State of Wisconsin
DEPARTMENT OF NATURAL
RESOURCES
101 S. Webster Street
Box 7921
Madison WI 53707-7921

Tony Evers, Governor Preston D. Cole, Secretary Telephone 608-266-2621 FAX 608-267-3579 TTY Access via relay - 711



December 9, 2019

Subject: City of Stoughton Landfill Operation and Maintenance Bidding Documents

Dear Prospective Bidder:

Attached are the bidding documents for the operation and maintenance of the City of Stoughton Landfill Superfund site in Stoughton, WI.

Bidding requirements and the bid submittal deadline are outlined in the Conditions of Bid portion of the document. Please note that there will be a mandatory on-site meeting on January 9<sup>th</sup>, at 9 AM.

The documents are provided in electronic form via download from our web site. If you desire a printed copy, please contact me and one will be mailed to you.

Should you have any questions regarding the bidding documents or bid process, please call me at (608) 267-7570 or email me at jason.lowery@wisconsin.gov. Thank you.

Sincerely,

Jason B. Lowery, P.G.

Hydrogeologist

Remediation & Redevelopment Program

Jan Blower

Attach.



## CONDITIONS OF BID SIMPLIFIED BIDDING PROCESS

#### December 2019

## OPERATION AND MAINTENANCE STOUGHTON CITY LANDFILL STOUGHTON, DANE COUNTY, WISCONSIN

- A. <u>Project Overview:</u> The Stoughton City Landfill is a Superfund National Priorities List site that has been covered with a multi-layer soil cover system as part of the final remedy for the site. A new contract for inspection and maintenance activities is required to maintain the effectiveness of this landfill final remedy. A detailed description of the site and this project is contained in the attached Operation and Maintenance Plan.
- B. Contract and Contract Term: The results of this bid process will result in a contract between the selected vendor and the Wisconsin Dept. of Natural Resources (DNR). The contract will be a one (1) year term agreement with the option to renew on a year by year basis for up to two (2) additional one year terms upon mutual agreement of both parties. The contract will begin on February 1, 2020 unless an earlier date is agreed to by both the contractor and the state. These renewals will be automatic at the original contract unit prices bid and at the original contract terms, unless either party provides sixty (60) days written notice of any suggested changes to the contract terms or prices, in which case the other party must then respond within thirty (30) days and state either their agreement to the changes, their desire to terminate the contract or their objections and desire to renegotiate the original agreement terms which would apply to the renewal. This contract will be initiated through issuance of agency Purchase Order (PO) documents and will include all of the terms and conditions listed and attached to this bid document, as well as any other terms necessary to clarify the contract requirements and as deemed to be in the best interests of the agency. Your signed bid response will be your offer to provide the required services and our PO document and attachments will be our acceptance of your offer. Initiation of services upon receipt of the PO will be deemed as your firms acceptance of any contractual clarifications attached or referenced to/by the PO.
- C. <u>Bidder Qualifications</u>: Bidders must provide a point by point response to the Bidder Certifications as listed in the next section of this bid document and must submit a completed DOA-3832 Bidder Required Form. This includes a list and descriptions of three (3) references for the Bidder. In addition, all bidding vendors shall provide for the laboratory or laboratories they plan to use, a list and description of at least three (3) previous sampling and analysis projects, noting any projects of similar scope and nature done by the lab(s) using an additional DOA-3832 Bidder Required Form found at the end of this bid package. Only Sections 1 and 3 are necessary from the testing laboratory. The same references may be used for both the bidding vendor and the testing laboratory. A bidders failure to provide a point by point response to the Bidder Certifications or to supply the required and completed DOA-3832 Bidder Required Form or a bidders failure to supply references which support their firms ability to meet the requirements of this bid, are all grounds for elimination of their bid from further consideration.
- D. Mandatory Pre-Bid Site Inspection: A mandatory pre-bid meeting will be held at the site on January 9 at 9am. Keep in mind that the site may be snow covered at this time and many features may not be visible. Directions: The entrance to the landfill site in Stoughton WI, is located at the end of Amundson Parkway, where it intersects Skogdalen Dr. The following link provides a street view to show where this site entrance is located: https://www.google.com/maps/place/Amundson+Pkwy,+Stoughton,+WI+53589/@42.9223988,-89.2057913,3a,75y,316.46h,89.63t/data=!3m7!1e1!3m5!1saFm4jWzqGu4QtwAsjSvMLQ!2e0!6s%2F%2Fge02.ggpht.com%2Fcbk%3Fpanoid%3DaFm4jWzqGu4QtwAsjSvMLQ%26output%3Dthumbnail%26cb\_client%3Dsearch.TACTILE.gps%26thumb%3D2%26w%3D392%26h%3D106%26yaw%3D285.45972%26pitch%3D0!7i13312!8i6656!4m2!3m1!1s0x8806468b3c9defe3:0x1790f37f7511890?hl=en.
- E. <u>Specifications</u>: The specifications for this project are those indicated in the attached Operation and Maintenance Plan, Stoughton City Landfill, Stoughton, Wisconsin document, and in the attached Bidder Certifications document. These are the minimum acceptable specifications for a qualified bidder and for the services which this bid requires to be performed. The requirements as listed in these documents will be the basis of any contract initiated as a result of this solicitation. By signing the Request for Bid form, you are committing your firm to provide the services listed in this document, at the prices included on your Bid Price Sheet, in compliance with the specifications and all the terms and conditions listed and attached to this bid document.

- F. Method of Bid: All bids must be submitted to the WDNR Project Manager by 4:30 pm on Wednesday, January 22 2020. Bidders must submit point by point responses to the requirements listed in the Bidder Certifications below and the prices for services submitted on the attached Bid Price Sheet. Bidders not so certified will not have their Bid Price Sheet reviewed. No partial bids will be accepted. Bids may be mailed, faxed or submitted as a converted and/or scanned pdf file via email. All documents must be signed as required. The email address of the WDNR Project Manager is jason.lowery@wisconsin.gov. Keep in mind the State of Wisconsin email system will not normally deliver email attachments over certain size so we ask you to limit the size of a pdf attachment in the submittal 10 megabytes in size. The fax machine phone number to use when faxing bids is 608-267-7646.
- G. <u>Method of Award</u>: Award will be made to the responsive and responsible bidder judged as being certified to provide the needed services, which has submitted the lowest total price for all required services based on the prices submitted on the Bid Price Sheet. Bidders are directed to use the attached Bid Checklist as a tool to help them submit a complete bid package.

#### BIDDER CERTIFICATIONS SIMPLIFIED BIDDING PROCESS

#### December 2019

## OPERATION AND MAINTENANCE STOUGHTON CITY LANDFILL STOUGHTON, DANE COUNTY, WISCONSIN

- A. Bidding vendors must certify that the staff they plan on using to perform the work required by the project specifications, including the Operation and Maintenance (O&M) Plan have experience in similar projects and are qualified and, where required, certified to perform those tasks assigned to them and use the equipment needed to do the work. Provide a description of the project team, including a list of staff that will be assigned to this project and include details of each staff members experience and qualifications, including qualifications to work in the landfill environment with monitoring wells and a gas collection system.
- B. Bidding vendors must certify that they have performed O&M work at three (3) or more similar projects at a Wisconsin landfill with gas collection, groundwater monitoring, cap maintenance and GEMS groundwater data submittal requirements, the project must be at least 50% of the size or value of the work being bid here, and the project must have been within the past 5 years. Provide a list and description of previous O&M projects, including the similar project or projects described in the previous sentence, and provide for all such similar projects reference information, using the DOA-3832 Bidder Required Form found at the end of this bid package.
- C. Bidding vendors shall specify which testing laboratory or laboratories they will use for the work and certify that the testing laboratory or laboratories can meet the Quality Assurance and Analysis requirements in the project specifications. All bidding vendors shall provide, for the laboratory or laboratories they plan to use, a list and description of previous sampling and analysis projects, noting any projects of similar scope and nature done by the lab(s). For all such similar projects noted, the bidding vendor shall provide reference information using the DOA-3832 Bidder Required Form found at the end of this bid package. This shall be a separate form in addition to the reference form being submitted for the general O&M work described in the previous paragraph.
- D. Bidding vendors must certify that they have access to all necessary equipment to do the work. Provide a list of all monitoring and maintenance equipment planned to be used and the location of that equipment. Equipment includes vehicles, tractors, sampling equipment, containers, bottles and meters, purge and development water storage and transportation containers/tanks and mowers.
- E. Bidding vendors must certify that they can access the site with all required personnel and equipment within 24 hours.
- F. Bidding vendors must certify that they have established a health and safety program to adequately educate and protect personnel working at a Superfund site with hazardous characteristics in accordance with OSHA requirements and other applicable laws and regulations. Bidding vendors must also provide some documentation/evidence of the existence of their program in their response to this certification.
- G. All vendors who bid must certify that if they are awarded a contract they will submit certification of health and safety training to the project manager, prior to the start of field activities.

## OPERATION AND MAINTENANCE PLAN STOUGHTON CITY LANDFILL STOUGHTON, WISCONSIN

Updated and Revised December 2019

Prepared by Wisconsin DNR

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#### Other Information, Figures, and Tables

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Bid Price Sheet

Bid Checklist

DOA Form 3832 for O&M Vendor

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#### SECTION 1 INTRODUCTION

#### 1.1. OBJECTIVE AND SCOPE

The objective of this Operation and Maintenance (O&M) Plan is to describe the inspection and maintenance activities required to maintain the effectiveness of the landfill final cover and its associated management systems for the duration of the Superfund post-closure operation period. This plan will be followed by the O&M Contractor (also referred to as the contractor) selected by the Wisconsin Department of Natural Resources (WDNR) to perform the O&M work and is considered part of the Scope of Work for the O&M work. The O&M Plan is intended to be used in conjunction with a Quality Assurance Project Plan (QAPP), prepared by the O&M contractor after the contractor receives a notice to proceed from WDNR, which describes the sampling and monitoring activities related to the remedial action.

This O&M Plan has been prepared in accordance with the Record of Decision (ROD) and the remedial action design. The O&M Contractor shall be responsible for recommending any needed repairs and materials for repairs. Material types for use in conducting any maintenance and restoration activities will be approved by WDNR in advance, after WDNR agrees mutually with the U.S. Environmental Protection Agency (USEPA) on the materials used. The O&M Contractor will not be responsible for carrying out any recommended repairs, except as specifically identified in this O&M Plan as being the responsibility of the O&M Contactor (or contractor, as referred to in this plan), as part of the O&M contract. Certain cover and other repairs identified in this document are the responsibility of the O&M Contractor. WDNR will contract with a Repair Contractor separately for recommended repairs on a cost and materials basis, as identified in this O&M Plan wherever the Repair Contractor is shown to have the responsibility. However, all bidders are allotted a fixed

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\$2000 per year contingency for repairs in the bid price sheet to be used for repairs as the

designated Repair Contractor if directed to proceed with any such repairs by WDNR.

1.2. SITE LOCATION/BACKGROUND INFORMATION

The Stoughton City Landfill (Stoughton Landfill) site is located in the northeast portion of

the City of Stoughton, approximately 13 miles southeast of Madison, in Dane County,

Wisconsin (Figure 1, a topographic map from the Dane County web page, does not show the

exact site extent). Figure 2 is an existing site layout map showing important features,

monitoring wells and gas probes. The property containing the site encompasses

approximately 27 acres and occupies portions of the west half of the southwest quarter and

the southwest quarter of the northwest quarter of Section 4, Township 5 North, Range 11

East. A wetlands area located along the southeast portion of the present property boundary

was the initial area of waste disposal. Wetlands are also located in the north portion of the

site and west of the site along the Yahara River. The Yahara River is located west of the site

and is within approximately 400 feet of the site at its closest distance.

Background and historical information about the site is available in the 2018 Five Year

Review document and recent O&M and groundwater monitoring reports at the WDNR web

site:

https://dnr.wi.gov/botw/GetActivityDetail.do?adn=0213000880&siteId=1584600&crumb=1

&search=b

1.3. SUMMARY OF THE REMEDIAL ACTION

The landfill remedial action identified in the EPA Record of Decision (ROD) includes

fencing, land use restrictions, construction of an access road, excavation and relocation of

waste in contact with groundwater, waste consolidation under final cover system, and

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placement of a new multilayer soil cover system with a passive landfill gas vent system over

the relocated wastes and the landfill.

Permanent fencing and gates were installed around the perimeter of the waste disposal area to

restrict access and to eliminate the potential for exposure to contaminants in the landfill.

Chain-link fencing with a locking gate at the landfill entrance was installed. [Note to bidders:

The exact location and construction of the fence may be confirmed at the pre-bid site visit, if

necessary.] The need to restrict site access during remedial construction activities was

evaluated, and a temporary fence was included as part of the remedial action plan for the site.

Wisconsin Administrative Code requirements prevent the installation of public or private

water supply wells within 1,200 feet of the landfill. These requirements also restrict building

structures on the site.

A permanent site access road was built to provide access to the site during waste

consolidation and capping activities. The access road was constructed along the southern

border of the site. [Note to bidders: The exact location of existing access roads may be

confirmed at the pre-bid visit]

Waste consolidation consisted of excavating wastes in contact with the groundwater along

the landfill's northeastern and southeastern boundaries, as well as consolidating the wastes on

top of the landfill along the site's western boundary. This minimized the direct contact of

wastes with the groundwater and will result in a reduced impact to the wetlands adjacent to

the site's eastern border. Prior to excavation, a dewatering pad was constructed to dewater the

saturated waste. This pad consisted of a temporary clay-lined basin on top of the landfill, into

which the excavated wastes were placed. The wastes were allowed to drain to a lower portion

of the basin, and the water was collected. The dewatered wastes were then placed and

compacted on the top of the landfill during the regrading phase. Areas impacted by waste

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consolidation activities were backfilled with hydric soil and reseeded with vegetation

consistent with existing wetlands species.

A landfill multilayer soil cover system was placed over the existing landfill cover and the

relocated waste. The areas from which waste was relocated were not capped, but backfilled

with grading layer material. The final cover system meets the requirements of the Wisconsin

Administrative Code (WAC) NR 504.07 regulations on cover systems for solid waste

disposal facilities. The cap consists of a 2-foot grading layer, a 2-foot clay barrier layer, a 2-

foot vegetative support layer, and a reinstalled 0.5-foot topsoil layer. The grading layer was

constructed from the existing cap and off-site imported borrow material. The clay barrier

layer was designed to have a saturated hydraulic conductivity of 1 x 10<sup>-7</sup> centimeters per

second (cm/sec) or less. A passive landfill gas vent system was installed to vent gas from

beneath the cap.

1.4. ELEMENTS OF THE O&M PLAN

This plan generally consists of the following elements:

• Description of main remedial components to include the final cover system, the

stormwater management systems, and the passive landfill gas venting systems.

Frequency of inspection and monitoring tasks.

• Identification of potential problems and corrective actions to be implemented by

the O&M contractor.

Description of safety precautions and recommendations.

• Description of record-keeping and documentation requirements.

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#### 1.5. ROLES AND RESPONSIBILITIES

Successful implementation of this O&M Plan will depend on a clear understanding of the roles and responsibilities of each member of the O&M team. The team is made of members responsible for implementing, operating, and overseeing the completion of the remediation of the site. The following list identifies the key personnel from each organization responsible for implementation of this remedial action:

• U.S. EPA Remedial Project Manager

Name: Ms. Giang Van Nguyen

(312) 886-6726 Phone:

Address: 77 West Jackson Boulevard

Chicago, Illinois 60604

Nguyen.Giang-Van@epa.gov

• WDNR Project Manager

Name: Mr. Jason B. Lowery

Phone: (608) 267-7570

Address: PO 7921, 101 S. Webster St. RR/5

Madison, WI 53707

jason.lowery@wisconsin.gov

The WDNR project manager will coordinate the contracting for the O&M work following this O&M plan, in accordance with the CERCLA National Contingency Plan. The WDNR will be considered U.S. EPA's designated representative.

#### 1.6. HEALTH AND SAFETY

Inspection and maintenance activities shall be conducted in accordance with a site-specific health and safety plan (HASP) to be prepared by the O&M contractor. The HASP shall be prepared in accordance with all state and federal regulations, and shall conform with applicable USEPA and Occupational Health and Safety Administration (OSHA) construction safety standards including 29 Code of Federal Regulations (CFR) 1910.120. The HASP shall be submitted to WDNR prior to starting any work at the site.

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SECTION 2
OPERATION AND MAINTENANCE ACTIVITIES

2.1. LANDFILL FINAL COVER O&M

The final cover for the landfill is a multi-layer soil system consisting of a 2-foot grading layer, a 2-foot clay barrier layer, a 2-foot vegetative support layer, and a 0.5-foot topsoil layer. The cover system has been designed in accordance with Wis. Admin § NR 504 standards. The objective of this inspection activity is to maintain the quality of the cover system to ensure the performance objectives dictated in Wis. Admin § NR 504 are being met.

The final cover is intended to reduce the volume of liquids that enter the landfill from precipitation that falls within the landfill limits. The grading plan was prepared to maximize the ability of the surface to shed water to the perimeter stormwater management system, as well as to minimize the potential for erosion damage. During the inspection process, the contractor shall document the quality of the cover system and areas where the performance objectives are not being maintained.

<u>Sufficent topsoil</u>, seed and mulch shall be stockpiled at the site for repairs. Specifications for materials used for repair shall be proposed by the contractor prior to use. Material types for use in conducting any maintenance and restoration activities will be approved by WDNR in advance, after WDNR agrees mutually with the U.S. Environmental Protection Agency (USEPA) on the materials used. Once material types are approved for a specific repair purpose, the same materials need not be approved again if they are to be used for the same purpose.

The clay barrier layer component of the final cover is the primary barrier to water movement and was designed to have a saturated hydraulic conductivity of  $1 \times 10^{-7}$  centimeters per second (cm/sec) or less.. This is accomplished through the use of suitable soil and by compacting to a degree necessary to meet this infiltration requirement. Material and compaction requirements are listed in the construction specifications. The cover soil layer is intended to provide protection to

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the clay barrier layer from desiccation (drying out of the clay), root penetration damage, burrowing animals, and frost damage. Each of the above items can reduce the clay's ability to limit infiltration of water through the cover system. The topsoil layer is provided as a highly organic layer that can support vigorous plant growth, which in turn will minimize erosion

damage from precipitation events, and maximize evaporation and transpiration.

2.1.1 Landfill Final Cover O&M and Inspection Requirements

2.1.1.1 Inspections and Erosion/Vegetation Repair.

The landfill cover shall be inspected twice a year, in April and October. The April inspection will coincide with the annual groundwater sampling. During the inspection process, the contractor

will evaluate the quality of the vegetative cover across the landfill surface. A satisfactory area of

vegetation shall be defined as an area of 10,000 square feet that has:

• No bare spots larger than 3 square feet.

• Not more than 10 percent of area with bare spots larger than 1 square foot.

Areas that show signs of erosion, animal burrows or sparse vegetation will be repaired by the contractor. The surface will be graded and/or filled to match the surrounding grade with topsoil material. The area will be reseeded and mulched. The contractor will sufficiently water the area

as needed to restore vegetation to an acceptable level.

The contractor will inspect the cover system for areas of significant erosion. Significant erosion

is defined as an erosion gully 6 inches deep or loss of vegetation and multiple gullies 3 inches

deep. Each layer of the final cover will be repaired. If significant erosion is discovered and

damage or cracking of the clay barrier layer is suspected, the contractor will overexcavate, place,

and recompact clay materials to restore the damaged section. The cover soil and the topsoil shall

be replaced immediately following completion of the clay barrier layer to minimize damage from

desiccation.

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The contractor will inspect the final cover for signs of settlement or subsidence. Areas showing

signs of potential ponding or continued settlement will be backfilled with protective cover soil

and topsoil and will be seeded/mulched by the O&M Contractor.

The contractor will inspect the cap areas around features such as gas vents for large rooty

vegetation and remove such vegetation and restore the area. Restoration: The surface will be

graded and/or filled to match the surrounding grade with topsoil material. The area will be

reseeded and mulched. The contractor will sufficiently water the area as needed to restore

vegetation to an acceptable level.

Damaged areas of the final cover will be documented by the contractor to include method and

scope of the repairs conducted. The locations and suppliers of materials will be included in the

documentation.

2.1.1.2 Mowing.

The O&M Contractor will mow the final cover vegetated areas as needed and at least once per

year sometime in the months of August or September. Mowing activities shall be conducted to

maintain a vegetation height of 12 inches and no less. Mowing of the final cover will also inhibit

the growth of deep-rooted vegetation that could impact the efficiency and integrity of the clay

barrier layer. Any tall vegetation next to wells and gas vents and along the fence will be cut down

as well at the time of mowing or duing the October semi-annual inspection without causing

damage to any of these features. A report confirming the mowing and tall vegetation cutting took

place and the results will be submitted by email to the WDNR and EPA Project Managers and in

writing with the October inspection report.

2.2. STORMWATER MANAGEMENT SYSTEM O&M

The stormwater management system is intended to provide control of runoff generated from

precipitation events over the operating life of the landfill closure. The system consists of two

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main drainage channels directing runoff into the wetlands on the north and east sides of the landfill.

One channel is located along the northwest edge of the final cover system. This channel collects stormwater from the western side of the landfill and directs it into the wetlands. A minimal volume of flow enters this channel because a limited surface area is included in its watershed. The channel begins on the north side of the permanent access road and drains north.

The second channel begins on the south side of the permanent access road along the west side of the site; this channel drains south, then east along the south boundary of the site. This channel directs runoff from the south and west sides of the site into the wetlands. A larger volume of flow is managed by this channel because of the larger size of the watershed and the additional flow added by the two storm drains servicing the Venevoll, Inc. property to the south.

#### 2.2.1 Stormwater Control O&M Inspection Requirements

The contractor shall inspect each component of the stormwater control system during the semi annual cover inspection. The contractor shall visually inspect the drainage channels for excessive erosion damage or lack of suitable vegetation. Erosion gullies will be backfilled, seeded, and mulched by the Repair Contractor. Additional straw bale barriers may be required to protect the repaired area until vegetation is reestablished. The presence of cattails or other pond-type vegetation will be a sign that appropriate drainage through that length of channel is not occurring. Regrading and backfilling may be required by the Repair Contractor to correct the slope or erosion along the channel lengths. Materials used for backfilling and restoration will be in accordance with the construction specifications for that element of work. The O&M Contractor will evaluate areas of continual erosion damage and will determine the need for permanent riprap structures in these areas. The contractor will also inspect the culvert for damage or erosion at the end sections. Riprap will be replaced as necessary by the Repair Contractor, and any debris will be removed to maintain a free-flowing condition.

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2.3. LANDFILL GAS VENTING SYSTEM

The landfill gas venting system is designed to release gases from under the final cover system

that have been generated from natural biological activity and the decomposition of waste

materials. Landfill gas has the potential to degrade the clay barrier layer by drying out the surface

of the clay from below the cover system. Through this desiccation, the effectiveness of the clay

layer would be reduced. The primary components of landfill gas are methane and carbon dioxide.

In a venting system that is not functioning properly, gas pressure within the landfill could

increase to such a point that methane gas, an explosive gas, could migrate underground to

structures outside the landfill limits, causing an explosion hazard.

2.3.1 Landfill Gas Venting System O&M Inspection Requirements

The contractor shall inspect the gas venting system for its overall condition and operational

effectiveness during the semi-annual inspection. Each vent pipe shall be individually inspected.

Vent screens that limit entry of foreign objects should be installed securely. Vent screens shall be

checked to assure they are not blocking gas flow and shall be unblocked by the O&M Contractor

if necessary. The O&M Contractor shall inspect the riser for damage. If the riser is damaged and

needs to be removed, the O&M Contractor shall excavate and repair the riser with like materials

and workmanship, and shall then repair the final cover in accordance with Subsection 2.1 of this

O&M Plan.

2.3.2 Landfill Gas Probe Monitoring

The 3 landfill gas probes at the edge of the site will be monitored in accordance with the QAPP.

The monitoring program has the objective of monitoring the concentration of the landfill gases at

the site boundary to assure that gas migration away from the site towards nearby buildings is not

a problem. All the probes shall be tested bi-monthly, 6 times a year, in February, April, June,

August, October and December.

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The probes shall be tested for percent LEL as methane, percent oxygen, percent carbon dioxide, PID in parts per million, and pressure in inches of water. The PID instrument must be capable of minimizing interference from methane.

In conjunction with this monitoring, the O&M Contractor will inspect the expandable caps (provided by the O&M Contractor) on monitoring wels MW7I and MW10I to ensure that they are preventing flow. Caps will be replaced, as needed.

#### 2.4. SECURITY FENCE O&M INSPECTION REQUIREMENTS

Chain-link and wood slat fencing is provided around the perimeter of the landfill waste disposal area to limit potential public contact with waste materials under the final cover and to limit exposure to landfill gas being vented from the gas venting system. In addition, the fencing provides protection for the gas vent risers and the cover system as a whole. Excessive vehicle or recreational use without the appropriate maintenance can contribute to erosion or limited vegetation.

The O&M contractor shall inspect the fence semi-annually, at the same time the other inspections occur. The contractor shall inspect the fence for serviceability and for signs of tampering. The chain-link fence fabric shall be securely attached to each post and end rail. All wooden slats on the wood fence shall be securely attached and in good condition. The posts shall be solidly installed in concrete pads with the necessary support posts and top rails detailed in the specifications. Any damaged or missing material will be replaced with new material by the Repair Contractor or by the City of Stoughton. Any signage located along the fence limit or attached to the fence fabric will be inspected. Any damaged or unreadable signs will be replaced. The O&M contractor will review the information on each sign, to include contact name and phone number. Outdated information will be removed, or the sign will be replaced. The O&M Contractor may use WDNR NR 714 signs, which can be picked up from the WDNR Project

Operation and Maintenance Plan Stoughton City Landfill

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Manager. Hand written information on the NR 714 signs that has faded shall be renewed by the

O&M Contractor at the semi-annual inspections.

2.5. GROUNDWATER MONITORING, MONITORING WELL INSPECTION, AND REPAIR

2.5.1 Routine Groundwater Monitoring

The routine groundwater monitoring will be conducted annually in April. The monitoring

schedule is below in Table 1. The WDNR Project Manager will provide well lock keys to the

contractor.

Monitoring shall be in accordance with QAPP, DNR Groundwater Sampling Field Manual

(DG038, available at http://dnr.wi.gov/files/PDF/pubs/rr/DG038.pdf) and DNR Groundwater

Sampling Desk Reference (DG037a.pdf, DG037b.pdf, available at

https://dnr.wi.gov/files/PDF/pubs/DG/DG0037.pdf and

https://dnr.wi.gov/topic/Groundwater/documents/pubs/desk\_b.pdf.

The O&M Contractor shall use a Wis. Admin. § NR 149 149 approved laboratory for all

groundwater sample analysis. Analysis shall be in accordance with SW846 – SW8260B. The

limit of quantification for all volatile organic compounds (VOCs) must be 10 ug/l or lower.

U.S. EPA CLP level lab data is not required (level 3) but the Contractor must utilize a state-

certified laboratory.

Data shall be submitted in report format and electronically in accordance with the requirements

of the WDNR Waste Management Program for the Groundwater and Environmental Monitoring

(GEMS) system. Links to a GEMS printout pdf and an Excel spreadsheet file at the end of this

plan shows the GEMS ID information.

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The O&M Contractor shall be responsible for the proper off site disposal of all contaminated

purge and development water.

The O&M Contactor shall develop their own QAPP, which will contain a Sampling and Analysis

Plan (SAP). For QAPP development cost purposes, the selected lab must submit their own

analytical SOPs; they may not simply reference SW846. The selected lab shall prepare an entire

data package, complete with QC information. The selected lab will retain and have available for

distribution, the data package for a minimum of 5 (five) years, in the event WDNR or USEPA

would wish to have data validated.

It is important to note that some of the monitoring wells, including some of the wells to be

sampled, are under artesian conditions and have had water free flowing out of them. The

previous O&M Contractor plugged those wells. If the plugs need to be replaced or maintained,

that will be performed by the O&M Contractor, generally separately from this contract at a price

agreed to by the O&M Contractor and the WDNR Project Manager. Wells noted to be

leaking/flowing in the past are OW1 through OW3, MW7I, MW8S, 8I, and 8D, MW10I, and

MW13I. Monitoring wells OW2, MW10I, and MW13I have had packers installed to prevent

outflow but the packers for MW10I and MW13I were recently removed. Monitoring wells OW3,

MW8S, 8I, 8D, MW7I and MW10I have only flowed occasionally. The O&M Contractor will

need to place an exapandable cap on monitoring wells MW7I and MW10I and monitor/replace

the caps during gas probe monitoring events in order to minimize flow. Due to a higher flow rate

and limited detections of contaminants, the O&M Contractor will need to abandon monitoring

well MW13I.

Note: Wells MW-7B, MW-10D, MW-13D, and OW1 were abandoned in 2013.

Additional monitoring well information for well depth, depth to water and screen lengths is

attached to the end of this plan as Table 2 from the 2019 groundwater monitoring report for the

site. The entire report can also be downloaded at

Operation and Maintenance Plan Stoughton City Landfill

Section: 2

Date: December 2019 Page: 14 of 20

https://dnr.wi.gov/botw/DownloadBlobFile.do;jsessionid=90EmR1QmX-

ENDg5T9Q9L6Bh4ID8rNM\_DiRGEvxp47CUpfG79mmX9!1075620187?docSeqNo=114475&

docName=20190624\_43\_Annual\_GW\_Monitoring\_Rpt.pdf.

The most recent Five-Year Review report can be downloaded at

https://dnr.wi.gov/botw/DownloadBlobFile.do;jsessionid=VJmICGSpVNkyESLc\_TUhchP7I1JD

A1sh2TzCUt\_eyIvLtBStBx4L!985613299?docSeqNo=82624&docName=20180412\_326\_Five\_

Year\_Review.pdf

Sampling procedures shall be documented at each location and submitted with the monitoring

report.

Duplicate samples should be analyzed at a rate of one for every 10 samples collected for the

monitoring wells. In addition, collect four (4) QA/QC samples during each sampling event

including a trip blank and a field blank and analyze for VOCs.

2.5.2 Monitoring Well Inspection and Repair

Monitoring wells shall be inspected twice a year during the semi-annual insepection and when

sampled. The contractor shall note the need for any repairs. The contractor shall replace any

missing, damaged or corroded locks. The Repair Contractor shall repair any damage to the casing

or well cover.

2.5.3 Monitoring Well Abandonment

Due to artesian conditions and limited contaminant concentrations, the O&M Contractor will

need to abandon monitoring well MW13I in accordance with Wis. Admin. § 141 as soon as

practicable after being awarded the contract. Monitoring well MW13I is approximately 55 feet

deep.

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#### **Groundwater Monitoring Schedule and GEMS IDs**

Well	GEMS ID	Parameters
MW03D	112	Water elevation - MSL, FI, DCDFM, THF
MW04D	115	Water elevation – MSL, FI, DCDFM, THF
MW05D	117	Water elevation – MSL, FI, DCDFM, THF
MW07I	119	Water elevation – MSL, FI, DCDFM, THF
MW08I	122	Water elevation – MSL, FI, DCDFM, THF
MW09S	124	Water elevation – MSL, FI, Full VOCs including DCDFM, THF
MW09I	125	Water elevation – MSL, FI, Full VOCs including DCDFM, THF
MW09B	126	Water elevation – MSL, FI, Full VOCs including DCDFM, THF
MW10S	127	Water elevation - MSL, FI, Full VOCs including DCDFM, THF
MW10I	128	Water elevation – MSL, FI, Full VOCs including DCDFM, THF
MW14S	133	Water elevation – MSL, FI, Full VOCs including DCDFM, THF
MW14I	134	Water elevation – MSL, FI, Full VOCs including DCDFM, THF

In addition, four (4) QA/QC samples which are a trip blank, field blank, duplicate QA/QC sample for full VOCs including DCDFM and THF and duplicate QA/QC sample for just DCDFM and THF

 $Key: MSL = Mean \ Sea \ Level; \ DCDFM = Dichlorodifluoromethane; \ THF = Tetrahydrofuran; \ FI = Field \ Indicators = pH, \ temperature \ and \ specific \ conductance$ 

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SECTION 3
DOCUMENTATION AND SUBMITTALS

This section describes the documentation and submittals that will be used to document the O&M

activities performed.

3.1. SEMI-ANNUAL INSPECTION REPORT

The O&M contractor will document and submit the semi-annual inspection within 30 days after

the date of the inspection, using the report form provided below or the Contractor's own report

form that is approved in advance by WDNR. The semi-annual inspection report shall contain a

narrative summarizing the results of the work, recommendations for follow up or repairs, and the

completed form. The O&M contractor will take photographs of all problems noted and provide

them in the inspection report. All photographs taken by the O&M contractor must be recorded on

a photograph documentation log that will include, at a minimum, the following information:

• A unique identifying number for cross referencing and document control.

• Date, time, location, and current weather conditions at the time the photograph was

taken.

Purpose or intent of the photograph.

• Signature of the photographer.

One copy of the semi-annual report shall be submitted to WDNR and an additional copy submitted to USEPA. A single electronic copy in Portable Document Format (.pdf) shall also be

submitted to WDNR via email.

3.2. GAS PROBE REPORT

The O&M contractor will document and submit the last 3 bi-monthly results of the gas probe

sampling with the semi-annual report (Section 3.1) using the report form provided below or the

Contractor's own report form that is approved in advance by WDNR.

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#### 3.3. GROUNDWATER MONITORING REPORT

The O&M contractor will document and submit annual groundwater monitoring results within 60 days of the date of the April groundwater sampling in a narrative report as well as tabular data presentation format. The report will identify any results that exceed Wis. Admin. § NR 140 groundwater Preventative Action Limits (PALs) or Enforcement Standards (ES). The tabular format shall be described in the QAPP/SAP and subject to prior approval by WDNR. The results shall also be submitted in proper electronic form on a CD or single floppy disk to WDNR for entry into the WDNR Waste Management Program GEMS system. One copy of the groundwater monitoring report shall be submitted to WDNR and an additional copy submitted to USEPA. A single electronic copy of the narrative report and tables in Portable Document Format (.pdf) shall also be submitted to WDNR via email.

### Operation and Maintenance Semi Annual Inspection Report Stoughton City Landfill Stoughton, Wisconsin

Inspector							
Company	Weather	Clear	P. Cloudy	7	Cloudy		Fog
Project	Temperature	High	F				
Location	Wind	Calm	Medium		High		
Date/Time	Precipitation	Rain	Light		Modera	te	Heavy
Project No.		Snow	Light		Modera	te	Heavy
Type of Inspection Routine  Special  Persons/Equipment Present:  General Description of Site Conditions:							
Specific Inspection Items	Potential Problem Areas			Status *		Notes	
Perimeter Security Fencing	Broken or missing wood slats	s, torn chain link fa	bric.				
Entrance Gate and Locking Mechanism	Lock broken/missing, mechan	nism inoperative.					
Monitoring Wells and Wellhead Covers	Signs of tampering, casing da	maged, lock missi	ng.				
Final Cover Vegetation	Bare spots, stressed vegetation	n, deep rooted vego	etation.				
Final Cover Slope (explain below)	Gullies, lack of vegetation, su	ibsidence, ponding					
Evidence of Burrowing Animals	Damage to final cover, evider	nce of waste.					
Stormwater Drainage Channels	Gullies, erosion, debris, culve	ert blocked.					
Landfill Gas Venting System	Damaged or blocked vent rise	ers, stressed vegeta	tion.				
Access Road Cover Mowing and Tall Vegetation Removal (October Inspection Only)	Ponding, rutting, erosion.  Mowing and tall vegetation reheight, any missed areas	emoval done to spe	cified vegetation				
* (1) Acceptable - No Maintenance Require	ed. (2) Not Acceptable - Identify	y Required Mainter	nance.	1		1	
Summary of Deficiencies and/or Corrective Signature of Inspector	Actions:		I	Date			

### Gas Probe Monitoring Report Stoughton City Landfill Stoughton, Wisconsin

Probe	%LEL (as methane)	% Oxygen	%CO2	PID (ppm)	Pressure (inches of water)
GMP-1					
GMP-2					
GMP-3					

Instruments Used:			
Operator: Date:			
Weather Conditions:			
Barometric Pressure (inches of Hg):		Temperature (De	grees F):
Relative Humidity (%):	Dewpoint (Degrees	s F):	Wind:
Sky Conditions:			
Ground Conditions:			
SnowNo SnowFrozen Ground/Fr	rost		

Operation and Maintenance Plan Stoughton City Landfill

Section: 3

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3.4. DRAWINGS

The repair contractor will make revisions to the existing site layout map when the following site features change or are moved or removed:

Fence

- All monitoring wells

- Onsite trails and roads

- All gas vents and probes

3.5. STORAGE AND DISPOSTION OF RECORDS

During post-closure activities, the O&M contractor will be responsible for maintaining a complete set of maps, analytical data, and inspection reports. The O&M contractor shall transfer all changes to the record documents following each maintenance activity at the site.

The O&M contractor will maintain a complete set of all laboratory quality assurance documentation produced as a function of each sampling event. The documents will be maintained at the O&M contractor's home office, in accordance with approved document control methods.

Figure 1 Site Location Map

Figure 2 Site Layout Map

Table 1 Groundwater Analytical Results Summary

Table 2 Water Level Summary

**Table 3** Field Parameter Summary

**Table 4** Historical Target Compound Detections

#### **BID PRICE SHEET**

# December 2019 SIMPLIFIED BID OPERATION AND MAINTENANCE STOUGHTON CITY LANDFILL STOUGHTON, DANE COUNTY, WISCONSIN

NOTE TO BIDDERS: All blank spaces requiring input below must be filled in, in BLACK INK. Bid items are described in the Scope of Work.

The bidder agrees to accept as full payment for the work proposed under this project (as shown in the Scope of Work and as based upon the undersigned's own estimate of quantities and costs) the following bid amounts for the initial 1 year contract term:

BID	DESCRIPTION	UNIT	QUAN	UNIT COST	TOTAL COST
ITEM			TITY		
1	Semi annual inspection of	Total \$ amount	2		
	facility components	per inspection			
2	Semi annual prep. of facility	Total \$ amount	2		
	components inspection report	per report			
	including gas probe results				
3	Bi monthly gas probe	Total \$ amount	6		
	monitoring & testing &	per test period			
	provide/maintain expandable				
	caps on MW7I and MW10I				
4	Annual groundwater monitoring	Total \$ amount	1		
	sampling and analysis	per year			
5	Annual preparation of a	Total \$ amount	1		
	groundwater monitoring report	per year			
6	Monitoring well purge water	Total \$ amount	1		
	containerization and disposal	per year			
7	Electronic submittal of data to	Total \$ amount	1		
	GEMS system	per year			
8	Annual landfill cover mowing	Total \$ amount	1		
		per year			
9	QAPP/SAP preparation	Total \$ amount	1		
		per contract term			
10	Preparation of revised site map	Total \$ amount	1		
		per contract term			
11	Preparation of Health and	Total \$ amount	1		
	Safety Plan (HASP)	per contract term			
12	Abandon monitoring well	Total \$ amount	1		
	MW13I	per year			
13	Fixed Yearly Repair	Total \$ amount	1	\$2,000.00	\$2,000.00
	Contingency for all Bidders	per contract term			
		per year			
14	Total Bid Amount				
	(sum of items 1-11 above)				\$

Company Name	 
Address	 
Name	 
Title	 
Signature	

State of Wisconsin Department of Natural Resources December 2019 SIMPLIFIED BID

#### **BID CHECKLIST**

Bidders are to complete, sign and return the following forms. Use the list below to check off the items as they are completed and as a mailing check list. A complete bid package <u>must</u> contain all the items.

1	 Bid Price Sheet (signed)
2	 DOA-3832, Bidder Required Form – 3 References for O&M Vendor
3	 DOA-3832, Bidder Required Form – Sections 1 and 3 (3 References) for Testing Laboratory
4	 Point by point response to all requirements listed in Bidder Certifications section of this bid document.

NOTE: The State reserves the right to reject incomplete bids.

## Provide 3 References for O&M Vendor

STATE OF WISCONSIN DEPARTMENT OF ADMINISTRATION DOA-3832 (R 03/2019) S. 16.72 WIS. STATS



### **Bidder Required Form**

**Instructions:** Bidder is required to complete all sections of this form. (Note: If the agency checks the box preceding Section 5 indicating that section is not applicable to the bid/proposal, Bidder may skip Section 5. Bidder may not skip any other sections of this form).

To be completed by the agence								
Agency Name	Solicitation	Title			Solicitation Referenc	e Number		
Section 1: Bidder Informatio	n							
Bidder/Proposer Company Na	Bidder/Proposer Company Name: E-Mail Address:							
Phone Number:	Toll Free Phone:		Fax:					
Address:								
				T				
City:		State:		Zip:				
<u> </u>	0 1 // !/ !/ !	<u> </u>	,					
Mailing Address for Purchas	se Orders (if different t	tnan above	9)					
Address:								
City:								
ony.		State:		Zip:				
		L						
Section 2: Bidder Contacts								
List the name and title of the p	erson to contact for que	estions rela	ted to eac	ch of the topics be	low:			
Topic				-Mail Address	Ph	one		
Bid/Proposal				Wall Address	1 11	<u> </u>		
Bid/Proposal								
Affirmative Action Plan								
Animative Action Flan								
Orders and billing								
Section 3: Bidder Reference								
Provide company name, addre								
service(s) used with requirement involving a third party, the name						ngement		
	Ted references should a	iiso be iiivo	iveu iii a i	similar arrangeme	iii.			
Company Name:								
Address (including City, State,	7in):							
Address (illoluding City, State,	<b>-</b> ιγ <i>)</i> .							
Contact Person:		F	-Mail Add	lress:	Phone:			
				<b></b>				
List Product(s) and/or Service(	(s) Used:	,						
Company Name:								

Address (including City, State, Zip):									
Contact Person:		E-Mail Address:	Phone:						
List Product(s) and/or Service(s) Used:									
Company Name:									
Address (including City, State, Zip):									
Contact Person:		E-Mail Address:	Phone:						
List Product(s) and/or Service(s) Used:									
Company Name:									
Address (including City, State, Zip):									
Contact Person:		E-Mail Address:	Phone:						
List Product(s) and/or Service(s) Used:									
Section 4: Designation of Confidential  The attached material submitted in respondualifies as a trade secret, as provided in the Wisconsin Open Records Law. As suctreated as confidential material and not be	nse to this bid/propo s. 19.36(5), Wis. St ch, we ask that certa	osal includes proprietary and confidentia ats., or is otherwise material that can be ain pages, as indicated below, of this bio	kept confidential under						
Prices always become public information	when bids/proposal	s are opened, and therefore cannot be l	cept confidential.						
Other information cannot be kept confidential unless it is a trade secret. Trade secret is defined in s. 134.90(1)(c), Wis. Stats., as follows: "Trade Secret" means information, including a formula, pattern, compilation, program, device, method, technique or process to which all the following apply:  1. The information derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use.  2. The information is the subject of efforts to maintain its secrecy that are reasonable under the circumstances.									
We request that the following pages not b									
Section	Page #	Topic							

Using the boxes below, indicate your agreement with the following statements:
☐ In the event the designation of confidentiality of this information is challenged, the bidder/proposer hereby agrees to provide legal counsel or other necessary assistance to defend the designation of confidentiality and agrees to hold the state harmless for any costs or damages arising out of the state's agreeing to withhold the materials.
☐ The state considers other markings of confidential in the bid/proposal document to be insufficient. The bidder/proposer agrees to hold the state harmless for any damages arising out of the release of any materials unless they are specifically identified above.
Agency Only:
☐ Section 5 is not applicable to this bid/proposal. If this box is checked, Bidder may skip to Section 6.
Section 5: Bidder Agreement: Wisconsin's Cooperative Purchasing Service
Wisconsin statutes (s. 16.73, Wis. Stats.) establish authority to allow Wisconsin municipalities to purchase from state contracts. Participating in the service gives vendors opportunities for additional sales without additional bidding. Municipalities use the service to expedite purchases. A "municipality" is defined as any county, city, village, town, school district, board of school directors, sewer district, drainage district, vocational, technical and adult education district, or any other public body having the authority to award public contracts (s. 16.70(8), Wis. Stats.). Federally recognized Indian tribes and bands in this state may participate in cooperative purchasing with the state or any municipality under ss. 66.0301(1) and (2), Wis. Stats.
Interested municipalities:
<ul> <li>Will contact the contractor directly to place orders referencing the state agency contract number; and</li> <li>Are responsible for receipt, acceptance, and inspection of commodities directly from the contractor, and making payment directly to the contractor.</li> </ul>
The State of Wisconsin is not party to these purchases or any dispute arising from these purchases and is not liable for delivery or payment of any of these purchases.
Bidders/Proposers may or may not agree to furnish the commodities or services of this bid/proposal to Wisconsin municipalities. A vendor's decision on participating in these services has no effect on awarding this contract.
Bidder: Please indicate your willingness to furnish the commodities or services to Wisconsin municipalities by checking the appropriate box below.
☐ <u>I Agree</u> to furnish the commodities or services of this bid/proposal to Wisconsin municipalities with any special conditions noted below.
☐ I Do Not Agree to furnish the commodities or services to Wisconsin municipalities.
A vendor in the service may specify a minimum order sizes by volume or dollar amount, additional charges beyond normal delivery areas, or other minimal charges for municipalities.
Special Conditions (if applicable):

Section 6: Bidder Identification (Check all that ap	ply)							
We claim minority bidder preference [Wis. Stats.16.75(3m) (b)(3)]. Under Wisconsin Statutes, a 5% preference may be granted to CERTIFIED Minority Business Enterprises. Bidder must be certified by the Wisconsin Supplier Diversity Program. If you have questions concerning the certification process, contact the Wisconsin Supplier Diversity Program, 6 <sup>th</sup> Floor, 101 E. Wilson St., Madison, WI 53703, (608) 267-9550. <b>Does Not Apply to Printing Bids.</b>								
5% preference may be granted to CERTIFIED Disab Wisconsin Supplier Diversity Program. If you have qu	We claim disabled veteran owned business bidder preference [Wis. Stats.16.75(3m) (b)(3)]. Under Wisconsin Statutes, a 5% preference may be granted to CERTIFIED Disabled Veteran Owned Businesses. Bidder must be certified by the Wisconsin Supplier Diversity Program. If you have questions concerning the certification process, contact the Wisconsin Supplier Diversity Program, 6 <sup>th</sup> Floor, 101 E. Wilson St., Madison, WI 53703, (608) 267-9550. <b>Does Not Apply to Printing</b>							
☐ We are a work center certified under Wis. Stats. State concerning the certification process should be address Floor, 101 E. Wilson St., Madison, WI 53703, (608) 2	ssed to the Work Center							
Section 7: Bidder Certifications								
Wis. Stats. s. 16.754 directs the state to purchase management of States when all other factors are equal. Materials covered united States. Yes No Unknown	ered in our bid were ma							
We certify that we have not, either directly or indirectly, entered into any agreement or participated in any collusion or otherwise taken any action in restraint of free competition, that no attempt has been made to induce any other person or firm to submit or not to submit a bid, that this bid has been independently arrived at without collusion with any other bidder, competitor or potential competitor; that this bid has not been knowingly disclosed prior to the opening of bids to any other bidder or competitor; that the above statement is accurate under penalty of perjury.								
☐ We certify that we are not currently engaged in a Should we be awarded a contract, we understand the contract termination.	☐ We certify that we are not currently engaged in a prohibited boycott of the State of Israel as defined in s. 20.931(1)(b). Should we be awarded a contract, we understand that future engagement in a boycott of the State of Israel may result in							
☐ We certify that we are in compliance with applicable State of Wisconsin non-discrimination/affirmative action requirements as described in State Standard Terms and Conditions, form DOA-3054.								
☐ We will comply with all terms, conditions and specifications required by the state in this Request for Bid/Proposal and all terms of our bid.								
Section 8: Bidder Signature								
Name of Authorized Company Representative: Title: Phone: Fax:								
Signature of Above	Date:	Email:						

# Provide 3 References for Laboratory

STATE OF WISCONSIN DEPARTMENT OF ADMINISTRATION DOA-3832 (R 03/2019) S. 16.72 WIS. STATS



### **Bidder Required Form**

**Instructions:** Bidder is required to complete all sections of this form. (Note: If the agency checks the box preceding Section 5 indicating that section is not applicable to the bid/proposal, Bidder may skip Section 5. Bidder may not skip any other sections of this form).

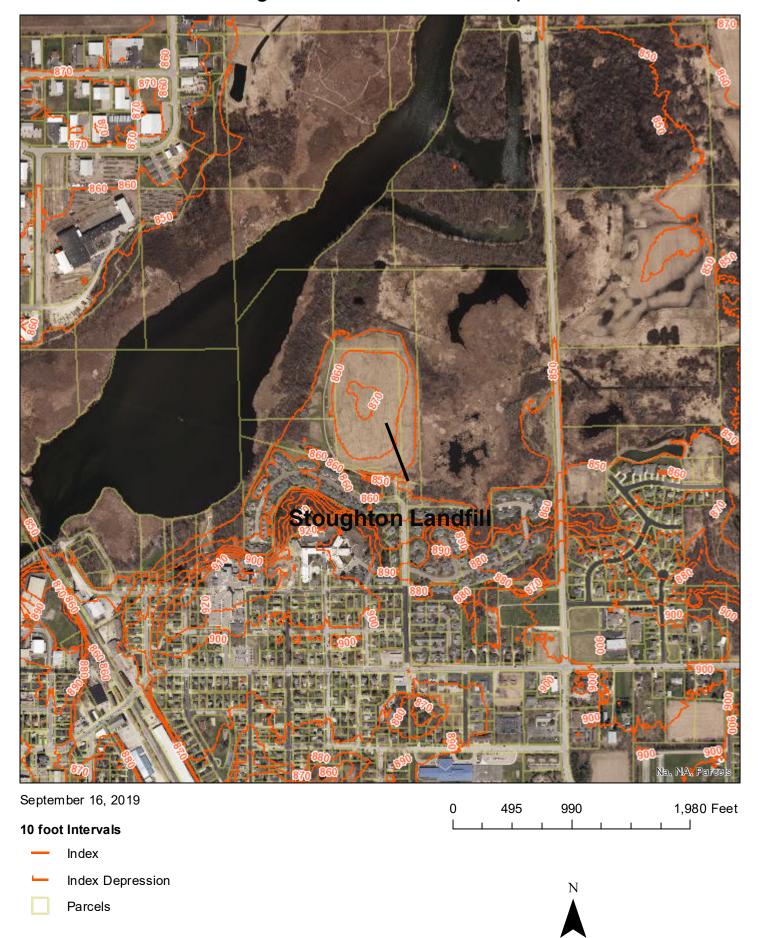
To be completed by the agen	cy:							
Agency Name		Solicitation	n Title			Solicitation Reference Number		
Section 1: Bidder Information	on							
Bidder/Proposer Company Na	ame:			E-Mail	Address:			
Phone Number:	Toll Free	Phone:		Fax:				
Address:								
City:			State:		Zip:			
City.			State.		Ζιρ.			
Mailing Address for Purcha	se Orders (	if different	than above	<del>)</del>				
Address:								
					•			
City:			State:		Zip:			
Section 2: Bidder Contacts								
List the name and title of the	person to co	ntact for que	estions rela	ted to ead	ch of the topics be	elow:		
Topic		•			E-Mail Address		Phone	
Bid/Proposal					Wall Addiess		FIIOHE	
Bid/F10posai								
Affirmative Action Plan								
Orders and billing								
Section 3: Bidder Reference								
Provide company name, addr		t person, tele	ephone nur	nber, and	appropriate inform	mation on the pro	oduct(s) and/or	
service(s) used with requirem	ents like tho	se included	in this solid	citation do	cument. If vendor	is proposing an		
involving a third party, the nar	ned referen	ces should a	also be invo	lved in a	similar arrangeme	ent.		
Company Name:								
Address (in studio - Otto Otto	7: <sub>0</sub> \.							
Address (including City, State	, <b>∠</b> ιρ):							
Contact Person:			l E	-Mail Add	dress:	Phone	ə:	
List Product(s) and/or Service	e(s) Used:							
Company Name:								

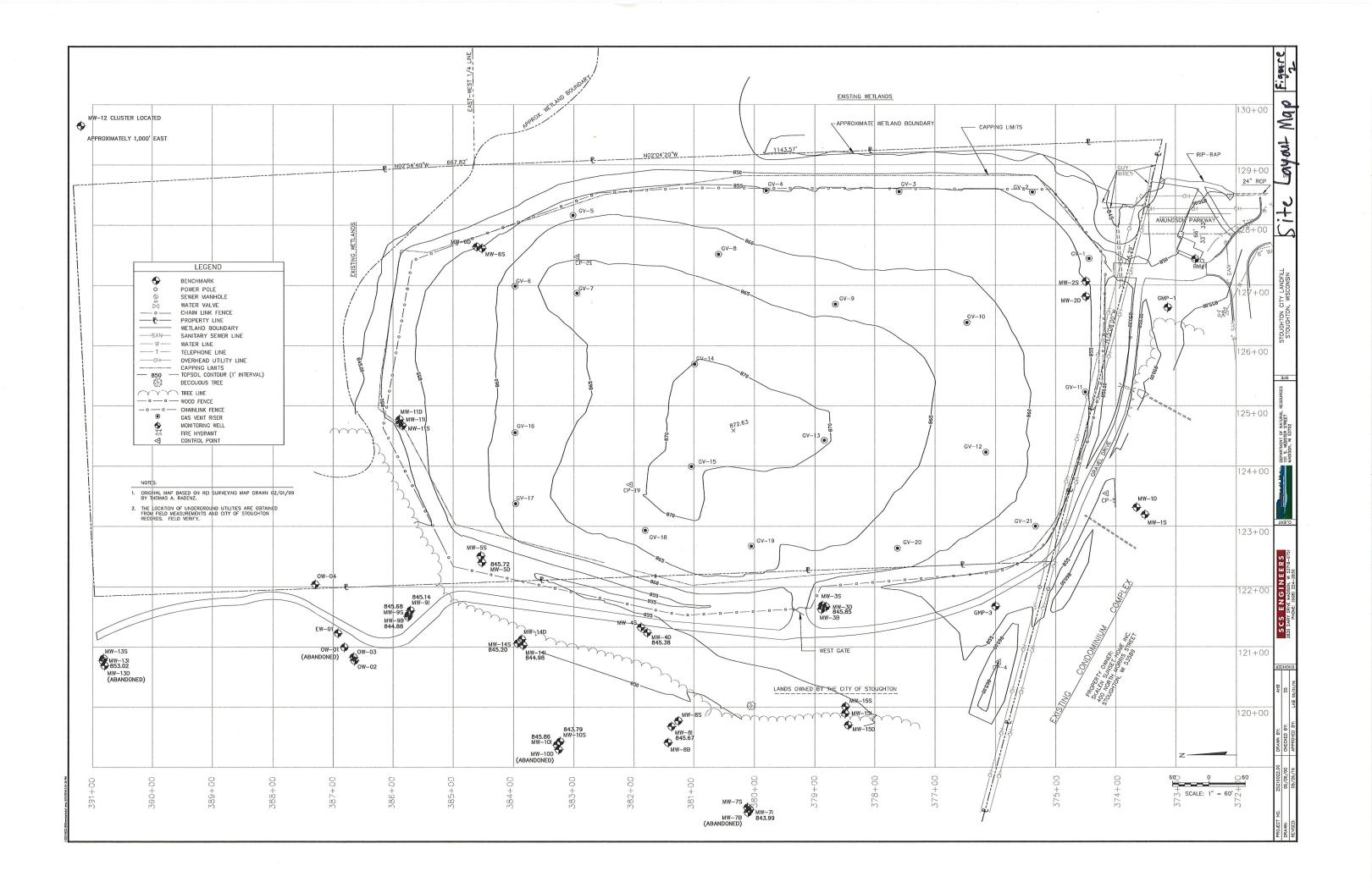
Address (including City, State, Zip):			
Contact Person:		E-Mail Address:	Phone:
List Product(s) and/or Service(s) Used:			
Company Name:			
Address (including City, State, Zip):			
Contact Person:		E-Mail Address:	Phone:
List Product(s) and/or Service(s) Used:			
Company Name:			
Address (including City, State, Zip):			
Contact Person:		E-Mail Address:	Phone:
List Product(s) and/or Service(s) Used:			
Section 4: Designation of Confidential  The attached material submitted in respondualifies as a trade secret, as provided in the Wisconsin Open Records Law. As suctreated as confidential material and not be	nse to this bid/propo s. 19.36(5), Wis. St ch, we ask that certa	osal includes proprietary and confidentia ats., or is otherwise material that can be ain pages, as indicated below, of this bio	kept confidential under
Prices always become public information	when bids/proposal	s are opened, and therefore cannot be l	cept confidential.
not being readily ascertainable disclosure or use.	tion, including a forr : pendent economic v e by proper means		generally known to, and omic value from its
We request that the following pages not b			
Section	Page #	Topic	

Using the boxes below, indicate your agreement with the following statements:
☐ In the event the designation of confidentiality of this information is challenged, the bidder/proposer hereby agrees to provide legal counsel or other necessary assistance to defend the designation of confidentiality and agrees to hold the state harmless for any costs or damages arising out of the state's agreeing to withhold the materials.
☐ The state considers other markings of confidential in the bid/proposal document to be insufficient. The bidder/proposer agrees to hold the state harmless for any damages arising out of the release of any materials unless they are specifically identified above.
Agency Only:
☐ Section 5 is not applicable to this bid/proposal. If this box is checked, Bidder may skip to Section 6.
Section 5: Bidder Agreement: Wisconsin's Cooperative Purchasing Service
Wisconsin statutes (s. 16.73, Wis. Stats.) establish authority to allow Wisconsin municipalities to purchase from state contracts. Participating in the service gives vendors opportunities for additional sales without additional bidding. Municipalities use the service to expedite purchases. A "municipality" is defined as any county, city, village, town, school district, board of school directors, sewer district, drainage district, vocational, technical and adult education district, or any other public body having the authority to award public contracts (s. 16.70(8), Wis. Stats.). Federally recognized Indian tribes and bands in this state may participate in cooperative purchasing with the state or any municipality under ss. 66.0301(1) and (2), Wis. Stats.
Interested municipalities:
<ul> <li>Will contact the contractor directly to place orders referencing the state agency contract number; and</li> <li>Are responsible for receipt, acceptance, and inspection of commodities directly from the contractor, and making payment directly to the contractor.</li> </ul>
The State of Wisconsin is not party to these purchases or any dispute arising from these purchases and is not liable for delivery or payment of any of these purchases.
Bidders/Proposers may or may not agree to furnish the commodities or services of this bid/proposal to Wisconsin municipalities. A vendor's decision on participating in these services has no effect on awarding this contract.
Bidder: Please indicate your willingness to furnish the commodities or services to Wisconsin municipalities by checking the appropriate box below.
☐ <u>I Agree</u> to furnish the commodities or services of this bid/proposal to Wisconsin municipalities with any special conditions noted below.
☐ I Do Not Agree to furnish the commodities or services to Wisconsin municipalities.
A vendor in the service may specify a minimum order sizes by volume or dollar amount, additional charges beyond normal delivery areas, or other minimal charges for municipalities.
Special Conditions (if applicable):

Section 6: Bidder Identification (Check all that ap	ply)									
☐ We claim minority bidder preference [Wis. Stats.? granted to CERTIFIED Minority Business Enterprises If you have questions concerning the certification pro Wilson St., Madison, WI 53703, (608) 267-9550. <b>Doe</b>	s. Bidder must be certified cess, contact the Wiscon	d by the Wisconsin Suppliensin Supplie	r Diversity Program.							
☐ We claim disabled veteran owned business bidder preference [Wis. Stats.16.75(3m) (b)(3)]. Under Wisconsin Statutes, a 5% preference may be granted to CERTIFIED Disabled Veteran Owned Businesses. Bidder must be certified by the Wisconsin Supplier Diversity Program. If you have questions concerning the certification process, contact the Wisconsin Supplier Diversity Program, 6 <sup>th</sup> Floor, 101 E. Wilson St., Madison, WI 53703, (608) 267-9550. <b>Does Not Apply to Printing Bids.</b>										
concerning the certification process should be address	☐ We are a work center certified under Wis. Stats. S. 16.752 employing persons with severe disabilities. Questions concerning the certification process should be addressed to the Work Center Program, State Bureau of Procurement, 6 <sup>th</sup> Floor, 101 E. Wilson St., Madison, WI 53703, (608) 266-5462.									
Section 7: Bidder Certifications										
Wis. Stats. s. 16.754 directs the state to purchase many States when all other factors are equal. Materials covered United States. Yes No Unknown	ered in our bid were ma									
☐ We certify that we have not, either directly or indirectly or indirec	tition, that no attempt has n independently arrived a ot been knowingly disclo	s been made to induce any at without collusion with any sed prior to the opening of	other person or firm							
☐ We certify that we are not currently engaged in a Should we be awarded a contract, we understand the contract termination.	prohibited boycott of the at future engagement in a	State of Israel as defined in a boycott of the State of Isra	n s. 20.931(1)(b). ael may result in							
☐ We certify that we are in compliance with applicate as described in State Standard Terms and Conditions		on-discrimination/affirmative	action requirements							
☐ We will comply with all terms, conditions and specterms of our bid.	cifications required by the	e state in this Request for B	id/Proposal and all							
Section 8: Bidder Signature										
Name of Authorized Company Representative:	Title:	Phone:	Fax:							
Signature of Above Date: Email:										

Figure 1: Site Location Map





# Table 1. Groundwater Analytical Results Summary - VOCs Stoughton City Landfill / SCS Engineers Project #25219092.00 (Results are in µg/L)

Sample	Date	Lab Notes	Benzene	Ethylbenzene	Toluene	Xylenes	TMBs	MTBE	Naphthalene	Other VOCs	
MW3D	4/7/2016		NA	NA	NA	NA	NA	NA	NA	ND	
	5/4/2017		NA	NA	NA	NA	NA	NA	NA	Tetrahydrofuran	6.5 J
	4/25/2018		NA	NA	NA	NA	NA	NA	NA	ND	
	4/26/2019		NA	NA	NA	NA	NA	NA	NA	ND	
MW4D	4/7/2016		NA	NA	NA	NA	NA	NA	NA	ND	
	5/4/2017		NA	NA	NA	NA	NA	NA	NA	ND	
	4/25/2018		NA	NA	NA	NA	NA	NA	NA	ND	
	4/26/2019		NA	NA	NA	NA	NA	NA	NA	ND	
MW5D	4/7/2016		NA	NA	NA	NA	NA	NA	NA	ND	
	5/4/2017		NA	NA	NA	NA	NA	NA	NA	ND	
	4/25/2018		NA	NA	NA	NA	NA	NA	NA	Dichlorodifluoromethane	1.8 J1
	4/25/2019		NA	NA	NA	NA	NA	NA	NA	ND	
MW5D Dup	4/7/2016		NA	NA	NA	NA	NA	NA	NA	ND	
	5/4/2017		NA	NA	NA	NA	NA	NA	NA	ND	
MW7I	4/7/2016		NA	NA	NA	NA	NA	NA	NA	ND	
	5/5/2017		NA	NA	NA	NA	NA	NA	NA	Tetrahydrofuran	6.9 J
	4/28/2018		NA	NA	NA	NA	NA	NA	NA	ND	
	4/25/2019		NA	NA	NA	NA	NA	NA	NA	ND	
MW8I	4/7/2016		NA	NA	NA	NA	NA	NA	NA	ND	
	5/5/2017		NA	NA	NA	NA	NA	NA	NA	ND	
	4/26/2018		NA	NA	NA	NA	NA	NA	NA	ND	
	4/25/2019		NA	NA	NA	NA	NA	NA	NA	ND	
MW8I Dup	4/26/2018		<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	ND	
MW9B	4/7/2016		<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	Dichlorodifluoromethane	11
										Trichlorofluoromethane	7.9
	5/5/2017		<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	Dichlorodifluoromethane	3.1
										Dichlorofluoromethane	1.5

# Table 1. Groundwater Analytical Results Summary - VOCs Stoughton City Landfill / SCS Engineers Project #25219092.00 (Results are in µg/L)

Sample	Date	Lab Notes	Benzene	Ethylbenzene	Toluene	Xylenes	TMBs	MTBE	Naphthalene	Other VOCs	
MW9B (cont.)	4/25/2018		<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	Dichlorodifluoromethane	7.1
										Dichlorofluoromethane	2.2
										Methylene Chloride	<u>7.3</u> ⊂
										Trichlorofluoromethane	4.8
	4/25/2019	(1)	<0.15	<0.18	<0.15	<0.22	<0.61	<0.39 *	<0.34	Dichlorodifluoromethane	1.5 J1
										Dichlorofluoromethane	0.76 J1
MW9S	4/7/2016		<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	Dichlorodifluoromethane	23
	5/5/2017		<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	Dichlorodifluoromethane	26
										Dichlorofluoromethane	30
	4/25/2018		<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	Dichlorodifluoromethane	22
										Dichlorofluoromethane	23
										Methylene Chloride	<u>8.0</u> ⊂
										Trichloroethene	0.32 ⊂
	4/25/2019		<0.15	<0.18	<0.15	<0.22	<0.61	<0.39 *	<0.34	Dichlorodifluoromethane	16
										Dichlorofluoromethane	22
										Trichloroethene	0.41 J1
MW9I	4/7/2016		<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	Dichlorodifluoromethane	19
										Trichloroethene	<u>0.59</u>
	5/5/2017		<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	Dichlorodifluoromethane	24
										Dichlorofluoromethane	13
	4/26/2018		<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	Dichlorodifluoromethane	22
										Dichlorofluoromethane	13
										Methylene Chloride	<u>2.9</u> Л,С
										Trichloroethene	<u>0.54</u>
	4/25/2019		<0.15	<0.18	<0.15	<0.22	<0.61	<0.39 *	<0.34	cis-1,2-Dichloroethene	0.52 J1
										Dichlorodifluoromethane	16
										Dichlorofluoromethane	16
										Trichloroethene	<u>0.77</u>

## Table 1. Groundwater Analytical Results Summary - VOCs Stoughton City Landfill / SCS Engineers Project #25219092.00 (Results are in µg/L)

Comple	Date	Lab Notes	Donzono	Cthydbonzono	Toluene	Vulonos	TMBs	MTBE	Nanhthalana	Other VOCs	
Sample MW91 Dup	4/7/2016		Senzene <0.15	<b>Ethylbenzene</b> <0.18	<0.15	Xylenes <0.22	<0.61	<0.39	Naphthalene <0.34	Dichlorodifluoromethane	21
VIVV 71 DUP	5/5/2017		<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	Dichlorodifluoromethane	26
	3/3/2017		<b>\0.13</b>	<b>\0.10</b>	<b>\0.13</b>	<b>\0.22</b>	\0.01	\0.37	\0.54	Dichlorofluoromethane	26 14
										Trichloroethene	0.39 J
MW10S	4/7/2016		<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	ND	0.37 3
100			<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	ND	
	5/5/2017		<0.15	<0.18	<0.15	<0.22	<0.61	<0.39			0.00.11
	4/25/2018		<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	Dichlorodifluoromethane	0.98 J1
										Dichlorofluoromethane	0.97 J1
	4/05/0010	(1)	0.15	.0.10	0.15	0.00	2 (1	.0.00 *	0.04	Methylene Chloride	<u>8.3</u> ⊂
	4/25/2019	(1)	<0.15	<0.18	<0.15	<0.22	<0.61	<0.39 *	<0.34	ND	
1W10I	4/7/2016		<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	Dichlorodifluoromethane	8.2
										Tetrachloroethene	<u>1.3</u>
	5/5/2017		<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	Dichlorodifluoromethane	12
										Dichlorofluoromethane	6.1
										Tetrachloroethene	<u>1.8</u>
	4/26/2018		<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	Dichlorodifluoromethane	8.0
										Dichlorofluoromethane	5.0
										Tetrachloroethene	<u>1.9</u>
	4/26/2019	(2)	<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	Dichlorodifluoromethane	5.8
										Dichlorofluoromethane	6.8
										Tetrachloroethene	<u>3.2</u>
MW13I	4/7/2016		NA	NA	NA	NA	NA	NA	NA	Dichlorodifluoromethane	4.1
										Tetrahydrofuran	<u>13</u>
	10/18/2016		NA	NA	NA	NA	NA	NA	NA	Tetrahydrofuran	<b>4.6</b> J
	5/5/2017		NA	NA	NA	NA	NA	NA	NA	ND	
	4/26/2018		NA	NA	NA	NA	NA	NA	NA	ND	
	4/25/2019		NA	NA	NA	NA	NA	NA	NA	ND	
MW13I Dup	4/25/2019		NA	NA	NA	NA	NA	NA	NA	ND	

# Table 1. Groundwater Analytical Results Summary - VOCs Stoughton City Landfill / SCS Engineers Project #25219092.00 (Results are in µg/L)

Sample	Date	Lab Notes	Benzene	Ethylbenzene	Toluene	Xylenes	TMBs	MTBE	Naphthalene	Other VOCs	;
MW14S	4/7/2016		<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	ND	
	5/5/2017		<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	ND	
	4/26/2018		<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	Dichlorodifluoromethane	2.4
										Dichlorofluoromethane	3.6
										Methylene Chloride	<u>2.7</u> J1,С
										Tetrachloroethene	<u>0.89</u> л
	4/25/2019	(2)	<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	Dichlorofluoromethane	2.8
										Tetrachloroethene	<u>0.81</u> л
MW14I	4/7/2016		<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	Dichlorodifluoromethane	2.8
	5/5/2017		<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	Dichlorodifluoromethane	4.6
										Dichlorofluoromethane	12
	4/26/2018		<0.15	<0.18	<0.15	<0.20	<0.61	<0.39	<0.34	Dichlorodifluoromethane	2.1
										Dichlorofluoromethane	9.5
	4/25/2019	(2)	<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	Dichlorofluoromethane	9.4
MW14I Dup	4/25/2019	(2)	<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	Dichlorofluoromethane	9.6
										Trichloroethene	0.18 มา
Field Blank	4/7/2016		<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	ND	
	5/5/2017		<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34 *F1	ND	
	4/26/2018		<0.15	<0.18	0.53	<0.22	<0.61	<0.39	<0.34	ND	
	4/25/2019	(2)	<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	ND	
Trip Blank	4/7/2016		<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	ND	
	10/18/2016		NA	NA	NA	NA	NA	NA	NA	Tetrahydrofuran	2.5 J
	5/4/2017		<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	ND	
	4/26/2018		<0.15	<0.18	<0.15	<0.22	<0.61	<0.39	<0.34	Methylene Chloride	<u>2.8</u> J1,C
	4/25/2019	(2)	<0.15	<0.18	<b>0.19</b> J1	<0.22	<0.61	<0.39	<0.34	ND	

# Table 1. Groundwater Analytical Results Summary - VOCs Stoughton City Landfill / SCS Engineers Project #25219092.00

(Results are in  $\mu$ g/L)

Sample	Date	Lab Notes	Benzene	Ethylbenzene	Toluene	Xylenes	TMBs	MTBE	Naphthalene	Other VOCs	
NR 140 Enforcem	ent Standar	ds (ESs)	5	700	800	2,000	480	60	100	cis-1,2-Dichloroethene	70
										Dichlorodifluoromethane	1,000
										Dichlorofluoromethane	NE
										Methylene Chloride	5
										Tetrahydrofuran	50
										Tetrachloroethene	5
										Toluene	160
										Trichloroethene	5
										Trichlorofluoromethane	3,490
NR 140 Preventive	e Action Lim	its (PALs)	0.5	140	160	400	96	12	10	cis-1,2-Dichloroethene	7
										Dichlorodifluoromethane	200
										Dichlorofluoromethane	NE
										Methylene Chloride	0.5
										Tetrahydrofuran	10
										Tetrachloroethene	0.5
										Toluene	800
										Trichloroethene	0.5
I										Trichlorofluoromethane	698

Abbreviations:

μg/L = micrograms per liter or parts per billion (ppb)

MTBE = Methyl-tert-butyl ether

NA = Not Analyzed

VOCs = Volatile Organic Compounds

(Dup) = Duplicate Sample

ND = Not Detected

TMBs = 1,2,4- and 1,3,5-trimethylbenzenes

-- = Not Applicable

NE = No Standard Established

#### Notes:

NR 140 ESs - Wisconsin Administrative Code (WAC), Chapter NR 140.10 Table 1 - Public Health Groundwater Quality Standards from February 2017.

NR 140 PALs - WAC, Chapter NR 140.10 Table 1 - Public Health Groundwater Quality Standards from February 2017.

**Bold+underlined** values meet or exceed NR 140 enforcement standards.

<u>Italic+underlined</u> values meet or exceed NR 140 preventive action limits.

#### Laboratory Notes/Qualifiers:

C = Probable Lab Contamination

F1 = MS and/or MSD Recovery is outside acceptance limits.

J = Results reported between the Method Detection Limit (MDL) and Limit of Quantitation (LOQ) are less certain than results at or above the LOQ.

J1 = Reported value was between the limit of detection and the limit of quantitation.

- \* = LCS or LCSD is outside acceptance limits.
- (1) Trichlorofluoromethane = LCS or LCSD is outside acceptance limits.
- (2) Bromomethane = LCS or LCSD is outside acceptance limits. CCV Recovery is outside acceptance limits.

 Created by:
 AV
 Date: 4/29/2016

 Last revision by:
 ZTW
 Date: 5/24/2019

 Checked by:
 LMH
 Date: 6/19/2019

I:\25219092.00\Deliverables\Annual GW Report\[Table 1\_GW\_VOCs.xlsx]GW VOCs

# Table 2. Water Level Summary Stoughton City Landfill / SCS Engineers Project #25219092.00

		Depth to Water in feet below top of well casing											
Raw Data	MW03D	MW04D	MW05D	MW07I	I80WM	MW09S	MW09I	MW09B	MW10S	MW10I	MW13I	MW14S	MW14I
Measurement Date													
May 4-5, 2017	8.74	6.14	6.08	0.00	0.12	1.11	1.48	1.25	3.18	0.00	0.00	2.94	1.68
April 25-26, 2018	9.30	6.69	6.60	0.00	0.68	1.76	1.99	1.76	3.25	0.00	0.00	3.38	2.20
April 25-26, 2019	8.02	5.41	5.33	0.00	0.00	0.75	0.76	0.50	3.27	0.00	0.00	2.11	0.96

	Ground Water Elevation in feet above mean sea level (amsl)												
Well Number	MW03D	MW04D	MW05D	MW07I	I80WM	MW09S	MW09I	MW09B	MW10S	MW10I	MW13I	MW14S	MW14I
Top of Casing Elevation (feet amsl)	855.17	852.08	852.35	843.99	846.32	847.23	847.14	846.68	846.88	845.86	853.02	848.73	847.38
Screen Length (ft)	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Total Depth (ft from top of casing)	73.0	74.0	77.0	60.0	62.4	13.4	21.5	83.3	16.9	39.8	57.5	26.2	51.2
Top of Well Screen Elevation (ft)	792.17	788.08	785.35	793.99	793.92	843.83	835.64	773.38	839.98	816.06	805.52	832.53	806.18
Measurement Date													
May 4-5, 2017	846.43	845.94	846.27	843.99	846.20	846.12	845.66	845.43	843.70	845.86	853.02	845.79	845.70
April 25-26, 2018	845.87	845.39	845.75	843.99	845.64	845.47	845.15	844.92	843.63	845.86	853.02	845.35	845.18
April 25-26, 2019	847.15	846.67	847.02	843.99	846.32	846.48	846.38	846.18	843.61	845.86	853.02	846.62	846.42
				·	·		·						
Bottom of Well Elevation (ft)	782.2	778.1	775.4	784.0	783.9	833.8	825.6	763.4	830.0	806.1	795.5	822.5	796.2

Notes:

MW07I, MW10I, and MW13I are artesian wells.

 Created by:
 ES
 Date: 6/28/2017

 Last revision by:
 ZTW
 Date: 5/23/2019

 Checked by:
 LMH
 Date: 6/19/2019

I:\25219092.00\Deliverables\Annual GW Report\[Table 2\_Water Level Summary.xls]levels

Table 3. Field Parameter Summary
Stoughton City Landfill / SCS Engineers Project #25219092.00

Well Number	Date	Temperature (°C)	Specific Conductivity (umhos/cm)	pH (Std. Units)	Dissolved Oxygen (mg/L)	Turbidity
MW03D	4/26/2019	11.6	896	7.41	0.91	None
MW04D	4/26/2019	11.9	960	7.31	1.48	Slight
MW05D	4/25/2019	17.1	839	7.53	3.16	Moderate
MW07I	4/25/2019	14.6	921	7.96	2.70	None
MW08I	4/25/2019	10.7	1075	7.52	0.40	None
MW09S	4/25/2019	10.3	750	7.39	2.49	None
MW09I	4/25/2019	11.8	607	7.50	2.90	None
MW09B	4/25/2019	14.0	274	7.34	6.47	None
MW10S	4/25/2019	8.9	583	8.56	4.60	High
MW10I	4/26/2019	11.9	789	7.27	2.09	Slight
MW13I	4/25/2019	15.9	719	7.55	2.43	Slight
MW14S	4/25/2019	11.9	436	7.89	2.00	High
MW14I	4/25/2019	13.3	844	7.87	1.49	None

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 Date: 6/28/2017

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 ZTW
 Date: 5/23/2019

 Checked by:
 LMH
 Date: 6/19/2019

I:\25219092.00\Deliverables\Annual GW Report\[Table 3\_Field\_Parameter Summary.xls]Table 3

# Table 4. Historical Target Compound Detections Annual Groundwater Report - April 2019 Stoughton City Landfill / SCS Engineers Project #25219092.00

Shallow Monitoring Wells						
	Current Event Concentration (µg/L)		Historical Range (µg/L)			
Well	DCDFM	THF	DCDFM	THF		
MW9S	16	ND	22-400	ND-22		
MW10S	ND	ND	ND-20	ND-20		
MW14S	ND	ND	2.4-710	ND-50		

Intermediate and Deep Monitoring Wells						
	Current Event Concentration (µg/L)		Historical Range (µg/L)			
Well	DCDFM	THF	DCDFM	THF		
MW5D	ND	ND	0.92-10	ND-4.0		
MW9I	16	ND	12-340	ND-12		
MW9B	1.5 J	ND	2.3-25	ND-2.4		
MW10I	5.8	ND	ND-280	ND-21		
MW14I	ND	ND	2.1-590	ND-2.4		

Abbreviations:

µg/L = micrograms per liter DCDFM = dichlorodifluoromethane

J - Estimated concentration

ND = Not Detected THF = tetrahydrofuran

Historical range includes 9 rounds of sampling performed by  $BT^2$ , Inc. (8/00, 4/01, 11/01, 4/02, 11/02, 4/03, 11/03, 4/04, 11/04) and two rounds performed by Roy F. Weston in April 1998 and April 1999.

 Created by:
 ES
 Date: 6/28/2017

 Last revision by:
 ZTW
 Date: 5/23/2019

 Checked by:
 MP
 Date: 6/7/2019

I:\25219092.00\Deliverables\Annual GW Report\[Table 4\_Historical\_Target\_Compound\_Detections\_April\_2019.xlsx]GW Natural Attenuation