site and a small storage rental unit owned by a private party is located on the property to the south. Across Broadway, Masse's, a flooring installation company, is located to the northeast of Tidy and two taverns are located to the east and southeast.

1.4 Available Information on PFAS Use at the Site

Information about dry cleaning chemical use at the Site was shared with Fehr Graham by Mr. Mohr. Records reviewed include safety data sheets (SDSs), and chemical storage information dating back to 1970. The following summarizes the use of PFAS at the site:

- SDSs received from Mr. Mohr include Staticol® and *Injectable Sizing*, as these are the commonly used products for the facility.
- The facility has historically used both Staticol® and *Injectable Sizing*, or products similar to these, since the start of the site use as a drycleaner (circa 1970).
- Staticol® is a dry-cleaning detergent, used for only professional dry-cleaning applications. The manufacturer listed on the SDS provided for the product is R. R. Street & Co. Inc, from Naperville, Illinois. The available product information on the provided SDS from the manufacturer includes chemical identification information for only 2 percent of the total weight of the product, the other 98 percent being listed as Trade Secret #1 to #6. Until further information is required of the chemical manufacturer to have products' mixtures listed or reported in-full and listed on the SDS provided to consumers, additional analysis of the use of PFAS for the site cannot be accurately determined.

However, in an attempt to provide background information on the use of PFAS at the Site, Fehr Graham has reviewed available information on the general use of PFAS at dry-cleaning facilities, on a scale similar to that of Tidy. The following provides details on the information reviewed:

- Historically, the first widely used solvents in the dry-cleaning industry were petroleum-based solvents, used as early as 1855, followed by Stoddard solvent (white spirit). Both products are highly flammable and explosive, which lead to the widespread use of chlorinated solvents to replace these due to the stricter regulations imposed on the industry from the many fires and explosions occurring at dry-cleaning facilities. These highly flammable substances were phased out starting circa 1930 and were replaced by those containing PCE, which the industry calls "perc," as well as trichloroethane (TCE). PCE is a highly stable substance, which volatilizes, and is nonflammable, making it a desirable dry-cleaning agent, as well as a safer option for facilities to use in their processes. Due to the molecular structure, the nonflammable nature, and the highly lipophilic characteristics of the PCE compounds generally used in dry-cleaning detergents, these are suspect to contain PFAS-related compounds that should fall under the same requirements of the new PFAS emerging contaminants listed, including the requirements of the sampling guidance document included in this report (Appendix B).

- The product, Injectable Sizing, is a liquid product used for chemical sizing applications in the professional dry-cleaning industry. The provided SDS is for the Injectable Sizing product produced by Adco Professional Products, LLC, out of Albany, Georgia. The manufacturer's SDS provided mixture components' information on the product encompassing 60-70 percent of the total weight, with the following details:
 - Petroleum distillates, 60-70 percent wt., CAS# 64742-88-7
 - This solvent product mixture of Petroleum distillates for the use by the dry-cleaning industry is generally referred to as a Stoddard Solvent. According to the WDNR guidance document on Site Investigation Scoping: Identifying Contaminants of Concern, Wis. Admin. Code NR 716.07, Stoddard Solvents are commonly associated with PFAS-substances and should be considered when developing site investigation and sampling plans (W.A.C. Document ID: RR-19-0101-D).
- Due to the limited amount of product-specific information listed for both products' SDSs, and the identified association with commonly used products for this industry, these products shall be considered and sampled as being included in the class of emerging contaminants falling under the PFAS class of chemicals.
- Both products provided by Mr. Mohr, historically having regular use at the facility, including regular process use (diffusion/dispersion via surface water) as well as transport possibilities (dispersion via air emissions) and disposal considerations (infiltration to soils and transformation of precursors via biotic-abiotic interaction) (USEPA CLU-IN, PFASs, 2019), and being reported as in-use throughout the history of the facility as a drycleaner (circa 1970), shall be treated as inclusions to the PFAS sampling plan, and should be handled as such, as well as considered when determining future remedial activities or data analysis of trends or defining and characterizing "plumes" of these and the studied co-contaminants (PCE, TCE, CVOCs, etc.) seen at this site (Merina et al 2016).

2.0 GROUNDWATER SAMPLING PROGRAM AND SCOPE

Sampling of the groundwater will be performed for laboratory analysis of PFAS at two locations at the Site, MW-7 (closest to source) and MW-11 (downgradient from source). Per conversations with the WDNR, sampling in this manner is sufficient to satisfy Wis. Admin. Code § NR 716.07 (4) for this Site. Monitoring well locations are shown on Figure 1.

The proposed investigation consists of the following tasks:

1. Project Management
2. Field Investigation: Groundwater Sampling
3. Data Evaluation, Interpretation, and Letter Report

Depending on the findings, there may be a need for additional phases of investigation to define the site conditions. More than one round of groundwater monitoring may prove necessary.

2.1 Project Management and Correspondence and SIWP Submittal to DNR

Project management and correspondence with Tidy and the WDNR Project Manager will be completed.

Also, under this task, are project management duties, including completion of occasional correspondence and status updates to the DNR.

This document serves as the SIWP, which will be submitted to the WDNR project manager for review and input. A formal WDNR review of the SIWP has been requested. Slight adjustments to the scope may be informally discussed via phone calls or email during the review process. Since a formal agency review and response is expected, a \$700 WDNR review fee will be submitted with the SIWP. Upon agreement of the SIWP from the WDNR, the field work will be initiated.

2.2 Field Investigation: Groundwater Sampling

At the time of this SIWP, WDNR methods and guidance are not available for sampling groundwater for PFAS. Fehr Graham has been provided a "PFAS Field Sampling Guide" by Pace Analytical Services (Pace) for general guidance. A copy of this guide is included in Appendix B.

Due to the potential presence of PFAS in common consumer products and in equipment typically used to collect groundwater samples, as well as the need for very low reporting limits, special handling and care must be taken when collecting samples for PFAS analysis to avoid sample contamination.

If groundwater is sampled for PFAS in conjunction with sampling for other parameters, all PFAS samples will be collected prior to any other parameters. All downhole equipment (water level indicator, YSI multiparameter probe) will be disinfected with Alconox® between wells.

Each groundwater sample will be collected in High density polyethylene or Polypropylene laboratory containers, using new disposable nitrile gloves, a peristaltic pump, and silicon tubing.

Additional practices and clothing/personal protective equipment choices that will be followed during PFAS sample collection include:

- Use of loose paper (non-water resistant)
- Use of Aluminum field clipboards
- Use of sharpies and pens for field notes
- Well-laundered clothing, defined as clothing that has been washed six or more times after purchase, made of synthetic or natural fibers (preferable cotton)
- Avoidance of fabric softener
- Polyurethane or polyvinyl (PVC) boots
- Use of only natural sunscreens or insect repellents
- Avoidance of cosmetics, moisturizers, hand creams, or other related products as part of personal cleaning routine the morning of sampling

Collected sample bottles will be placed in individual sealed plastic bags separate from all other sample parameter bottles. Samples will be brought directly to the lab in a cooler containing ice (no chemical ice packs). Laboratory analysis of PFAS will include the 36-compound list requested by the WDNR using Environmental Protection Agency Method 537M with Isotope Dilution.

2.3 Data Evaluation, Interpretation and Reporting

After evaluation of the groundwater laboratory analytical results, a formal letter report including tables and figures will be submitted to Tidy and the WDNR summarizing the PFAS assessment conducted at the Site.

Comments will be made by the WDNR on the need for additional actions. If appropriate, the WDNR will recommend no further action regarding the assessment of PFAS at the Site.

3.0 STATE OF WISCONSIN PFAS REGULATIONS

The State of Wisconsin is currently in the process of creating regulations for sampling methodology, groundwater standards, and certifying laboratories for PFAS. This SIWP is being submitted to satisfy Wis. Admin. Code § NR 716.09. However, no PFAS samples will be collected or submitted for laboratory analysis prior to PFAS regulations being implemented and enforced.

4.0 REFERENCES

Merino, N., et al. 2016. Degradation and removal methods for perfluoroalkyl and polyfluoroalkyl substances in water. *Environmental Engineering Science* 33(9):615-649.

“Site Investigation Scoping: Identifying Contaminants of Concern”. *Wis. Stat.* 292.63; *Wis. Admin. Code NR 747* (September 16, 2019): RR-19-0101-D.

“Per- and Polyfluoroalkyl Substances (PFASs), Remediation Technologies”. November 8, 2019. United States Environmental Protection Agency Contaminated Site Clean-Up Information. [https://clu-in.org/contaminantfocus/default.focus/sec/Per-_and_Polyfluoroalkyl_Substances_\(PFASs\)/cat/Remediation_Technologies/](https://clu-in.org/contaminantfocus/default.focus/sec/Per-_and_Polyfluoroalkyl_Substances_(PFASs)/cat/Remediation_Technologies/)

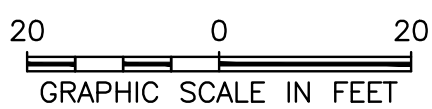
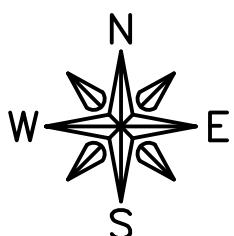
Figure 1
Monitoring Well Locations



LEGEND

- | | | | |
|---|---------------------|----------|----------------|
| ⊕ | MONITORING WELL | —W— | WATER MAIN |
| ⊕ | PIEZOMETER WELL | —< SAN — | SANITARY SEWER |
| ⊕ | SMALL DIAMETER WELL | —< ST — | STORM SEWER |
| | | —G— | GAS LINE |
| | | —T— | TELEPHONE LINE |
| | | ⊙ | MANHOLE |
| | | ⊗ | WATER VALVE |
| | | ⊘ | CATCH BASIN |
| | | ▨ | FLOOR DRAIN |

FIGURE 1
MONITORING WELLS
TIDY CLEANERS
818 S. BROADWAY
GREEN BAY, WI 54303
BRRTS NO.: 02-05-552220



12/16/19

FEHR GRAHAM
 ENGINEERING & ENVIRONMENTAL

ILLINOIS
 IOWA
 WISCONSIN

Appendix A
Site Safety Data Sheets

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Injectable Sizing

OTHER MEANS OF IDENTIFICATION: Not applicable.

GENERAL USE: For professional drycleaning use only.

PRODUCT DESCRIPTION: Sizing

MANUFACTURER

Adco Professional Products LLC

1706 Ledo Rd.

Albany, GA 31707

Product Information: 800-821-7556 (USA
& Canada only)

24 HR. EMERGENCY TELEPHONE NUMBERS

Medical Emergency: 866-303-6947 (USA & Canada
only) or 651-632-9272

Transportation Emergency: 800-424-9300 (USA &
Canada only) or 703-527-3887

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Flammable Liquids: Category 4

Skin Corrosion/Irritation: Category 2

Specific Target Organ Toxicity (STOT-SE) Central Nervous System: Category 3

Aspiration hazard: Category 1

GHS LABEL ELEMENTS

Symbol(s):



Signal Word: Danger

Hazard Statements:

H227 – Combustible liquid.

H304 – May be fatal if swallowed and enters airways.

H315 – Causes skin irritation.

H336 – May cause drowsiness or dizziness.

Precautionary Statements:

P210 – Keep away from heat/sparks/open flames/hot surfaces - No smoking.

P261 – Avoid breathing dust/fume/gas/mist/vapors/spray.

P264 – Wash skin thoroughly after handling.

P271 – Use only outdoors or in a well-ventilated area.

P280 – Wear protective gloves/protective clothing/eye protection/face protection.

P301+P310+P331 – If SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
DO NOT induce vomiting.

P302+P352 – IF ON SKIN: Wash with plenty of soap and water.

P304+P340 – IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 – Call POISON CENTER or doctor/physician if you feel unwell.

P332+P313 – If skin irritation occurs: Get medical advice/ attention.

P362+P364 – Take off contaminated clothing and wash before reuse.

P370+P378 – In case of fire: Use water fog or fine spray, foam, carbon dioxide extinguishers, or dry chemical extinguishers for extinction.

P403+P233+P235 – Store in a well-ventilated place. Keep container tightly closed. Keep cool.

P501 – Dispose of contents/container in accordance with local/regional/national/international regulations.

Other Hazards: Not available.

Unknown Acute Toxicity: Not applicable.

3. COMPOSITION / INFORMATION ON INGREDIENTS

The specific identities of one or more components of this product are withheld as a trade secret.

<u>Chemical Name</u>	<u>Wt.%</u>	<u>CAS#</u>
Petroleum distillates	60 - 70	64742-88-7

COMMENTS: None.

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

SKIN: Remove contaminated clothing. Wash with water. Consult a physician if irritation persists.

INGESTION: Get immediate medical attention. Do not induce vomiting unless instructed to do so by poison center or physician.

INHALATION: Remove affected person to fresh air. If not breathing, give artificial respiration. Get medical attention.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Irritation, redness, tearing, discomfort.

SKIN: Irritation.

SKIN ABSORPTION: No data available.

INGESTION: Gastrointestinal tract irritation, burning of throat and esophagus, nausea, vomiting, dizziness, drowsiness, unconsciousness, and other central nervous system effects.

INHALATION: May cause central nervous system depression, headache, nausea, dizziness, unconsciousness.

ADDITIONAL INFORMATION: After emergency actions, call the emergency medical information number on page 1 or a physician immediately.

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: NFPA Class IIIA

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, foam, water spray or fog.

HAZARDOUS COMBUSTION PRODUCTS: Carbon dioxide, carbon monoxide.

FIRE FIGHTING EQUIPMENT: As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Clean up spill with absorbent material and water, if necessary.

LARGE SPILL: Extinguish all ignition sources. Contain spill. Avoid breathing vapor. Clean up spills immediately with absorbent material, observing precautions in the Exposure Control/Personal Protection section (see section 8). Place absorbed material in closed containers for disposal (see section 13). Do not flush to sewer. Avoid contamination of ground and surface waters.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Keep away from heat, sparks and flame.

HANDLING: Follow all SDS/label precautions even after container is emptied because it may retain product residues.

STORAGE: Store in labeled, tightly sealed containers in a cool, well-ventilated area.

ELECTROSTATIC ACCUMULATION HAZARD: Ground and bond containers when transferring material.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**EXPOSURE GUIDELINES:****OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)**

	<u>EXPOSURE LIMITS</u>					
	<u>OSHA PEL</u>		<u>ACGIH TLV</u>		<u>Supplier OEL</u>	
	<u>ppm</u>	<u>mg/m³</u>	<u>ppm</u>	<u>mg/m³</u>	<u>ppm</u>	<u>mg/m³</u>
Petroleum distillates	TWA	500	NE			
	STEL	NE ⁽¹⁾	NE			

TABLE FOOTNOTES

1. NE=Not established.

The specific identities of one or more components of this product are withheld as a trade secret.

ENGINEERING CONTROLS: Not applicable.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Safety glasses with side shields, or goggles.

SKIN: Neoprene or Barrier™ gloves.

RESPIRATORY: NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

PROTECTIVE CLOTHING: Where contact is likely, wear the appropriate chemical resistant equipment, which depending on circumstances may include gloves, a chemical suit, rubber boots, and chemical safety goggles plus a face shield.

WORK HYGIENIC PRACTICES: Wash thoroughly after handling. Do not eat or drink in work area.

OTHER USE PRECAUTIONS: Have eye wash station available. Do not wear contact lenses without eye protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear.

PHYSICAL STATE: Liquid.

COLOR: Light yellow.

ODOR: Mild.

ODOR THRESHOLD: No data available.

pH: Not applicable.

FREEZING POINT: No data available.

INITIAL BOILING POINT: No data available.

FLASHPOINT: 68°C (155°F) (TCC)

EVAPORATION RATE: No data available.
FLAMMABILITY (Solid, Gas): Not applicable, this product is a liquid at room temperature.
FLAMMABLE LIMITS: No data available.
VAPOR PRESSURE: No data available.
VAPOR DENSITY: No data available.
RELATIVE DENSITY: 0.856
SOLUBILITY IN WATER: Insoluble.
PARTITION COEFFICIENT (Log K_{ow}): No data available.
AUTOIGNITION TEMPERATURE: No data available.
DECOMPOSITION TEMPERATURE: No data available.
VISCOSITY: 16 sec, Zahn #2
PERCENT VOLATILE: ~65

10. STABILITY AND REACTIVITY

REACTIVITY: No.
CHEMICAL STABILITY: Stable.
POSSIBILITY OF HAZARDOUS REACTIONS: Polymerization will not occur.
CONDITIONS TO AVOID: High heat.
INCOMPATIBLE MATERIALS: Strong oxidizers, strong alkalis.
HAZARDOUS DECOMPOSITION PRODUCTS: High heat may form noxious decomposition products.

11. TOXICOLOGICAL INFORMATION

ROUTES OF EXPOSURE: Inhalation and skin.
ACUTE TOXICITY (ATE)
DERMAL LD₅₀: Insufficient data available.
ORAL LD₅₀: > 2,000 mg/kg (rat)
INHALATION LC₅₀: Insufficient data available.
CHRONIC TOXICITY
TARGET ORGANS: Components of this product may cause damage to central nervous system, brain, and lungs.
SENSITIZATION: Insufficient data available.
CARCINOGENICITY
IARC: Not listed as a carcinogen.
NTP: Not listed as a carcinogen
OSHA: Not listed as a carcinogen.
OTHER: No data available.
OTHER: No data available.
REPRODUCTIVE EFFECTS: Insufficient data available.
MUTAGENICITY: Insufficient data available.
SYNERGISTIC MATERIALS: No data available.
POTENTIAL HEALTH EFFECTS
EYES: Insufficient data available.
SKIN: Insufficient data available.
SKIN ABSORPTION: Insufficient data available.

INGESTION: May be harmful if swallowed. In the case of vomiting, product may be aspirated into lungs causing chemical pneumonia, which in extreme cases could lead to death. See section 4, First Aid Measures, for more information.

ASPIRATION HAZARD: Yes.

INHALATION: May be harmful if inhaled.

MEDICAL CONDITIONS AGGRAVATED: Significant exposure to this product may adversely affect people with chronic disease of the respiratory system, skin, and/or eyes.

GENERAL COMMENTS: Refer to Section 2 for additional information on potential health effects.

12. ECOLOGICAL INFORMATION

ECOTOXICITY: Insufficient data available.

PERSISTENCE AND DEGRADABILITY: Insufficient data available.

BIOACCUMULATIVE POTENTIAL: Insufficient data available.

MOBILITY IN SOIL: Insufficient data available.

OTHER ADVERSE EFFECTS: No data available.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Incinerate or dispose of in accordance with federal, state and local regulations.

EMPTY CONTAINER: Not applicable.

RCRA/EPA WASTE INFORMATION: Contains no material listed by RCRA as a hazardous waste.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not regulated if shipped by ground.

OTHER SHIPPING INFORMATION: Not applicable.

CANADA TRANSPORT OF DANGEROUS GOODS

PROPER SHIPPING NAME: Not regulated if shipped by ground.

OTHER SHIPPING INFORMATION: Not applicable.

AIR (ICAO/IATA)

PROPER SHIPPING NAME: Combustible Liquid, NOS

PRIMARY HAZARD CLASS/DIVISION: Combustible Liquid

UN/NA NUMBER: UN1993

PACKING GROUP: III

LABEL: Consult applicable regulations governing air shipments.

PLACARDS: Consult applicable regulations governing air shipments.

IATA NOTE: Consult IATA for quantity limitations.

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES:

FIRE: Yes. **PRESSURE GENERATING:** No. **REACTIVITY:** No. **ACUTE:** Yes.
CHRONIC: Yes.

313 REPORTABLE INGREDIENTS: None.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA RQ: Not applicable.

REPORTABLE SPILL QUANTITY: Not applicable.

RCRA STATUS: See section 13.

MEXICO

Not regulated for ground transportation.

STATE REGULATIONS

MASSACHUSETTS

Contains one or more substances regulated by the Massachusetts Substance List.

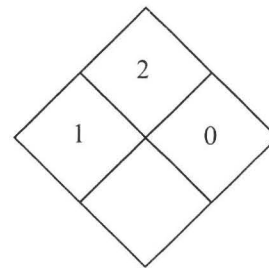
CALIFORNIA

PROPOSITION 65 STATEMENT: This product contains no ingredients known to the state of California to cause cancer, birth defects, or other reproductive harm.

16. OTHER INFORMATION

HMIS RATINGS	
HEALTH:	1
FLAMMABILITY:	2
REACTIVITY:	0
PERSONAL PROTECTION:	B

NFPA RATINGS



SDS Revision Date: October 17, 2018

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Staticol

OTHER MEANS OF IDENTIFICATION: Not applicable

GENERAL USE: For professional drycleaning use only.

PRODUCT DESCRIPTION: Drycleaning Detergent

MANUFACTURER

R. R. Street & Co. Inc.

215 Shuman Boulevard/Suite 403

Naperville, IL 60563

Product Information: 800-323-7206 (USA
& Canada only) or 630-416-4244

24 HR. EMERGENCY TELEPHONE NUMBERS

Medical Emergency: 866-303-6947 (USA & Canada
only) or 651-632-9272

Transportation Emergency: 800-424-9300 (USA &
Canada only) or 703-527-3887

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Skin Corrosion/Irritation: Category 2

Eye Damage/Irritation: Category 1

GHS LABEL ELEMENTS

Symbol(s):



Signal Word: Danger

Hazard Statements:

H315 – Causes skin irritation.

H318 – Causes serious eye damage.

Precautionary Statements:

P264 – Wash skin thoroughly after handling.

P280 – Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 – IF ON SKIN: Wash with plenty of soap and water.

P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 – Immediately call a POISON CENTER or doctor/physician.

P332+P313 – If skin irritation occurs: Get medical advice/attention.

P362+P364 – Take off contaminated clothing and wash before reuse.

P501 – Dispose of contents/container in accordance with local/regional/national/
international regulations.

Other Hazards: Not available.

Unknown Acute Toxicity: Not applicable.

3. COMPOSITION / INFORMATION ON INGREDIENTS

The specific identities of one or more components of this product are withheld as a trade secret.

<u>Chemical Name</u>	<u>Wt.%</u>	<u>CAS#</u>
Trade Secret #1	-	-
Trade Secret #2	-	-
Trade Secret #3	-	-
Trade Secret #4	-	-
Trade Secret #5	-	-
Trade Secret #6	-	-
Glycol Ethers	<2	

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

SKIN: Remove contaminated clothing. Wash with water. Consult a physician if irritation persists.

INGESTION: Get immediate medical attention. Do not induce vomiting unless instructed to do so by poison center or physician.

INHALATION: Remove affected person to fresh air. If not breathing, give artificial respiration. Get medical attention.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Stinging, tearing, redness swelling.

SKIN: Pain, redness, swelling, drying, cracking.

SKIN ABSORPTION: No data available.

INGESTION: Irritation of mouth, throat and gastrointestinal tract, nausea, dizziness, fatigue, loss of concentration.

INHALATION: Not applicable.

ADDITIONAL INFORMATION: After emergency actions, call the emergency medical information number on page 1 or a physician immediately.

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: NFPA Class IIIB.

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, foam, water spray or fog.

HAZARDOUS COMBUSTION PRODUCTS: Carbon dioxide, carbon monoxide, oxides of sulfur, hydrogen sulfide, oxides of nitrogen.

FIRE FIGHTING EQUIPMENT: As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Clean up spill with absorbent material and water, if necessary.

LARGE SPILL: Contain spill. Clean up spills immediately with absorbent material, observing precautions in the Exposure Controls/Personal Protection section (see section 8). Place absorbed material in closed containers for disposal (see section 13). Do not flush to sewer. Avoid contamination of ground and surface waters.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Not applicable.

HANDLING: Follow all SDS/label precautions even after container is emptied because it may retain product residues.

STORAGE: Store in labeled, tightly sealed containers.

ELECTROSTATIC ACCUMULATION HAZARD: Not applicable.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES:

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

		<u>EXPOSURE LIMITS</u>					
		<u>OSHA PEL</u>		<u>ACGIH TLV</u>		<u>Supplier OEL</u>	
		<u>ppm</u>	<u>mg/m³</u>	<u>ppm</u>	<u>mg/m³</u>	<u>ppm</u>	<u>mg/m³</u>
Trade Secret #1	TWA	NE ^[1]		NE			
	STEL	NE		NE			
Trade Secret #2	TWA	NE		NE			
	STEL	NE		NE			
Trade Secret #2	TWA	NE		NE			
	STEL	NE		NE			
Trade Secret #3	TWA	NE		NE			
	STEL	NE		NE			
Trade Secret #4	TWA	NE		NE			
	STEL	NE		NE			
Trade Secret #5	TWA	NE		NE			
	STEL	NE		NE			
Trade Secret #6	TWA		5		5		
	STEL		NE		10		
Glycol Ethers	TWA	NE		NE			
	STEL	NE		NE			

TABLE FOOTNOTES:

1. NE=Not established.

The specific identities of one or more components of this product are withheld as a trade secret.

ENGINEERING CONTROLS: Not applicable.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Safety glasses with side shields, or goggles.

SKIN: Nitrile or Barrier™ gloves.

RESPIRATORY: None required under ordinary conditions.

PROTECTIVE CLOTHING: Where contact is likely, wear appropriate chemical resistant equipment, which depending on circumstances may include gloves, a chemical suit, rubber boots, and chemical safety goggles plus a face shield.

WORK HYGIENIC PRACTICES: Wash thoroughly after handling. Do not eat or drink in work area.

OTHER USE PRECAUTIONS: Have eye wash station available. Do not wear contact lenses without eye protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear.

PHYSICAL STATE: Viscous liquid.

COLOR: Light yellow to amber.

ODOR: Mild.

ODOR THRESHOLD: No data available.

pH: 7

FREEZING POINT: <0°C (32°F)

INITIAL BOILING POINT: >100°C (212°F)

FLASHPOINT: None (PMCC)

EVAPORATION RATE: ~0.2 (butyl acetate = 1)

FLAMMABILITY (Solid, Gas): Not applicable, this product is a liquid at room temperature.

FLAMMABLE LIMITS: Not available.

VAPOR PRESSURE: 8 mm Hg at 20°C

VAPOR DENSITY: ~0.3 (air=1)

RELATIVE DENSITY: 1.01

SOLUBILITY IN WATER: Dispersible.

PARTITION COEFFICIENT (Log K_{ow}): No data available.

AUTOIGNITION TEMPERATURE: Not available.

DECOMPOSITION TEMPERATURE: No data available.

VISCOSITY: ~300cps at 20°C (68°F)

PERCENT VOLATILE: ~28

10. STABILITY AND REACTIVITY

REACTIVITY: No dangerous reactions known.

CHEMICAL STABILITY: Stable.

POSSIBILITY OF HAZARDOUS REACTIONS: Polymerization will not occur.

CONDITIONS TO AVOID: None known.

INCOMPATIBLE MATERIALS: Strong alkalies, strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen sulfide.

11. TOXICOLOGICAL INFORMATION

ROUTES OF EXPOSURE: Skin.

ACUTE TOXICITY (ATE)

DERMAL LD₅₀: > 2,000 mg/kg (rabbit/rat).

ORAL LD₅₀: > 2,000 mg/kg (rat).

INHALATION LC₅₀: Insufficient data available.

CHRONIC TOXICITY

TARGET ORGANS: Components of this product in large doses have caused liver, kidney, hematological and CNS effects, and a lower body weight in certain laboratory animals.

SENSITIZATION: Insufficient data available.

CARCINOGENICITY

IARC: Not listed as a carcinogen.

NTP: Not listed as a carcinogen.

OSHA: Not listed as a carcinogen.

OTHER: No data available.

OTHER: No data available.

REPRODUCTIVE EFFECTS: Insufficient data available.

MUTAGENICITY: Insufficient data available.

SYNERGISTIC MATERIALS: No data available.

POTENTIAL HEALTH EFFECTS

EYES: Substance may cause substantial eye irritation and possible burns.

SKIN: May cause inflammation. Prolonged or repeated contact may cause dermatitis.

SKIN ABSORPTION: Prolonged or widespread exposure may result in the absorption of potentially harmful amounts of material.

INGESTION: May cause vomiting, diarrhea, central nervous system depression, collapse, coma, in extreme cases, death. In the case of vomiting after ingestion, product may be aspirated into lungs causing chemical pneumonia, which in extreme cases could lead to death. See section 4, First Aid Measures, for more information.

ASPIRATION HAZARD: Insufficient data available to classify this product as an aspiration hazard. See INGESTION precautions.

INHALATION: Not a route of exposure under normal conditions.

MEDICAL CONDITIONS AGGRAVATED: Pre-existing kidney disease.

12. ECOLOGICAL INFORMATION

ECOTOXICITY: Some components of this product have moderate toxicity.

PERSISTENCE AND DEGRADABILITY: All components are readily or inherently biodegradable.

BIOACCUMULATIVE POTENTIAL: Potential to bioaccumulate is low to moderate for all components.

MOBILITY IN SOIL: Some components have the potential for high mobility in soil.

OTHER ADVERSE EFFECTS: No data available.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Incinerate or dispose of in accordance with federal, state and local regulations.

EMPTY CONTAINER: Do not cut or weld empty drums.

RCRA/EPA WASTE INFORMATION: Contains no material listed by RCRA as a hazardous waste.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not regulated.

OTHER SHIPPING INFORMATION: Not applicable.

CANADA TRANSPORT OF DANGEROUS GOODS

PROPER SHIPPING NAME: Not regulated.

OTHER SHIPPING INFORMATION: Not applicable.

AIR (ICAO/IATA)

PROPER SHIPPING NAME: Not regulated.

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES:

FIRE: No. **PRESSURE GENERATING:** No. **REACTIVITY:** No. **ACUTE:** Yes. **CHRONIC:** Yes.

313 REPORTABLE INGREDIENTS: Glycol Ethers are reportable.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA RQ: Not applicable.

REPORTABLE SPILL QUANTITY: Not applicable.

RCRA STATUS: See section 13.

MEXICO

Not regulated for ground transportation.

STATE REGULATIONS

MASSACHUSETTS

Contains no substances regulated by the Massachusetts Substance List.

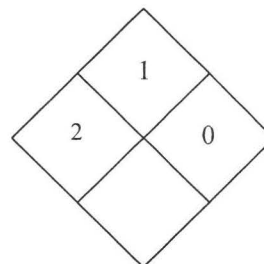
CALIFORNIA

PROPOSITION 65 STATEMENT: This product contains no ingredients known to the state of California to cause cancer, birth defects, or other reproductive harm.

16. OTHER INFORMATION

HMIS RATINGS	
HEALTH	2
FLAMMABILITY	1
REACTIVITY	0
PERSONAL PROTECTION	B

NFPA RATINGS



Appendix B

Pace Analytical PFAS Field Sampling Guide

PFAS Field Sampling Guide



Due to the potential presence of Per- and Polyfluoroalkyl Substances (PFAS) in common consumer products and in equipment typically used to collect soil, groundwater, surface water, sediment, and drinking water samples, as well as the need for very low reporting limits, **special handling and care must be taken when collecting samples for PFAS analysis to avoid sample contamination.**

Best Practices

- Wash hands and use new nitrile gloves for each sample collected
- Groundwater, surface water, or drinking water samples should not be filtered as the glass fiber on the filter can potentially absorb PFAS
- Collect the PFAS sample first, prior to collecting samples for any other parameters into any other containers; this avoids contact with any other type of sample container, bottles or package materials
- Do not place the sample bottle cap on any surface when collecting the sample, and avoid all contact with the inside of the sample bottle or its cap
- When the **labeled** sample is collected, place the samples in an individual sealed plastic bag separate from all other sample parameter bottles
- Samples must be chilled during shipment and should arrive at the lab at $<6\text{ C } \pm 2$

Field Reagent Blanks (FRB) - When sampling for PFAS, it is recommended that field reagent blanks be collected during sampling to check for residual PFAS during the sample collection process. The purpose of the FRB is to ensure that PFAS measured in the field samples were not inadvertently introduced into the sample during sample collection/handling.

Analysis of the FRB is required only if a field sample contains a method analyte or analytes at or above the MRL. The FRB is processed, extracted, and analyzed in exactly the same manner as a field sample. FRBs include a container filled with preserved water and an empty unpreserved container (per EPA methodology). To collect the FRB, simply pour the preserved water into the empty unpreserved container at the time a sample is collected in the field.

FRBs are required by EPA Method 537, but the number of FRBs to collect (for each site, for each representative sample, or not at all) is at the discretion of the customer and/or regulator overseeing the project.

SAMPLE COLLECTION

Matrix	Container	Preservative	Method	Notes
Drinking Water	2 x 250 ml HDPE or PP	Trizma	EPA Method 537 or EPA Method 537M	Trizma is a buffer and removes free chlorine.
Groundwater, surface water, waters	2 x 250 ml HDPE or PP	none	EPA Method 537M	
Effluent	2 x 250 ml HDPE or PP	Trizma	EPA Method 537M	Finished samples may require Trizma.
Soil, sediment, bio-solids	1 x 250 ml (or 4 ounce) HDPE or PP	none	EPA Method 537M	

Sample extraction = 14 days Sample analysis = 28 days



Best Practices



What to Avoid

Sample Container Items

- HDPE or Polypropylene (PP)
- Lined or unlined HDPE or polypropylene caps
- No glass or LDPE containers
- No Teflon™-lined caps

Field Equipment

- High density polyethylene (HDPE) or polypropylene materials
- Silicon tubing
- Loose paper (non-water resistant)
- Aluminum field clipboards or Masonite
- Sharpies, pens
- Regular Ice
- No Teflon™ containing materials
- No Teflon™ tubing
- No waterproof field books
- No plastic clipboards, binders, or spiral notebooks
- No Post-It Notes
- No chemical (blue) ice packs

Field Clothing and Personal Protection Equipment

- Well-laundered clothing, defined as clothing that has been washed six or more times after purchase, made of synthetic or natural fibers (preferable cotton)
- No fabric softener
- Cotton Clothing
- Boots made with polyurethane and polyvinyl chloride (PVC)
- Sunscreens – All Organic Natural Sunscreen, that are “free” or “natural” Check the label. Insect Repellents – Various natural one, DEET, check the label
- No new clothing or water resistant, waterproof, or stain-treated clothing, clothing containing Gore-Tex™
- No clothing laundered using fabric softener
- No Tyvek®
- No boots containing Gore-Tex™
- No cosmetics, moisturizers, hand cream, or other related products as part of personal cleaning/ showering routine on the morning of sampling

Field Equipment Decontamination Items

- Alconox® and/or Liquinox®
- No Decon 90

Food Items

- Bottled water and hydration drinks (i.e. Gatorade® and Powerade®) to be brought and consumed only in the staging area
- No food and drink, with exceptions hydrating items listed on the left

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