MINNESOTA POLLUTION CONTROL AGENCY
520 Lafayette Road North
St. Paul, MN 55155-4194

Example Workplan

Project Title: Western MN Service Station (Scenario B - Petroleum Only Environmental Services Work Plan)

1. Project Summary:

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2. Statement of Problems, Opportunities, and Existing Conditions

The following background information was provided by the Minnesota Pollution Control Agency (MPCA) in regards to a recently discovered petroleum release:

A petroleum release has been identified at an active fueling station with a connected 24-hour restaurant (Site) located in a small rural town in western Minnesota. The petroleum release is assumed to be have been reported to the Minnesota State Duty Officer and subsequently assigned an MPCA Leak Site ID number. The fueling station has been in operation since the 1950's. The 24-hour restaurant was an addition (connected) along the east side fueling station building in the late 1990's. The Site is located along the north side of Main Street in a small rural town, surrounded by mixed commercial and residential properties. The Site is adjoined by single-family homes to the north; a residential service road/scenic drive followed by single-family lake homes to the east; Main Street followed by commercial properties to the south; and a street followed by commercial properties to the west. The nearest observed surface water feature is a lake which is located within 500 feet to the east of the Site.

The Site currently operates one diesel fuel and two gasoline underground storage tanks (USTs); and a fueling area consisting of four fuel dispensers. The active USTs are present within the tank basin located to the west of the Site building. The four fuel dispensers are located to the south of the Site's fueling station. An active fuel oil aboveground storage tank (AST) is also located to the north of the Site building. Reportedly, two USTs (unknown product contents) were removed from the Site prior to the addition of the slab-on-grade restaurant. The removed USTs were located within the footprint of the restaurant. Little is known about the condition and sampling results of the removed USTs. However, the MPCA provided information that strong petroleum odors were noted and photoionization detector (PID) readings of up to 1,263 parts per million (ppm) were recorded during historical tank removal activities.

In addition to the petroleum impacts acknowledged during historical UST removal activities, the active tank system is showing product loss within the last few months and a significant amount of petroleum staining has been observed near the fuel dispenser islands. Conversations with the fuel station owner also indicated that some neighboring home owners have been complaining about petroleum odors in their drinking water.

The MPCA provided information indicating that municipal services are available in the area and that the Site is connected to municipal water and sanitary sewer services. Municipal water, sanitary and storm sewer main lines transect along Main Street. However, it is known that the neighboring lakeside single-family homes obtain water from private water supply wells. In addition, the two single-family homes neighboring the Site to the north were acknowledged to have private water supply wells but unknown if these homes are currently connected to municipal services or obtain resource water from the respective wells. The private water supply wells in the area are acknowledged to be completed at depths of 80 feet below ground surface (bgs).

Based on the well logs for the identified off-site private water supply wells, geology consists of interbedded sand and gravel

units from near the surface to depths between 40 and 45 feet bgs. Bedrock is then encountered at depths of 45 feet bgs in each well log. The interpolated groundwater flow is to the east, towards the nearby recreational lake.

The RFP requests that the proposer submit a work plan, including a schedule for specific tasks to be performed that define the extent and magnitude of petroleum contamination; identify and assess potential health; safety and environmental risks; and provide sufficient information to justify MPCA Site file closure, design a potential monitoring plan, or select a potential corrective action. This work plan scenario describes the sequence of work and the tasks necessary to provide decision making and recommendations to MPCA staff associated with the Site petroleum release. To help demonstrate our understanding of the scenario specifics/Site conditions described above, we have taken the liberty of preparing conceptual drawings (Figures 1 and 2), tables and example survey letters. We understand that some of the drawings shown are not typically included with a work plan. However, we felt these would provide graphic representation of some of the assumptions we are using for this scenario. In addition, we also wanted to provide the MPCA with an example of the type of figures and data reduction that would be included with reporting documentation.

3. Goals, Objectives, Tasks, and Subtasks

Goal:

Carlson McCain's primary goal of the proposed work plan is to identify and assess potential pathways for which existing petroleum contamination may or may not impact potential receptors. Identified receptors may be linked with groundwater that has or may affect human health, led or may lead to dangerous conditions from the exposure of petroleum vapors, affect or may affect surface water quality or caused or may cause direct human (dermal) contact. Proposed objectives will provide the information to assess the risks to identified receptors and corrective action, if necessary.

Objective 1: Limited Site Investigation (LSI)

Based on the available data and knowledge of the MPCA Petroleum Remediation Program (PRP) Guidance Documents, Carlson McCain intends to complete an LSI as the initial step of environmental investigation for this Site. Some available data support the fact that the LSI will eventually translate to a full Remedial Investigation (RI). Because much of the information is circumstantial and many unknowns exist, the most appropriate initial approach is to conduct an LSI. The proposed LSI will include the advancement of Site and potential off-site soil and vapor borings to define soil contamination associated with two Site release source areas (historical tank basin and active fuel dispensers), assess impacts to a shallow groundwater unit and potential vapor intrusion impacts to the Site building, underground utilities and off-site property structures. Associated with the initial LSI are surface water, vapor, and water well receptor surveys. Because several neighboring single-family home owners acknowledged petroleum odors from their drinking water, initial LSI activities will also include off-site access to sample nearby water supply wells and potentially advance soil and vapor borings to define a contamination plume migrating off-site. A total of six private water supply wells were previously identified at residential properties neighboring the Site to the north, northeast, east and southeast directions.

Subsequent to discussions with the MPCA assigned Project Leader and acquisition of available Site data (as summarized above and included with the RFP), Carlson McCain will prepare a work plan and cost estimate for the initial stage of work. Carlson McCain and the MPCA Project Leader would potentially discuss the amount of work associated with the initial LSI to get a full understanding of the scope and limit the need for any future change orders. This initial cost estimation would include solicitation of bids from MPCA contracted direct-push probe companies for the projected scope of services assumed to exceed $5,000. In this case, Carlson McCain acquired drilling bids from Range Environmental Drilling, Inc. (Range) and Thein Well Company (Thein), both MPCA contracted drilling companies. For the purpose of this scenario, Range was selected to conduct push probes services for being a veteran owned company, lower bid amount, availability and accessibility with their mobile track drill-rig. Typically, Carlson McCain obtains multiple bids as a means of cost comparison and to select a subcontractor that is the most cost effective, qualified, may provide a drill unit to meet Site accessibility demands, veteran or minority ownership, and proximity from the Site. Carlson McCain will also utilize MPCA contracted laboratories for the required analytical services. Costs for these services would be calculated based on current Pace Analytical Services, LLC. (Pace) and Interpoll Laboratories, Inc. (Interpoll) MPCA contracted rates.

To accomplish the LSI, Carlson McCain will identify receptors to evaluate potential risks; and assess the risk to the identified receptors potentially impacted by petroleum contamination for future investigation or RI activities. Future activities may include MPCA Site file closure, developing a Site monitoring plan or selecting corrective action.

Task A: Project Administration

Carlson McCain will conduct administration activities to effectively investigate the Site petroleum release(s) in an approved, safe and efficient manner. These subtasks are outlined below.

Subtask 1: Background Review

Prior to scheduling and completing LSI activities (soil, groundwater and soil vapor intrusion assessments; and receptor survey walkthrough), Carlson McCain will complete a background review to obtain any reasonably ascertainable information (not previously provided) pertaining to the Site. The background review would include any available tank removal documentation for the former USTs and a review of installation information for the current UST system. Reviewing the MPCA online "Tanks" database, contacting the regional MPCA Tank

Inspector and telephone interviews with the current property owner and the local Fire Department may assist with gathering important information about the past and current tank system components. Specific details to be ascertained would include (but are not necessarily limited to): former UST, piping and dispenser locations; current UST, piping and dispenser locations; any known spills or past tank removal documentation which may have been reported to the local Fire Department; identifying other potential contamination sources; and understanding the contaminant conditions identified at the Site.

Carlson McCain will also prepare initial Site Location and Aerial Plan Views for the Site and surrounding area from available topographic maps, aerial photographs and/or Google Earth®. These maps are invaluable in locating potential receptors near the Site and planning investigative activities prior to mobilization. The maps will also assist our selected driller for Gopher State One Call and private utility locates.

Available well logs will be obtained through the Minnesota Department of Health (MDH) online Minnesota Well Index (MWI) database. Well logs of nearby private water supply wells would be reviewed to initially assist and confirm the area's geology, hydrogeology, type of supply well, well construction, elevations, off-site property owner information for potential off-site access, active or abandoned well, depth, bedrock, aquifer(s), etc.

The following Site characteristics and project details were additionally determined through research and data collection from the information initially provided by the MPCA in this Work Plan Scenario:

- The former USTs were confirmed through local Fire Department records to have stored gasoline and diesel. However, the timeframes for use of leaded gasoline is unknown. A sketch provided by the fire department indicated two fuel dispensers were located directly to the south of the historical tank basin.
- Contact with the property owner and review of an aerial view indicated that the fuel oil AST is located on a small curbed concrete pad;
- The MPCA's online "Tanks" database indicated that the current UST system is in compliance and provided sizes, contents and type of USTs and associated piping present at the Site. However, correspondence with the regional MPCA Tank Inspector indicated that they haven't conducted a Site visit in the past two years and a Site compliance inspection is due within the year.
- The City Public Works Department was contacted and able to provide utility maps (water, sanitary sewer and storm) and indicates that municipal water is available for the area. It was also confirmed that the Site, neighboring commercial properties and the two single-family homes to the north are connected to municipal water and sanitary sewer services.
- A search of well logs from the MDH online MWI database indicates that a total of six private domestic wells are located within 500 feet of the Site. Each well obtains resource water within a bedrock aquifer. In addition to the geology initially provided by the MPCA, static water levels were measured in each domestic well from depths between 12 and 16 feet bgs. It should be noted that the one of the two off-site private water wells to the north of the Site is listed as abandoned/sealed.
- Water supply well logs and review of Google Earth® indicates a relative elevation decrease from the Site towards neighboring homes and the Lake to the east.
- The Site is located approximately two hours (120 miles) to the west of our Plymouth office.

Subtask 2: Site Specific Health & Safety Plan

Carlson McCain will prepare a Site-specific Health and Safety Plan (HASP) prior to investigation activities. The HASP will be consistent with CERCLA Section 104(f) and U.S. Environmental Protection Agency (EPA) Occupational Health and Safety requirements. Carlson McCain will require that all field personnel and contractors conducting work on-site review and sign the HASP. The HASP will include exposure risks to possible contamination, outline the route to the nearest hospital/emergency center and identify standard Occupational Safety and Health Administration (OSHA) requirements set forth in 29 CFR 1910.120 to maintain a safe working environment. The names and telephone numbers of Carlson McCain's designated Safety Officer and project management staff will be included. Telephone numbers for the MPCA, State of Minnesota Duty Officer, local fire department and related agencies will also be included.

In addition, Carlson McCain's HASP will contain Site information, summary of the scope of work and a narrative about historic and current Site operations. The HASP will take into account that petroleum compounds may be encountered.

Subtask 3: Site and Off-site Access/Initial Site Visit

Before conducting Site investigation activities, Carlson McCain will obtain information from the MPCA regarding the current Site owner/applicant. The current Site owner will be contacted about access, schedule Site investigation activities and answer any questions or concerns that may include information about the scope of

work, type of equipment, Site access or hinder business operations. If an access agreement form was not previously completed between the MPCA and the Site owner, Carlson McCain would complete the form and send to the Site owner for review and signature. Once completed, the Site owner may either send the access agreement back to Carlson McCain or directly to the MPCA for their approval and signature.

Carlson McCain will also complete an initial Site visit and/or Site meeting to assess soil and vapor boring locations in regards to the release source area(s), provide information to assist with utility locates, and gather off-site property information for private water supply well sampling and potential soil and/or vapor boring advancements. An attempt to meet with off-site property owners would be conducted to discuss upcoming investigation work, including the need to sample water supply wells and off-site access agreements. If off-site property owners are not available during the initial Site visit, Carlson McCain will document each home address and send letters discussing the scope of work. Carlson McCain may also contact the City and Site owner to assist with neighboring property contact information. Off-site agreement forms between the MPCA and each identified property owner would be completed prior to water supply well sampling and potential soil and vapor boring advancements.

Subtask 4: Non-Specific Administration

Subsequent to receiving the work order, MPCA State Contract Order Forms (SCOFs) will be completed and signed by Carlson McCain and the selected State subcontractors. The SCOF form is used by the MPCA Contractor when hiring a State Subcontractor. Non-specific administration activities may also include budget tracking, project status, subcontractor work review, updates with property owners, assisting field staff, data review, etc.

Subtask 5: Field Work Notification

Carlson McCain will initially schedule drilling activities and off-site water supply well sampling with Range, the Site owner/manager and neighboring property owners/tenants. Carlson McCain's main goal would be to conduct all initial field work within a one or two-day timeframe, limiting costs and mobilizations to the Site. Carlson McCain will try to accommodate all aspects of involved parties schedule, availability and Site operation interference. If an off-site property owner cannot be home during private water well sampling, Carlson McCain will coordinate with the off-site property owner for permission and the best available location to sample the well from outside of the home or advance an off-site soil and/or vapor boring(s). Once the schedule is set with all involved parties, Carlson McCain would contact the MPCA prior to field work. Carlson McCain will utilize the MPCA e-Services online database to login and notify when field work is proposed to commence. Field work notification states the Site leak number, date of field work, start time, Carlson McCain field personnel on-site, field staff cell phone number, drilling sub-contractor selected and work to be performed (i.e. number of soil and vapor borings, receptor survey walkthrough, private water well sampling, etc.).

Associated with Field Work Notification, Carlson McCain prepares field supplies, sampling kits and checks equipment prior to conducting field work. Also, Carlson McCain orders laboratory supplies with the contracted laboratory and confirms requested sampling containers are included or are not damaged.

Subtask 6: Utility Clearance

Prior to conducting subsurface investigation/soil boring advancement activities, Carlson McCain's drilling subcontractor will arrange for clearing public and private utilities. Initial coordination and scheduling for the push probe assessment will include Site information to the drilling subcontractor to complete the Gopher State One Call notification. The drilling subcontractor will also coordinate with a private utility locator to clear private utilities at the Site. All necessary drilling permits will be secured by either Carlson McCain or our subcontractor. The initial visit will also assist in the locating of public and/or private utilities. Proposed soil and vapor boring locations will be marked during the initial Site visit in the event a utility meet is not scheduled or necessary.

Subtask 7: Travel Time

Costs for a field technician from our Plymouth office, nearest to the Site, to conduct the initial Site visit would be proposed for travel to and from the Site located in Western, Minnesota. From the background review, the Site is located approximately 120 miles from our Plymouth office. A total of four hours and respective mileage (240 miles total) at the current Federal rate would be included with this work plan.

Task B: Receptor Surveys

Prior to or while on-Site completing soil, groundwater and vapor intrusion assessment activities, Carlson McCain will complete receptor surveys following MPCA Guidance Document 4-02 (*Risk Evaluation and Site Management Decision at Petroleum Release Sites*). Survey procedures will provide information to identify potential receptors and evaluate the risks associated with impacted drinking water, discharge to surface water features, high concentrations of petroleum vapors and contaminated surface soil for potential run-off and dermal contact.

Subtask 1: Water Well Receptor Survey

- Walking Survey - Utilizing the data from the background review and evaluation of available databases to provide valuable insight for the Site and surrounding area, Carlson McCain will then complete a walking survey of all properties within 500 feet of the Site and release source areas. An initial base map would be used to identify existing features near the Site and confirm distances from the Site. An example of the base map (utilizing data provided for the PRP Scenario 1 Site) is attached as Figure 2. All properties within the 500 feet radius would be identified, listed in tabular form with address and field observable features. During the 500-foot walking survey, Carlson McCain will also attempt to interview any available personnel associated with each identified property (homeowner, business manager, tenant, etc.) and leave self-addressed, stamped questionnaire letter to gather information regarding the properties within 500 feet of the source area. An example of the Property Owner Notification and Questionnaire are attached as Exhibit A. Information requested would include whether water wells, basements or sumps exist on each of the identified properties within 500 feet. If water wells are present, questions about known depth, construction and year installed are included. In addition, the survey questionnaire asks the off-site property owners/tenants if they have observed any unusual odors, primarily in a basement or sump area. Data acquired during the walking survey and questionnaire distribution is tabulated on the property summary table (see example attached as Exhibit B) and utilized to help confirm public water supply.

- Public Water Supply Confirmation - Carlson McCain will submit to the City Public Works Department the tabulated list of properties identified during the 500-feet walking survey to confirm the water supply status for the addresses listed. In addition, information about municipal line construction, depths, diameters, etc. and future development plans would be requested. An example submittal form and property listing table are attached for reference as Exhibit C.

- Well Records Search and Review/Drinking Water Supply Management Areas - Carlson McCain will utilize the MDH online MWI database and the Minnesota Geological Survey (MGS) to locate any wells within ½ mile of the Site to provide information on groundwater usage, aquifers and local geology. Copies of any wells logs identified within ½ mile of the Site will be included as an Appendix to the Investigation Report.

For the purpose of this scenario, the City confirmed that the Site and neighboring properties (commercial and residential) to the north, south and west of the Site are connected to municipal water and sanitary sewer services. The City also provided information about the depth, construction and diameters of Site and off-site municipal service and main lines. Information about municipal service and main lines are included on exhibit figures and discussed throughout the scenario work plan. The City Public Utility Supervisor also acknowledged that plans to install water and sanitary sewer main lines along the Service/Scenic Drive are in the works. The receptor survey also confirmed that six domestic water supply wells are present at single-family homes located to the northern and eastern directions from the Site. The wells associated with the two single-family homes located directly to the northwest and northeast of the Site's former tank basin are either sealed or not in operation and noted that they obtain municipal water from the City. However, the private water supply wells present at the lakeside single-family homes, located to the northeast, east and southeast of the Site, are active. Personal contact and survey letters from two of the four lakeside neighboring homes also acknowledged petroleum odors coming from their well water.

Subtask 2: Surface Water Receptor Survey

Initially, a scaled Site map of the surrounding area will be prepared utilizing both available internet sources (i.e. Google Earth® and/or USGS topographic maps). Using these topographic maps or internet sources, Carlson McCain will identify all surface water features within ¼-mile of the Site. Again, review of the Site maps would provide a basis for completing the walking survey. During the 500-foot walking survey, Carlson McCain would also document any other identifiable surface water features. In addition, potential pathway features such as ditches, drain tiles and storm sewers will be identified. Based on this information, Carlson McCain will evaluate the risk of potential impacts to nearby surface water features. Based on the given Site information and data obtained during initial background review and contact with the City Public Works Department, it is determined that a lake exists approximately 230 feet to the east of the Site. Storm water is collected municipally through roadway catch basins and is assumed to discharge to the lake (via culvert). During the walking survey, the discharge outfall is inspected for signs of contamination (unusual odors, stained soil and/or sheen on discharge water) and these observations are documented. For purposes of this scenario, the observations made during the walking survey do not provide evidence of contamination near the storm water sewer outfall.

Subtask 3: Vapor Receptor Survey

Carlson McCain will conduct a vapor receptor survey in accordance to MPCA Guidance Document 4-02. The vapor receptor survey will identify the location and type of nearby potential vapor receptors. Carlson McCain will prepare a Vapor Receptor Survey Map identifying all potential vapor receptors and vapor migration pathways within 500 feet of the Site. Potential receptors may include sanitary and storm sewer lines, buried cables and

nearby basements where petroleum vapors could accumulate. Carlson McCain will contact City officials for information regarding sanitary and sewer lines, buried utility lines and other subsurface features they have knowledge about. Occupants of nearby buildings and structures will be interviewed and asked if they have smelled petroleum odors. Lower explosive limit (LEL) meter readings will be collected first to check for possible explosive conditions and PID readings will be collected for potential petroleum vapor accumulation within these nearby building, structures and sanitary and storm sewers. Specifically, Carlson McCain will arrange with City public works officials to assess the identified utility lines (manholes and catch basins). We would coordinate with the local police department and/or public works department (and MnDOT District personnel, as necessary) to provide traffic control while working in or near the public roadways, if necessary. Our staff has working experience with MnDOT and railroads to provide safe working areas and signage.

During the vapor receptor survey, measurements and field notes would be collected noting air and potential fluid flow direction, potential sheens and odors, LEL and PID readings, samples (if necessary) and an evaluation of branch locations (with particular attention to locations with unusual readings and/or observations). Two eastern neighboring home owners have observed petroleum odors, but only in their drinking water. Carlson McCain will coordinate efforts to field screen and evaluate the well water at the eastern neighboring properties. In addition, any other floor or wall penetrations, cracks and areas of low air flow such as crawl spaces, sumps and building corners will be screened by utilizing an explosimeter and PID.

Ultimately, the vapor survey information will be used to assess if emergency conditions (i.e. elevated vapors) exist at and surrounding the Site. The assumptions made with this scenario indicated that petroleum vapors were not detected within the open storm water grates identified to the southeast and southwest of the Site. Nearby residents and commercial property owners also did not acknowledge petroleum odors within the basements of each off-site structure. Observations and PID readings were collected from the two eastern homes indicating petroleum odors from their well water. Relatively low petroleum odors and PID readings were identified when the water was turned on at each indoor and outdoor faucet.

Subtask 4: Contaminated Surface Soil Survey

Carlson McCain will complete a surface soil contamination survey as part of the initial soil boring advancement activities. Because the Site is predominantly paved (operation of the Site as a fuel service station and restaurant with parking), risks through this exposure pathway will be significantly reduced. Specific attention will be placed on the area of the aboveground fuel oil AST, fuel dispensers and other areas with no permanent cover (historical tank basin below the restaurant section of the building). For purposes of this evaluation pathway, the completed work results in surface soil contamination (between 0-2 feet bgs) directly below the active petroleum dispensers (present beneath 6-inch thick concrete pad). Visual observations of the concrete pad did not identify staining below or around the fuel oil AST. In addition, a soil boring advanced next to the AST did not identify impacts to the depth of exploration (25 feet bgs - at least five feet below the shallow groundwater table and deepest measurable Site contamination).

Subtask 5: Petroleum Release Notification

Effective August 1, 2008 tank owners are responsible for providing petroleum release information (i.e. release notification, results of the receptor survey and any corrective actions) to all property owners/tenants contacted as part of the receptor survey. On behalf of the current Site owner, Carlson McCain will use the letter template provided by MPCA Guidance Document 2-08 (*Release Notification Follow-up Template*) to facilitate communication to all contacted residents. The example letter template and its Site-specific narrative should satisfy the Petroleum Release Notification Bill (*Sec. 11. [116.482]*).

Task C: Subsurface Investigation

Carlson McCain will complete the first phase of soil, groundwater and vapor assessment with direct-push probe soil borings. Borings will be drilled in accordance with Minnesota Department of Health (MDH) Well Construction Code (Minnesota Rules 4725). As previously indicated, Range will provide drilling services as they are a licensed and registered well contractor in the State of Minnesota. In addition, they are a Veteran Owned company contracted with the MPCA. The soil and vapor borings will be advanced at locations throughout the Site and potentially off-site to determine the extent and magnitude of contamination.

At this point in the project, a Site map has been prepared and will be utilized to locate the appropriate number of soil and vapor borings. The Site map is included as Figure 1. Based on given Site characteristics and assumed conditions obtained during background review for the Site, up to 12 soil borings and 10 vapor borings are initially proposed and agreed upon with the MPCA to initially evaluate the degree and extent of Site and potential off-site soil, groundwater and vapor intrusion impacts in regards to the two identified release source areas. Furthermore, collecting up to six water samples from the previously identified private water supply wells located at single-family homes neighboring the Site is initially proposed. Coordination and scheduling for the push probe assessment and water well sampling would include Gopher State One Call notification (provide drilling contractor with Site information and map with proposed Site and off-site boring locations), contact with City officials regarding any required permits, and ordering of laboratory supplies. Soil and vapor boring locations may be marked during the initial Site visit and receptor

survey walkthrough. Prior to mobilizing to the Site, the current property owner would be notified of our schedule and determine preferred times to complete work in busy areas. Off-site single-family home owners/tenants would also be contacted for collecting water supply well samples and potential soil and vapor boring advancement. As mentioned above, the MPCA field work notification through e-Services will be completed once the field work is scheduled.

It should be noted that prior and subsequent to soil and vapor borings advanced at the Site for soil, groundwater and soil-gas sample collection, the push probe rig tools and sampling equipment will be decontaminated to minimize the potential for cross-contamination. During drilling, all soil sampling equipment (i.e. Macro cores, rods, etc.) will be thoroughly decontaminated between uses using a Liquinox® or dish soap with tap water wash, followed by a tap-water rinse.

Subsequent to soil and vapor boring advancement and sample collection, boreholes will be abandoned according to the current MDH regulations and guidelines. Immediately prior to abandonment, the depth to water (if applicable) and the total depth of the borehole will be measured and recorded to the nearest 0.1 foot. Each borehole will be sealed by backfilling the boring with bentonite in two-feet lifts, topped off with soil cuttings and marked (i.e. staked) for future reference. Each borehole will be measured with a walking wheel in regards to Site and off-site features for completion of a detailed and scaled Site map. Carlson McCain field staff and the drilling contractor will be responsible for restoring the Site and/or off-site properties back to their original condition, as reasonable. Boreholes advanced on asphalt or concrete surfaces will be capped with asphalt patch or sealed with concrete surfacing. Ruts on grass surfaces will be restored to the extent possible. All disposable sampling equipment will be properly bagged and collected and removed from the Site and/or off-site properties for disposal.

Subtask 1: Water Supply Well Sampling

Carlson McCain will collect water samples from the off-site water supply wells identified during initial Site visit and receptor survey activities. The samples will be collected from either directly from the well or before any treatment or filtration system. Prior to sample collection, the water will be allowed to run for at least 10 minutes. The water samples, five total (well to the northwest is confirmed sealed), will be submitted to Pace for analysis of gasoline range organics (GRO), diesel range organics (DRO), volatile organic compounds (VOCs) and lead. Lead analysis may be held with the laboratory until subsurface investigation results confirm the presence of lead or not within impacted soil and groundwater. The purpose of sampling the off-site water supply wells is to determine if petroleum impacts are present. Because two eastern neighboring property owners are smelling petroleum in their well water and an impacted groundwater plume may be migrating to the east, Carlson McCain suspects that the respective water supply wells are impacted by the plume. PID readings will be collected while the water is running during sample collection at each off-site single-family home.

Subtask 2: Soil and Vapor Boring Oversight and Sampling

Out of the 12 proposed soil borings, a total of 11 will be advanced to provide the best possible Site and off-site coverage to address the vertical and horizontal extent of soil and groundwater contamination. Two soil borings will be advanced in or immediately adjacent to the likely release source areas (historical tank basin/dispensers and active dispenser islands). Other soil borings will be placed to sufficiently define the horizontal extent of soil and potential groundwater contamination. Soil borings will be advanced to a minimum of five feet below the water table, 10 feet below the deepest contamination or until significant refusal is encountered. One soil boring will be advanced 20 feet below deepest Site contamination to evaluate Site stratigraphy. In addition, soil borings will be advanced directly next to the fuel oil AST and current UST basin to assess a potential release and provide radial definition from the known release source areas. During soil boring advancement at the Site, the impacted groundwater plume was not defined to the east. A total of three additional off-site soil borings were advanced adjacent to the two eastern adjoining homes and near the shoreline of the Lake. Soil boring locations are visually depicted on the attached Figure 1. Soil boring advancement methods, locations and sampling will follow procedures outlined in MPCA PRP Guidance Document 4-01 (*Soil and Groundwater Assessments Performed During Site Investigations).*

All soil borings will be continuously logged and screened for organic vapors. To determine if contamination is present in soil, visual and olfactory observations will be noted and vapor monitoring will be conducted using a PID equipped with a 10.6 eV lamp. In addition, soil samples will be manually and visually classified by a Carlson McCain field technician according to methods outlined in the American Society for Testing and Materials (ASTM) D2488 and entered onto a field boring log. Soil descriptions will include depth, recovery, consistency, color (using a Munsell Color Chart), physical description/classification of the material, angularity and grading (coarse soils), cohesiveness and plasticity (fine soils), moisture content and depositional environment. Data collected during soil boring advancement will be utilized to create Site geologic cross-sections. Organic vapors will be monitored in soils using bag headspace methods, as outlined in MPCA Guidance Document 4-04 (*Soil Sample Collection and Analysis Procedures*). The PID will be calibrated according to factory specifications, using the benzene equivalent of an isobutylene standard prior to the start of field work, each day or between relatively long work stoppages. Soil samples will be collected from each sampling interval and placed into sealed polyethylene baggies. Each sample will be shaken and placed in a warm environment to allow organic vapors to develop. After letting each sample stand by for at least 10 minutes, the PID probe will be inserted into the plastic bag. The highest detected PID reading for each sample within the first five seconds will be recorded on the boring log.

Vapor monitoring may also be conducted to ensure atmospheric conditions are sufficient to provide a safe working environment.

Select soil samples will be collected from each push probe boring and submitted under Chain of Custody (COC) for laboratory analysis. Soil samples will generally be collected from either the soil interval indicating the highest PID readings, above the water table and/or from the bottom of each boring. Soil samples would be collected from the bottom of the respective boring that did not indicate the presence of soil contamination or the presence of groundwater during field screening activities. All collected soil samples will be preserved, as required, and placed into clean, laboratory supplied sample containers. Each sample container will be uniquely numbered and labeled using indelible ink. The samples will be placed on ice and maintained at a temperature of 4° C. A chain-of-custody will be initiated and kept with the samples until custody is relinquished to the laboratory.

Soil samples will be analyzed for specific analytical parameters based on the contaminants of concern as outlined in MPCA Guidance Document 4-04. Because groundwater is encountered, soil samples will be analyzed for DRO, GRO, petroleum volatile organic compounds (PVOCs), and lead. Samples will be submitted to Pace, a MPCA contract laboratory certified in the State of Minnesota for chemical analysis. The analytical methods for each parameter analyzed at the Site are summarized below:

- PVOCs – Method EPA 8260
- GRO - Wisconsin DNR Modified GRO Method
- DRO - Wisconsin DNR Modified DRO Method
- Lead – Using EPA Method 6010/200.7

For quality assurance, one methanol blank will also be analyzed per sampling event for samples being analyzed for GRO/PVOCs. One temperature blank will accompany the samples per each sampling cooler.

A minimum of three grain size samples would be collected to classify sediments and estimate the hydraulic conductivity for transmissivity calculations. Typically, grain size samples would be collected from the saturated zone or from different horizons that appear to have a high permeability. Grain size samples would be analyzed using the ASTM Method D422 "*Standard Test Method of Particle Size Analysis of Soils*". The locations and depths of the grain size samples would be noted, along with the method of measurement (e.g. Hazen or Krumbein and Monk methods). Grain size samples will be submitted to a MPCA contracted laboratory, Interpoll Laboratories, Inc. (Interpoll), for analysis. Aquifer transmissivity would be calculated using the average hydraulic conductivity and aquifer thickness. For this hypothetical investigation, grain size will be analyzed without hydrometer due to sand and gravel units encountered. The transmissivity is estimated at greater than 50 ft^2/day and is considered an aquifer for the purpose of the MPCA PRP.

A groundwater sample will be collected from each advanced soil boring, if encountered in sufficient quantities to facilitate sample collection for chemical analysis. Temporary wells will be installed within the soil borings by the licensed drilling contractor which will consist of a temporary number 10-slot (0.01 inch), 1-inch diameter by 5-foot long polyvinyl chloride (PVC) screen completed to the surface using flush threaded PVC riser. Groundwater samples will be collected by lowering clean, dedicated polyethylene tubing down the temporary well and pumping groundwater using a check valve or peristaltic pump until it is relatively sediment free and directly into sampling containers. Waste water generated from purging is dispersed from the sampling location. All disposable supplies (i.e. gloves, paper towels, etc.) will be disposed of as solid waste. Sample handling procedures will be conducted as described in the section above and in accordance with MPCA PRP Guidance Document 4-05 (*Ground Water Sample Collection and Analysis Procedures*). Samples will be submitted to Pace, a certified laboratory in the State of Minnesota and contracted laboratory with the MPCA, for chemical analysis. The analytical methods for each parameter analyzed for the Site investigation are summarized below:

- GRO – Wisconsin DNR Modified GRO
- DRO – Wisconsin DNR Modified DRO Method
- VOCs – EPA Method 8260
- Lead – Using EPA Method 6010/200.7

Trip blanks, field blanks and duplicate samples will be collected for quality assurance. One trip blank and one temperature blank will accompany the samples per each sampling event/cooler. In addition, at least one duplicate groundwater sample will be collected to evaluate variability in analytical methods. Duplicate samples will be labeled in such a way as to avoid alerting State certified laboratories that the sample is a duplicate. Duplicate samples will be collected from temporary wells that have either moderate or high levels of contamination. The duplicate sample will be sampled for all parameters as the original samples. The trip blank will be analyzed for GRO and VOCs. A spreadsheet with the Proposed Sample Analysis Breakdown is included in Exhibit D. The Proposed Sample Analysis Breakdown spreadsheet outlines the analysis for each sample matrix, the number of proposed samples for each line item, and sample price.

As part of the initial Site investigation, Carlson McCain will conduct a vapor intrusion assessment in accordance with MPCA PRP Guidance Document 4-01a (*Vapor Intrusion Assessments Performed during Site Investigations*).

The vapor intrusion assessment will evaluate the potential risk of petroleum vapors migrating and accumulating toward and within potential receptors. Recent receptor survey activities identified that the Site building, neighboring commercial and residential property structures, and buried utility corridors, located within 100 feet of the Site petroleum release source areas, are considered potential receptors. Several neighboring properties acknowledged that they have basements and sumps.

In this scenario, the total proposed amount of 10 soil vapor borings were advanced for the collection of soil gas samples necessary to evaluate Site and off-site vapor intrusion impacts towards the Site building, nearby buried utility lines, and neighboring property structures. The soil gas samples will be obtained by advancing direct push borings to depths of eight feet bgs throughout the Site and towards the nearby buildings with basements and setting the drive point with an expendable screen and threaded steel rods at eight feet bgs. Two "worst-case" vapor borings will be advanced through the release source areas to evaluate the potential magnitude of soil-gas accumulating below the Site slab-on-grade building. Polyethylene tubing will then be inserted into the rods and at least two volumes of air shall be removed from the sampling point and tubing using a syringe. The soil vapor samples will be collected by attaching the top end of the tubing to a Summa® canister, which is instrumented with a vacuum gauge (EZ Can assembly). The initial vacuum gauge reading will be recorded and subsequent readings will be checked to identify when the canister is full. Subsequent to sample collection, a PID reading will be collected from the sample tubing and recorded for laboratory confirmation. Vapor boring locations are shown on Figure 1, attached.

Collected soil gas samples will be submitted to Pace and analyzed using the EPA TO-15 method for VOC compounds in the Minnesota Soil Gas List (62 compounds). To minimize cross-contamination of samples, clean disposable gloves and sampling canisters will be used. Summa® canisters received from the lab will be tracked and tagged to make sure clean canisters are used. Summa® canisters will be carefully labeled with the name of the sampler, date, time, initial/final vacuum gauge readings and PID readings from sample tubing. This information will be recorded on a chain-of-custody form. Samples will be placed in a box with bubble wrap and delivered to a certified laboratory in accordance with chain-of-custody procedures. The amount, analysis and sample price of proposed soil gas analysis and EZ Canister Assembly are included in the Proposed Sample Analysis Breakdown (Exhibit D).

Subtask 3: Sample Shipping and Transportation

Preparation and review of the laboratory COCs for all collected soil, groundwater, well water and soil gas samples will be conducted. In addition, this task includes making sure sampling containers are labeled correctly and that the delivery coolers are iced with temperature and laboratory trip blanks. Soil gas sample canisters will be placed in boxes with bubble wrap or fitted shipping containment provided by the laboratory. The laboratories will be notified of delivery procedures and proper COC relinquishment will be conducted.

Subtask 4: MPCA Status Update

Carlson McCain will correspond with the MPCA Project Leader summarizing the results of the LSI. Assumed from the initial investigation, the following information would be relayed/discussed with the MPCA as necessary:

- Groundwater appears to flow to the east as indicated by impacted plume migration.
- The shallow groundwater unit, encountered in Site and off-site soil borings at depths between 12 and 16 feet bgs, is considered an aquifer per the MPCA PRP Program.
- Impacted soil was identified directly below the concrete pad surrounding the active fuel dispensers in soil boring GP-2.
- Soil contamination identified in soil borings GP-1 and GP-2, advanced within and/or adjacent to the former tank basin location and active fuel dispensers (release source areas), are in contact with the shallow groundwater unit. Soil impacts appeared vertically defined by the shallow groundwater unit, as PID readings or petroleum odors were no longer identified below 20 feet bgs.
- Soil and groundwater samples collected from the soil boring advanced next to the fuel oil AST resulted in no contaminant concentrations. Surface staining was also not observed on the curbed concrete pad below the AST.
- Soil, groundwater and soil gas samples collected from soil and vapor borings advanced to the north, west and south of the Site release source areas did not identify the presence of petroleum contamination or evidence of elevated vapor intrusion impacts.
- Laboratory analysis of groundwater samples collected from Site soil borings GP-1, GP-2 and GP-6 (Figure 1) identified elevated DRO and GRO concentrations with several VOCs exceeding MDH Health Risk Limits (HRLs).
- Off-site soil borings were advanced toward the eastern neighboring homes subsequent to impacts identified in Site soil boring GP-6. Laboratory analysis of collected groundwater samples identified GRO, DRO and several VOCs present at concentrations just above MDH HRLs, indicating that the plume

migrated off-site and toward private water supply wells.

- The impacted groundwater plume appears defined with an additional off-site soil boring (GP-11) advanced to the east of the neighboring homes, near the western Lake shoreline.
- A petroleum sheen or Light non-aqueous Phase Liquid (LNAPL) were not observed in the groundwater samples collected in each advanced Site and off-site soil boring.
- Laboratory analysis of the off-site water supply wells located to the northeast and southeast of the Site did not identify constituents present at concentrations above laboratory detection limits.
- Laboratory analysis of the two off-site water supply wells located to the east of the Site indicated several petroleum derived VOCs detected just above MDH HRLs and low DRO and GRO concentrations.
- The soil vapor samples (VP-1 and VP-2) collected from within the release source areas at depths of eight feet bgs detected several petroleum concentrations which exceed MPCA Commercial Intrusion Screening Values (ISVs) by 33X their concentration.
- Soil vapor sample VP-6 (8'), collected from the vapor boring advanced along the Site's eastern boundary, identified several VOC concentrations above 33X Residential ISVs, but below 33X Commercial ISVs.
- The soil gas samples collected from the off-site vapor borings (VP-9 and VP-10), advanced directly to the west of the eastern neighboring homes, did not identify VOC concentrations above 33X Residential ISVs.
- The storm sewer drains easterly to the nearby Lake.
- Petroleum vapors and elevated LEL readings were not detected in "open" storm sewer grates or throughout the inside of the Site building.
- Natural gas, municipal water and sanitary sewer service line depths were acknowledged by the City Public Works Supervisor and estimated between 6 and 12 feet above the shallow groundwater unit encountered throughout the Site.
- The water and sanitary sewer service lines are constructed of material (copper and ductile iron), known to withstand direct petroleum impacts.
- Radial soil and vapor borings provide evidence that petroleum impacts are not migrating toward nearby utility mains.
- The City Public Works Supervisor also confirmed that the four lakeside single-family homes are the only properties in the area not connected to municipal services. The City confirmed that plans to run a water main line along the Service/Scenic Drive, located to the east of the Site, are in the works to potentially provide the lakeside homes municipal water and sanitary sewer services.

Objective 1 Timeline:

Carlson McCain estimates to complete the above identified tasks associated with the initial LSI objective within four to five weeks due to off-site access and scheduling. This also allows at least 6-7 days for soil, groundwater and soil vapor samples to be analyzed by the lab and Carlson McCain to review the analytical data assess the situation.

Objective 1 Deliverables:

Based upon the results of the LSI, an Emergency Response to reduce or eliminate the intake or direct contact of petroleum impacted water from the two off-site water supply wells is necessary. In addition, a full Remedial Investigation (RI) is required at the Site. A deliverable, such as the Investigation Report Form (MPCA Guidance Document 4-06) will be completed subsequent to RI activities. The following data supports the Emergency Response and RI recommendation/requirement:

- Two neighboring private water supply wells appear directly impacted from the groundwater plume.
- Both eastern property owners acknowledged that they do not drink the water from the Site water wells due to the odor and taste. They currently drink bottled water or have a water delivery service (water cooler). However, they do shower/bathe with the well water.
- The calculated transmissivity for the hydrologic unit is greater than 50 ft^2/day based on grain size distribution samples collected during the LSI;
- Groundwater contaminant concentrations from borings advanced within or adjacent to the the historical tank basin and active dispenser pumps resulted in elevated DRO and GRO concentrations with several VOCs exceeding respective MDH HRLs;

- A vapor intrusion sample collected within the former tank basin (source area) and near the Site building resulted in concentration detections of various TO-15 compounds (petroleum related) that exceed MPCA Commercial ISVs by 33 times their concentration;
- Soil and groundwater samples collected from borings advanced to the east of the release source areas (historical tank basin and active fuel dispensers) provide evidence of moderate petroleum contamination and groundwater plume dispersion toward the eastern neighboring single-family homes and the Lake.
- Because impacts were discovered around the active dispenser pump islands, we recommend that the property owner contract with a company to conduct leak tests on the tank system to determine what is failing and have it repaired to prevent current and future product loss.
- The private well that is not in-use at the northeastern neighboring home should also be sealed through the MDH.

Objective 2: Emergency Response/Remedial Investigation (RI)

Based on the initial LSI data, knowledge of the PRP Guidance Documents, recent MPCA Vapor Intrusion Best Management Practices (BMPs) and correspondence with the MPCA assigned Project Leader, Carlson McCain intends to complete a RI as an additional step of environmental investigation for this Site. In addition, immediate actions to limit or eliminate direct contact and potential ingestion of impacted water identified from private water supply wells at the eastern neighboring residential properties should be conducted. Carlson McCain recommends the installation of five Site and off-site monitoring wells to monitor contamination plume characteristics, calculate groundwater flow rate and direction, and define/confirm the extent of the down-gradient impacted groundwater plume. Once wells are installed, Carlson McCain will conduct two quarterly groundwater sampling events from each well to assess groundwater contamination magnitude and extent. Also associated with the RI, Carlson McCain is recommending an additional soil vapor assessment, which includes vapor pin installations through the Site building's floor for sub-slab soil-gas sample collection. Carlson McCain will provide the MPCA with the Investigation Report Form (MPCA Guidance Document 4-06) once the field work is completed, documenting all initial LSI, RI and ER activities.

Subsequent to discussions with the MPCA Project Leader, Carlson McCain will prepare a cost estimate for the recommended ER and RI scope of work. This cost estimate would include solicitation of bids from well contractors versed in carbon filtration systems and monitoring well installation for the proposed scope of services. Again, Carlson McCain normally obtains multiple bids as a means of cost comparison and to subcontract the most cost effective, qualified service provider. Range was ultimately selected to install the five relatively shallow monitoring wells. In addition, Stevens Drilling & Environmental Services, Inc. (SDE) provided a bid to install carbon filtration systems at the eastern neighboring properties wells. SDE is fully licensed contractor to conduct this work. Pace is also selected for their lab services and electronic deliverables. Costs for these services have been calculated based on Pace's current state contract rates and summarized on the Proposed Sample Analysis Breakdown spreadsheet, included in Exhibit D.

To accomplish the ER and RI scope of work, Carlson McCain will assess the risks to the identified receptors potentially impacted by petroleum contamination for future activities. Future activities may include MPCA Site file closure, continued groundwater monitoring or selecting corrective action.

Task A: Project Administration

Carlson McCain will conduct administration activities to effectively conduct the Emergency Response and Remedial Investigation Tasks in a safe, an approved, cost effective and efficient manner. These subtasks, similar to administration tasks previously documented during initial LSI activities, are outlined below.

Subtask 1: Update Health & Safety Plan

The previously prepared H&S plan will be updated to include the work included as part of the proposed RI. Site information has not changed since initial LSI activities.

Subtask 2: MPCA Status Updates

Carlson McCain will correspond with the MPCA Project Leader summarizing the results and status updates of the ER and throughout RI activities.

Subtask 3: Site & Off-site Property Owner Status Updates

Contact with involved property owners will be necessary. Carlson McCain would contact the two off-site home owners about the carbon filtration system installed with their private water supply wells and subsequent sampling results confirming that petroleum concentrations have significantly lowered or no longer present above laboratory detection limits. The Site owner will also be updated about the additional work, sub-slab soil gas sampling in the building, and best locations to install vapor sampling points.

Subtask 4: Non-specific Administration

Subsequent to receiving the additional work order, MPCA State Contract Order Forms (SCOFs) will be completed and signed by Carlson McCain and the selected State subcontractors. The SCOF form is used by the MPCA Contractor when hiring a State Subcontractor. Non-specific administration activities may also include budget tracking, project status, subcontractor work review, updates with property owners, assisting field staff, data review, etc.

Subtask 5: Field Work Scheduling

Carlson McCain will initially schedule off-site water supply well carbon filtration system installation, monitoring well installation, and sub-slab vapor pin installation with Range, the Site owner, and off-site home owners/tenants. Carlson McCain's main goal would be to conduct ER and RI work in conjunction with each other, limiting costs and mobilizations to the Site. Carlson McCain will try to accommodate all aspects of involved parties schedule, availability and Site operation interference. Once the schedule is set with all involved parties, Carlson McCain would contact the MPCA prior to field work. Carlson McCain would utilize the MPCA e-Services online database to login and notify when field work is proposed to commence. Scheduling with the Site and off-site property owners would also be conducted for quarterly groundwater sampling (two events), seasonal sub-slab vapor sampling and subsequent water supply well sampling.

As mentioned above during initial LSI work plan, Carlson McCain prepares field supplies, sampling kits and checks equipment prior to conducting field work. Also, Carlson McCain orders laboratory supplies with the contracted laboratory and confirms requested sampling containers are included or are not damaged.

Subtask 6: Utility Clearance/Well Permitting

Carlson McCain will assist the selected drilling contractor with utility locate clearance information at the Site and eastern neighboring property. Utility locates will be conducted similar to LSI activities. The well driller is legally obligated to contact the Gopher State One-call for each property conducting subsurface work on. In addition, Carlson McCain will assist the driller in obtaining well permits. Carlson McCain assumes that the MPCA is the well owner and permit fees would be waived. Well and property owner contacts will be provided to the drilling contractor to complete the monitoring well permits.

Subtask 7: Sample Shipping and Transportation

Preparation and review of the laboratory COCs for all collected soil, quarterly groundwater, well water and seasonal sub-slab soil gas samples will be conducted. In addition, this task includes making sure sampling containers are labeled correctly and that the delivery coolers are iced with temperature and laboratory trip blanks. Soil gas sample canisters will be placed in boxes with bubble wrap or fitted shipping containment provided by the laboratory. The laboratories will be notified of delivery procedures and proper COC relinquishment will be conducted.

Task B: Water Supply Well Carbon Filtration System Installation (ER)

Previous LSI activities confirmed that the off-site private water supply wells associated with the two lakeside single-family homes, located directly to the east of the Site, are directly impacted from the shallow groundwater plume. Laboratory analysis of water samples collected from each off-site well identified several VOCs present at concentrations above MDH HRLs. It appears that petroleum impacted groundwater is in direct contact with the well casing and acting as a conduit for contamination to enter the water supply stream. The impacted wells are considered High Priority and Emergency per the MPCA PRP.

Each property owner acknowledged that they do not drink the well water. However, they use well water to bathe, wash and water the lawn. Actions to eliminate or reduce direct dermal contact and potential ingestion would be completed immediately. Installing carbon filtration systems to the private water supply well service lines would be the quickest, temporary (interim) technology to eliminate the human health risk until municipal service can be supplied to each home.

Subtask 1: Filtration System Installation Oversight

Carlson McCain will be on-site to meet with the property owners, discuss the carbon filtration system, and oversee installation. SDE proposed costs to install the filtration system, which include 12X40 mesh carbon filters and 1354 in/out filter tanks. Expediated shipping may also be included based on the necessary response to install the systems. SDE will plumb the carbon system to the service lines coming into the basements of each off-site home. Accessibility next to water heaters and/or softeners located in the utility rooms of each home is available. Carbon filtration systems have eliminated petroleum impacts in the past for similar situations and magnitude of contamination. The systems installed at the two off-site wells are calculated to provide clean water for up to three years. At this time, either replace the filter or another corrective action would be in place at each

off-site home (i.e. install new double-cased water supply wells or connect to municipal water). Scheduling, updates, non-specific administration and sample shipping associated with this subtask are included above in Task A.

Subtask 2: Water Supply Well Sampling

Carlson McCain will collect water samples from the impacted off-site water supply wells subsequent to carbon filtration system installation. Sampling would be conducted during the same mobilization to the Site for monitoring well installation. The samples will be collected from a sampling point past the treatment or filtration system. Prior to sample collection, the water will be allowed to run for at least 10 minutes. A total of two water samples will be submitted to Pace for analysis of GRO, DRO and VOCs. The purpose of sampling the off-site water supply wells is to confirm that the carbon filtration system is eliminating petroleum impacts for current and temporary well use.

Task C: Monitoring well installation

Carlson McCain will complete RI activities to assess groundwater plume characteristics by installing monitoring wells. Monitoring wells will be drilled in accordance with MDH Well Construction Code (Minnesota Rules 4725). Drilling services will be provided by Range who is a licensed and registered well contractor in the State of Minnesota, contracted with the MPCA, a veteran owned company and has prior knowledge of the Site. The monitoring wells will be advanced at locations throughout the Site and off-site (down-gradient direction from the release source areas) to determine the magnitude of contamination, indications of stabilization and/or natural attenuation, hydraulic gradient, flow direction and plume characteristics.

Carlson McCain will proceed with RI activities to include the installation of five monitoring wells at proposed locations shown on Figure 1. The hydrogeologic unit is considered an aquifer and data indicate that it has become impacted by two releases of petroleum from the Site, diesel fuel and gasoline related. One of the five monitoring wells will be advanced off-site, to assess the down-gradient extent and stabilization of the impacted groundwater plume. The Site monitoring wells will be installed within the source area (between the historical tank basin and directly down-gradient from the active dispenser pump islands; side-gradient directions (north and south Site boundaries) of the plume and up-gradient direction from the release source areas (west of the active fuel dispensers). Prior to mobilizing to the Site, the current property owner and the off-site property owner would be notified of our schedule and determine preferred times to complete work in busy areas as outlined above (Task A). In addition, MPCA field work notification will be completed once the field work is scheduled.

It should be noted that prior and subsequent to monitoring well installation activities, the drill rig tools, sampling split spoons and hollow stem augers (HSA) will be decontaminated to minimize the potential for cross-contamination. Again, Equipment will be thoroughly decontaminated using Liquinox® or dish soap and pressurized wash. HSA will be steamed cleaned between monitoring well boring advancement by the drilling contractor.

Subtask 1: Monitoring Well Installation Oversight

Carlson McCain will oversee the advancement and installation of five Site and off-site monitoring wells. The HSA borings will be advanced to depths of 20 feet bgs for the completion as monitoring wells. Four flush-grade monitoring wells will be installed at the Site and one aboveground monitoring well installed on the eastern neighboring property (down-gradient between the plume extent and Lake). The proposed monitoring well locations are shown on Figure 1. The two-inch inner diameter (ID) HSA boreholes will be fitted with a 10-foot factory slotted (Number 10-slot), PVC well screens, allowing the screened interval to straddle the water table. Well screens will be connected to flush threaded, Schedule 40 PVC riser pipe to the surface. Carlson McCain will complete a field boring log and construction diagram for each installed monitoring well. Once installed and allowing the grout to set for each well, the drilling contractor will develop each monitoring well to ensure adequate hydraulic connections with the aquifer and to remove any drilling fluids and sediments.

At this time, it appears that a deep monitoring well is not necessary at the Site. The LSI soil boring advanced within the source area appeared to vertically define soil contamination within the shallow groundwater unit.

Because the LSI appeared to define the vertical and horizontal extent of soil contamination and no other release source areas were identified, soil samples will be collected from the HSA borings at five-foot intervals from two-feet split-spoon sampling cores. Collected soil samples will be classified, observed for petroleum impacts and screened for organic vapors with a PID. Field screening and sample collection information will be included on the boring log and well construction diagram. One soil sample from each boring will be submitted to Pace for laboratory analysis of DRO, GRO and PVOCs. Please note that lead impacts were not identified during initial LSI sampling and analysis is no longer requested.

Subtask 2: Monitoring Well Surveying

Carlson McCain will survey the ground surface and top of riser pipe for each of the monitoring wells and tie to the soil borings elevations previously advanced at the Site. A bench mark (typically a permanent Site feature, county coordinates or a nearby MnDOT control point if available) will be surveyed in to be used for any further boring

activities at the site. Monitoring wells will be surveyed to the 0.1 of an inch from the ground surface and the top of casing (TOC).

Subtask 3: Quarterly Groundwater Sampling

Prior to sampling the monitoring wells, they will be purged a minimum of three well volumes. Clean, new disposable high-density polyethylene tubing (HDPE) and a peristaltic pump will be used to purge and collect groundwater from each well. If the contaminant concentrations are known, the monitoring well network would be sampled from the least contaminated well and would proceed to increasingly contaminated wells. If the contaminant concentrations are unknown, Carlson McCain will begin with the wells in the up-gradient and side-gradient locations, which would be the least likely to be contaminated.

Immediately prior to monitoring well purging and sample collection, water level measures will be collected using an electronic water level indicator. The water level measurements would be used to prepare water table maps for inclusion into the RI report. In addition, field parameters (temperature, pH, dissolved oxygen, specific conductance and turbidity) will be collected using a flow through cell water quality meter. Monitoring wells will be sampled only after stable water quality readings are achieved. Groundwater elevations and samples will be collected from each monitoring well in accordance with MPCA Guidance Document 4-05 (*Groundwater Sample Collection and Analysis Procedures*).

Groundwater samples collected from each monitoring well during the quarterly sampling events will be submitted to a Minnesota State certified laboratory (Pace). Based on the results of the LSI and following MPCA Guidance Documents, groundwater samples will be collected for analysis of GRO, DRO and VOCs. Trip blanks, field blanks and duplicate samples will be collected for quality assurance. One trip blank and one temperature blank will accompany the samples per each sampling event/cooler. One field blank will be collected if using re-usable sampling equipment. In addition, at least one duplicate groundwater sample will be collected during each sampling event to evaluate variability in analytical methods. Duplicate samples will be labeled in such as a way as to avoid alerting the laboratory that the sample is a duplicate. A duplicate sample will be collected from the monitoring well that has either moderate or high levels of contamination. The duplicate samples will be sampled for all parameters as the original samples. The trip blanks will be analyzed for GRO and VOCs. A spreadsheet with the Proposed Sample Analysis Breakdown for ER and RI sampling activities included in Exhibit D.

Subsequent to receiving laboratory analytical reports and Pace's EDD, Carlson McCain would upload field and groundwater sampling data into MPCA's Environmental Quality Information System (EQuIS) as requested.

Subtask 4: Travel Time

Costs for a field technician from our Plymouth office (nearest to the Site) would be proposed for travel between the Site located in Western, Minnesota. Travel time is necessary for staff to be on-Site during Emergency Response activities, additional private water supply well sampling, Site building sub-slab vapor sampling, monitoring well installation and quarterly (two rounds) groundwater sampling. Carlson McCain would be able to conduct minimal trips to the Site by conducting monitoring well installation oversight, development, surveying and sub-slab vapor pin installation with the non-heating sampling event in two days (see section below). In addition, a trip to conduct the sub-slab heating season sampling event, a quarterly groundwater sampling event and additional water supply well samples subsequent to filtration system installation would be conducted in one day. Carlson McCain estimates that a total of five trips to the Site would be necessary to complete proposed ER and RI activities. Travel time and mileage to conduct work associated with Tasks B, C, and D are included with this subtask.

Task D: Sub-Slab Vapor Sampling

The initial vapor intrusion assessment identified constituent concentrations exceeding 33X Commercial ISVs from soil gas samples collected from vapor borings advanced alongside the Site building. Therefore, two seasonal (non-heating and heating seasons) sub-slab soil gas sampling events are proposed to determine whether or not soil gas is accumulating below the Site building. Sub-slab vapor sampling would follow MPCA Vapor Intrusion BMPs. Per MPCA BMPs, the Site building size will determine the number of installed sub-slab vapor points. Prior to mobilizing to the Site, the current property owner would be notified of our schedule and determine preferred times to complete work in busy areas as outlined above (Task A). In addition, MPCA field work notification will be completed once the field work is scheduled. Travel, non-specific administration, Site owner updates, and sample shipping subtasks would also be conducted as part of Task A.

Subtask 1: Sub-slab Vapor Pin Installation & Sampling

Carlson McCain proposes up to five sub-slab vapor points to be installed throughout the Site building to assess potential vapor intrusion migration and accumulation below the Site buildings foundation. Carlson McCain will work with the Site owner for "best placement" of each sampling points. Vapor pins will be installed for the two seasonal (non-heating and heating seasons) sampling events required for the Site. Sampling methods used are

consistent with U.S. EPA protocols and procedures for collecting sub-slab samples using Summa® canister sampling and analysis methods included in MPCA PRP Guidance Document 4-01a and Vapor Intrusion Technical Support Document. Sampling is also conducted in accordance with the most recent MPCA BMP's for Vapor Investigation and Building Mitigation Decisions.

Sub-slab soil vapor samples will be collected by drilling small diameter holes at select locations through the concrete floor with a rotary hammer drill to provide access into the sub-surface soil. A stainless-steel Vapor Pin® will be installed within the drill hole as a semi-permanent sub-slab vapor sampling location (two seasonal sampling events are necessary). Prior to collecting each soil gas sample, a sample train (purge manifold assembly) consisting of three valves is installed to connect the vapor port to the sample canister. The tubing, canister, and vapor pin are leak tested by installing a water dam around the vapor pin and leak tightness of the system was verified by leaving the water dam in-place through the duration of the sample collection. In addition, the sampling train is also verified for air tightness by performing a shut-in test. Before collecting the sample, a syringe is then used to purge two volumes of air from the sample train and tubing. Once purged, the canister fitted with a flow controller (which, in turn, is connected to a Summa® canister), is opened to collect the sub-slab soil gas sample at a flow rate of 200 milliliters per minute. Upon completion, the tubing is then connected to a PID to obtain a field measurement for the presence of organic vapors. The tubing is then removed and the Vapor Pin® covered with a protective cap. In addition, a stainless steel protective cover may be installed at the slab surface to prevent damage to the pin in high traffic areas.

Each canister will be labeled with the name of the sampler, date, time, initial/final vacuum gauge readings and PID readings from the sample tubing. This information is also recorded on the laboratory COC form for the canisters. Each sub-slab soil gas samples will be submitted to Pace for TO-15 analysis. Costs are included with the Proposed Sample Analysis Breakdown spreadsheet included in Exhibit D. The canisters are then placed in a box, fitted with bubble wrap or laboratory canister foam containers, and delivered to the laboratory for analysis. Laboratory batch-certified clean Summa canisters and gauges, and new disposable tubing, fittings and disposable gloves are used at each vapor sampling location to minimize the potential for cross-contamination.

Task E: Remedial Investigation (RI) Report

Following the completion of the second round of groundwater monitoring data and seasonal sub-slab vapor sampling events from the Site building, Carlson McCain will complete the MPCA Investigation Report Form (Guidance Document 4-06). Carlson McCain typically initiates the report once data are initially collected and reviewed. Subsequent data and information is added to the document as it is collected and reviewed. The comprehensive Investigation Report Form would include all required information including: general Site and contact information; the Release Information Worksheet (Guidance Document 2-05); answers related to the emergency and high priority status of the Site and what actions were taken; Site and release information; details regarding the extent and magnitude of soil and groundwater contamination; initial LSI soil and vapor boring information; data and calculations for aquifer characteristics and the groundwater contamination assessment; data related to the monitoring well installation and extent and magnitude of the groundwater contamination plume; an evaluation of natural attenuation (if required by the MPCA); information related to the well receptor survey and assessment; data related to the surface water risk assessment; vapor risk assessment/survey data and evaluation; vapor intrusion screening assessment data; a Site Conceptional Model; and recommendations. Supporting attachments to the report include appropriate Site figures (i.e. plan view, geologic cross sections, receptor maps, potentiometric surface maps, groundwater plume extent and flow maps; data tables; concentrations and water level graphs; boring logs and well construction forms; and appendices including such information as laboratory analytical reports, field forms, methodologies and procedures, soil boring logs, water well logs from the area; receptor survey information; and grain size and transmissivity calculations.

Carlson McCain's recommendations, based upon the assumptions throughout this scenario, would be as follows:

- The groundwater contamination plume appears defined by relatively low DRO and GRO concentrations identified in groundwater samples detected in the down-gradient monitoring well (MW-4), advanced off-site toward the nearby Lake. Quarterly groundwater samples indicated concentration below the MPCA's threshold of 1,000 micrograms per liter (µg/L) for requesting additional investigation. However, concentrations within the release source area did not indicate stabilization, as it appears the "new" release associated with the active fuel dispensers have elevated the magnitude of the groundwater plume. Carlson McCain recommends at least one year of quarterly groundwater sampling of the five monitoring wells. Carlson McCain proposes that quarterly groundwater samples collected from up-gradient and side-gradient wells (MW-2, MW-3 and MW-5) be analyzed for DRO, GRO and PVOCs, as laboratory analysis from the two sampling events have indicated concentrations below laboratory reporting limits. Full VOCs should be continued to be analyzed for monitoring wells MW-1 and MW-4. Results would be included on the MPCA Monitoring Report (MPCA Guidance Document 4-08).
- The heating season sampling event identified several VOC concentrations detected in sub-slab soil gas samples collected from vapor pin locations SSV-1 through SSV-3 (Figure 1) exceeding 33X Commercial ISVs. Carlson McCain recommends a Corrective Action Design (CAD) to design and install a vapor mitigation system for the Site building. Indoor air and continued seasonal sub-slab soil gas sampling would

continue through post mitigation diagnostic and confirmation sampling outlined with the MPCA's Vapor Intrusion BMPs.

- Laboratory analysis of water well samples collected from the two off-site homes with recently installed filtration systems no longer identify petroleum constituents present at concentrations above laboratory detection limits. It appears that the carbon filtration systems are temporary providing "clean" resource water to the homes. However, this is a temporary solution and the potential to impact the resource aquifer remains. After discussions with the property owners and the City Public Works department, water main lines will be constructed along the Service/Scenic Drive and plans to hook-up the homes to City municipal services will be conducted. If they are not, a CAD would be recommended to install new, double cased water supply wells and sealing the impacted supply wells in regards to MDH guidelines.

Objective 2 Timeline:

Carlson McCain estimates to complete the above identified tasks associated with the ER and RI objective within six months. This allows for off-site private water supply well filtration system installation and subsequent well sampling, monitoring well installation, development, surveying, assessment, the first two rounds of groundwater sampling (at least 3 months apart), seasonal (non-heating and heating) sub-slab vapor sampling events, and time to complete the Investigation Report once all analytical are received and reviewed.

Objective 2 Deliverables:

Subsequent to the ER activities, quarterly groundwater monitoring and Site building sub-slab soil vapor assessment, Carlson McCain will provide the MPCA with the Investigation Report Form (MPCA Guidance Document 4-06). The report will include the results, SCM and recommendations from data collected during LSI and RI activities. In conjunction with the deliverables provided from LSI activities (Objective 1) of this work plan, the following RI activities provided the following data for Carlson McCain to recommend additional monitoring and CAD mentioned above:

- Laboratory analysis of water samples collected from off-site private water supply wells, subsequent to carbon filtration system installations, indicate GRO, DRO and VOCs not present at concentrations above laboratory detection limits.
- Monitoring well installation and soil sampling activities did not identify any new release source areas.
- The impacted groundwater plume around the release source areas appear to not have stabilized, as fluctuations of DRO, GRO and several VOC concentrations above MDH HRLs were identified during the two quarterly sampling events. This may be in regards to the recent release identified around the active fuel dispensers.
- Two quarterly rounds of collected groundwater water samples from up-gradient and side-gradient monitoring wells did not identify the presence of petroleum contamination, verifying plume definition in these directions.
- The off-site, down-gradient monitoring well identified relatively low GRO and DRO concentrations, decreasing in concentration between the 1st and 2nd quarterly groundwater sampling events. Concentrations are also below the MPCA's threshold of 1,000 micrograms per liter (µg/L) for requesting additional remedial investigation.
- Potentiometric surface maps indicate a low hydraulic gradient, flowing the east of the Site.
- Sub-slab vapor samples SSV-1, SSV-2 and SSV-3, collected from vapor pins installed throughout the restaurant section of the Site building, identified several petroleum derived constituents present at concentrations exceeding 33X Commercial ISVs.

MINNESOTA POLLUTION CONTROL AGENCY
520 Lafayette Road North
St. Paul, MN 55155-4194

Attachment B
*Example Scenario Project Spreadsheet

Project title: Western MN Service Station (Scenario B - Petroleum Only Envrionmental Services Work Plan)

	1. Personnel					2. Subcontracting	3. Equipment								4. Other Expenses			Totals (Extended)
	Hourly						Per Day							Per Point				
Project Budget	Project Manager	Scientist II	Scientist I	Field Technician	GIS/CADD Specialist	Bid Amounts	PID (10.6eV)	Multi-gas Meter	Water Level Indicator	Peristaltic Pump	Water Quality Meter (6 par.)	GPS Unit (Submeter)	Coreing Machine w/drill bits	Vapor Pin Install Kit	Mileage (per mile)	Per Diem (Breakfast)	Per Diem (Lunch)	Hours
	$137.52	$97.48	$78.09	$78.09	$78.09	Lump Sum	$99.00	$123.00	$27.00	$43.00	$102.00	$122.00	$110.00	$60.00	$0.545	$9.00	$11.00	
Objective 1: Limited Site Investigation (LSI)																		
Task A - Project Administration																		
Background Review	2		4		2													8
Health & Safety Plan	0.5		0.5															1
Site & Off-site Access/Initial Site Visit	4	8	2	2														16
Non-Specific Administration	5																	5
Field Work Scheduling	4			1														5
Utility Clearance	0.5		1	1	1													3.5
Travel Time (Initial Site Visit)				4														4
Vehicle Mileage (1 trip - 240 miles)															$130.80			
Task B - Receptor Surveys																		
Water Well Survey	2		4	2														8
Surface Water Survey	1	1		1														3
Vapor Receptor Survey	1		2	1														4
Contaminated Surface Soil Survey				1														1
Petroleum Release Notification	1		1															2
Photoionization Detector (PID) - 10.6eV							$24.75											
Multi-gas Meter (O2/CO/LEL/Methane)								$30.75										
Task C - Subsurface Investigation																		
Water Supply Well Sampling				3.0														3
Soil & Vapor Boring Oversight & Sampling				18.0														18
Sample Shipping & Transportation	0.5			1.0														1.5
MPCA Status Updates	3.0																	3
Travel Time (2 potential trips)				8.0														8
Vehicle Mileage (2 trips - 480 miles)															$261.60			
Photoionization Detector (PID) - 10.6eV							$198.00											
Electric Water Level Indicator									$54.00									
Per Diem Breakfast (2 days)																$18.00		
Per Diem Lunch (2 days)																	$22.00	
Laboratory Analysis (Pace & Interpol)						$7,802.00												
Soil and Vapor Boring Advancement (Range)						$6,480.00												
Total for Objective 1 Hrs	**24.5**	**9.0**	**14.5**	**43.0**	**3.0**													**94.0**
Objective 2: Emergency Response/Remedial Investigation (RI)																		
Task A - Project Administration																		
Update Health & Safety Plan			0.5															0.5
MPCA Status Updates	4																	4
Site & Off-site Property Owner Updates	4																	4
Non-specific Administration	6																	6
Field Work Scheduling	4			2														6
Utility Clearance/Well Permitting	0.5		1	1														2.5
Sample Shipping & Transportation	1			4														5
Task B - Water Supply Well Carbon Filtration System Installation																		
Filtration System Install Oversight				4														4
Water Supply Well Sampling				1														1
Laboratory Analysis (Pace)						$429.00												
Carbon Filtration Install (SDE- two wells)						$7,000.00												
Task C - Monitoring Well Installation and Sampling																		
Monitoring Well Installation Oversight				16														16
Monitoring Well Surveying		1		2														3
Quarterly Groundwater Sampling (2 events)			4	15														19
Travel Time (up to 5 trips)				20														20
Vehicle Mileage (5 trips - 240 miles per trip)															$654.00			
Photoionization Detector (PID) - 10.6eV							$148.50											
Electric Water Level Indicator									$81.00									
Peristaltic Pump										$129.00								
Water Quality Meter (6 parameter)											$204.00							
GPS Unit												$30.50						
Per Diem Breakfast (2 days)																$18.00		
Per Diem Lunch (2 days)																	$22.00	
Laboratory Analysis (Pace)						$2,494.00												
Monitoring Well Installation (Range)						$8,200.00												
Task D - Sub-slab Vapor Sampling																		
Sub-slab Vapor Pin Installation & Sampling				12														12
Coreing Machine w/Drill Bits													$110.00					
Vapor Pin Installation Kit (5 points)														$300.00				
Laboratory Analysis (Pace)						$2,620.00												
Task E - Remedial Investigation (RI) Report																		
MPCA GD 4-06 Report Preparation	2	12	24		10													48
Total for Objective 2 Hrs	**21.5**	**13**	**29.5**	**77**	**10**													**151**
Total Project Hours	**46.0**	**22.0**	**44.0**	**120.0**	**13.0**													**245.0**

ATTACHMENT D

STATE OF MINNESOTA
AFFIDAVIT OF NONCOLLUSION

I swear (or affirm) under the penalty of perjury:

1. That I am the Responder (if the Responder is an individual), a partner in the company (if the Responder is a partnership), or an officer or employee of the responding corporation having authority to sign on its behalf (if the Responder is a corporation);

2. That the attached proposal submitted in response to the MPCA PT RFP - Remediation Master Request for Proposals has been arrived at by the Responder independently and has been submitted without collusion with and without any agreement, understanding or planned common course of action with, any other Responder of materials, supplies, equipment or services described in the Request for Proposal, designed to limit fair and open competition;

3. That the contents of the proposal have not been communicated by the Responder or its employees or agents to any person not an employee or agent of the Responder and will not be communicated to any such persons prior to the official opening of the proposals; and

4. That I am fully informed regarding the accuracy of the statements made in this affidavit.

Responder's Firm Name: Carlson McCain, Inc.

Authorized Representative (Please Print) Wade Carlson

Authorized Signature: [signature]

Date: 4/5/18

Subscribed and sworn to me this 20th day of April

REBECCA THOMPSON
Notary Public
State of Minnesota
My Commission Expires
January 31, 2022

Notary Public Signature: [signature]

My commission expires: January 31, 2022

ATTACHMENT E
STATE OF MINNESOTA – WORKFORCE CERTIFICATE INFORMATION

Required by state law for ALL bids or proposals that could exceed $100,000

Complete this form and return it with your bid or proposal. The State of Minnesota is under no obligation to delay proceeding with a contract until a company becomes compliant with the Workforce Certification requirements in Minn. Stat. §363A.36.

BOX A – MINNESOTA COMPANIES that have employed more than 40 full-time employees within this state on any single working day during the previous 12 months, check one option below:

☒ Attached is our current Workforce Certificate issued by the Minnesota Department of Human Rights (MDHR).

☐ Attached is confirmation that MDHR received our application for a Minnesota Workforce Certificate on _____ (date).

BOX B – NON-MINNESOTA COMPANIES that have employed more than 40 full-time employees on a single working day during the previous 12 months in the state where it has its primary place of business, check one option below:

☐ Attached is our current Workforce Certificate issued by MDHR.

☐ We certify we are in compliance with federal affirmative action requirements. Upon notification of contract award, you must send your federal or municipal certificate to MDHR at compliance.MDHR@state.mn.us. If you are unable to send either certificate, MDHR may contact you to request evidence of federal compliance. The inability to provide sufficient documentation may prohibit contract execution.

BOX C – EXEMPT COMPANIES that have not employed more than 40 full-time employees on a single working day in any state during the previous 12 months, check option below if applicable:

☐ We attest we are exempt. If our company is awarded a contract, we will submit to MDHR within 5 business days after the contract is fully signed, the names of our employees during the previous 12 months, the date of separation, if applicable, and the state in which the persons were employed. Send to compliance.MDHR@state.mn.us.

By signing this statement, you certify that the information provided is accurate and that you are authorized to sign on behalf of your company.

Name of Company: Carlson McCain, Inc. Date 4/5/18

Authorized Signature: _____ Telephone number: 763 487-7400

Printed Name: Wade A. Carlson Title: President/CEO

For assistance with this form, contact:

Minnesota Department of Human Rights, Compliance Services

Web: http://mn.gov/mdhr/
Email: compliance.mdhr@state.mn.us

TC Metro: 651-539-1095

Toll Free: 800-657-3704
TTY: 651-296-1283

Minnesota Department of
HUMAN RIGHTS

WORKFORCE
CERTIFICATE OF COMPLIANCE

The Commissioner of the Minnesota Department of Human Rights by the signature below attests that **CARLSON MCCAIN INC** is hereby certified as a contractor under the Minnesota Human Rights Act, §363A.

Certificate start date: **6/28/2016**
Certificate expiration date: **6/27/2020**

Minnesota Department of Human Rights

FOR THE DEPARTMENT BY:

Kevin M. Lindsey, Commissioner

DEPARTMENT OF HUMAN RIGHTS

March 13, 2018

Carlson McCain Inc
3890 Pheasant Ridge Dr NE STE 100
Blaine MN 55449
ATTN: Dawn Meyers

Re: Equal Pay Certificate of Compliance

Congratulations, the Minnesota Department of Human Rights has reviewed and approved your business's application for an Equal Pay Certificate of Compliance. This Certificate allows you to execute contracts with the State of Minnesota; state departments, state agencies, and the Metropolitan Council agencies, that are likely to exceed $500,000.

Please be aware that the Department will periodically request information from you to ensure compliance with equal pay laws and your good faith efforts to comply with equal pay laws.

For information regarding Equal Pay, go to the Department's website at www.mn.gov/mdhr/certificates. If you have any questions or need additional information, please contact Compliance Services at 651-539-1095 or Compliance.MDHR@state.mn.us.

Sincerely,

Kevin M. Lindsey, Commissioner
Minnesota Department of Human Rights

Enclosure(s)

ATTACHMENT F

CERTIFICATION REGARDING LOBBYING

For State of Minnesota Contracts and Grants over $100,000

The undersigned certifies, to the best of his or her knowledge and belief that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, A Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, Disclosure Form to Report Lobbying in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

Carlson McCain, Inc.

Organization Name

Wade A. Carlson - President/CEO

Name and Title of Official Signing for Organization

By: _____

Signature of Official

4/5/18

Date

ATTACHMENT G

State of Minnesota – Equal Pay Certificate

If your response could be in excess of $500,000, please complete and submit this form with your submission. **It is your sole responsibility to provide the information requested and when necessary to obtain an Equal Pay Certificate (Equal Pay Certificate) from the Minnesota Department of Human Rights (MDHR) prior to contract execution. You must supply this document with your submission.** Please contact MDHR with questions at: 651-539-1095 (metro), 1-800-657-3704 (toll free), 711 or 1-800-627-3529 (MN Relay) or at compliance.MDHR@state.mn.us.

Option A – If you have employed 40 or more full-time employees on any single working day during the previous 12 months in Minnesota or the state where you have your primary place of business, please check the applicable box below:

☒ Attached is our current MDHR Equal Pay Certificate.

☐ Attached is MDHR's confirmation of our Equal Pay Certificate application.

Option B – If you have not employed 40 or more full-time employees on any single working day during the previous 12 months in Minnesota or the state where you have your primary place of business, please check the box below.

☐ We are exempt. We agree that if we are selected we will submit to MDHR within five (5) business days of final contract execution, the names of our employees during the previous 12 months, date of separation if applicable, and the state in which the persons were employed. Documentation should be sent to compliance.MDHR@state.mn.us.

The State of Minnesota reserves the right to request additional information from you. **If you are unable to check any of the preceding boxes, please contact MDHR to avoid a determination that a contract with your organization cannot be executed.**

Your signature certifies that you are authorized to make the representations, the information provided is accurate, the State of Minnesota can rely upon the information provided, and the State of Minnesota may take action to suspend or revoke any agreement with you for any false information provided.

Authorized Signature	Wade A. Carlson	President/CEO
	Printed Name	Title
Carlson McCain, Inc.	04-3684414	4/5/18
Organization	MN/FED Tax ID#	Date

Issuing Entity	Project # or Lease Address

DEPARTMENT OF HUMAN RIGHTS

EQUAL PAY
CERTIFICATE OF COMPLIANCE

The Commissioner of the Minnesota Department of Human Rights by the signature below attests that Carlson McCain Inc is hereby certified as a contractor under the Minnesota Human Rights Act, §363A.44.

Certificate start date: March 13, 2018

Certificate expiration date: March 12, 2022

Minnesota Department of Human Rights

FOR THE DEPARTMENT BY:

Kevin M. Lindsey, Commissioner

ATTACHMENT H
STATE OF MINNESOTA
RESIDENT VENDOR FORM

In accordance with Laws of Minnesota 2013, Chapter 142, Article 3, Section 16, amending Minn. Stat. § 16C.02, subd. 13, a "Resident Vendor" means a person, firm, or corporation that:

(1) is authorized to conduct business in the state of Minnesota on the date a solicitation for a contract is first advertised or announced. It includes a foreign corporation duly authorized to engage in business in Minnesota;
(2) has paid unemployment taxes or income taxes in this state during the 12 calendar months immediately preceding submission of the bid or proposal for which any preference is sought;
(3) has a business address in the state; and
(4) has affirmatively claimed that status in the bid or proposal submission.

To receive recognition as a Minnesota Resident Vendor ("Resident Vendor"), your company must meet each element of the statutory definition above by the solicitation opening date and time. If you wish to affirmatively claim Resident Vendor status, you should do so by submitting this form with your bid or proposal.

Resident Vendor status may be considered for purposes of resolving tied low bids or the application of a reciprocal preference.

I HEREBY CERTIFY THAT THE COMPANY LISTED BELOW:

1. Is authorized to conduct business in the State of Minnesota on the date a solicitation for a contract is first advertised or announced. *(This includes a foreign corporation duly authorized to engage in business in Minnesota.)*
   X **Yes** ___ **No (must check yes or no)**

2. Has paid unemployment taxes or income taxes in the State of Minnesota during the 12 calendar months immediately preceding submission of the bid or proposal for which any preference is sought.
   X **Yes** ___ **No (must check yes or no)**

3. Has a business address in the State of Minnesota.
   X **Yes** ___ **No (must check yes or no)**

4. Agrees to submit documentation, if requested, as part of the bid or proposal process, to verify compliance with the above statutory requirements.
   X **Yes** ___ **No (must check yes or no)**

BY SIGNING BELOW, you are certifying your compliance with the requirements set forth herein and claiming Resident Vendor status in your bid or proposal submission.

Name of Company: Carlson McCain, Inc. Date: 4/5/18

Authorized Signature: [signature] Telephone: 763 494-7924

Printed Name: Wade A. Carlson Title: President/CEO

IF YOU ARE CLAIMING RESIDENT VENDOR STATUS, SIGN AND RETURN THIS FORM WITH YOUR BID OR PROPOSA SUBMISSION.

ATTACHMENT I

STATE OF MINNESOTA
VETERAN-OWNED PREFERENCE FORM

Unless a greater preference is applicable and allowed by law, in accordance with Minn. Stat. §16C.16, subd. 6a, the state will award a 6% preference on state procurement to certified small businesses that are majority owned and operated by veterans.

Veteran-Owned Preference Requirements - *See* Minn. Stat. § 16C.19(d):

1) The business has been certified by the Office of Equity in Procurement as being a veteran-owned or service-disabled veteran-owned small business.

   or

2) The principal place of business is in Minnesota AND the United States Department of Veterans Affairs verifies the business as being a veteran-owned or service-disabled veteran-owned small business under Public Law 109-461 and Code of Federal Regulations, title 38, part 74 (Supported By Documentation).

Statutory requirements and appropriate documentation must be met **by the solicitation response due date and time** to be awarded the veteran-owned preference.

Claim the Preference

By signing below I confirm that:

My company is claiming the veteran-owned preference afforded by Minn. Stat. § 16C.16, subd. 6a. By making this claim, I verify that:

- The business has been certified by the Office of Equity in Procurement as being a veteran-owned or service-disabled veteran-owned small business.
  or
- My company's principal place of business is in Minnesota **and** the United States Department of Veteran's Affairs verifies my company as being a veteran-owned or service-disabled veteran-owned small business (Supported By Attached Documentation)

Name of Company: N/A Date:

Authorized Signature: _____ Telephone:

Printed Name: _____ Title:

Attach documentation, sign, and return this form with your solicitation response to claim the veteran-owned preference.

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 5/26/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME: Certificates Department
Kraus-Anderson Insurance 420 Gateway Boulevard Burnsville MN 55337-2790	PHONE (A/C, No, Ext): (952) 707-8200 FAX (A/C, No): (952) 890-0535 E-MAIL ADDRESS: certificates@kainsurance.com
	INSURER(S) AFFORDING COVERAGE — NAIC #
	INSURER A : United Specialty Insurance Company
	INSURER B : Secura Insurance A Mutual Company
	INSURER C :
	INSURER D :
	INSURER E :
	INSURER F :
INSURED Carlson McCain, Inc. 3890 Pheasant Ridge Drive Suite 100 Blaine MN 55449	

COVERAGES **CERTIFICATE NUMBER:** 17-18 Certificate **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS		
A	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR X Stop Gap Coverage-ND&WY X Contractual Liability GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-JECT LOC OTHER:			USA4169560	6/1/2017	6/1/2018	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG $	$ $ $ $ $ $ $	3,000,000 100,000 5,000 3,000,000 3,000,000 3,000,000
B	AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS HIRED AUTOS NON-OWNED AUTOS			A3150593	6/1/2017	6/1/2018	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) $	$ $ $ $ $	1,000,000
A	UMBRELLA LIAB X OCCUR X EXCESS LIAB CLAIMS-MADE DED X RETENTION $ 0			USA4169561	6/1/2017	6/1/2018	EACH OCCURRENCE AGGREGATE $	$ $ $	4,000,000 4,000,000
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N: N If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		WC3150594	6/1/2017	6/1/2018	X PER STATUTE OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ $ $	1,000,000 1,000,000 1,000,000
A	Professional Liability			USA4169560	6/1/2017	6/1/2018	Each Claim/Aggregate:		$3,000,000
	Pollution Liability			USA4169560	6/1/2017	6/1/2018	Each Claim/Aggregate:		$3,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER

For Informational Purposes Only

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Mark N. Kampf/MARIEL

MINNESOTA POLLUTION CONTROL AGENCY
520 Lafayette Road North
St. Paul, MN 55155-4194

REQUEST FOR PROPOSAL (RFP) ADDENDUM

Addendum No.: 1 Date of Addendum: March 19, 2018

Due Date, Time: April 11, 2018, 2:00 PM

Title: MPCA PT RFP – REMEDIATION MASTER

SCOPE OF ADDENDUM

The Request For Proposal (RFP) is revised as follows with additions underlined, and deletions are ~~struck out~~:

Revision 1. RFP Section 2: Project Goals, Page 3, is amended as follows:

The total amount of money available for work under this Master Contract is approximately ~~$120,000,000.00 (One Hundred Twenty Million Dollars)~~ $420,000,000.00 (Four Hundred Twenty Million Dollars) for five years between all Master Contracts issued under this RFP. No payments will be made except for work authorized by a Work Order that is issued from the State. No minimum payment is guaranteed by the State.

Revision 2. RFP Attachment C. Sample Contract, Page 2, Clause 4.1 Consideration. is amended as follows:

4.1 Consideration. The State will pay for all services satisfactorily performed by the Contractor for all Work Order Contracts issued under this Master Contract. The total compensation of all Work Orders may not exceed **~~$120,000,000.00 (One Hundred Twenty Million Dollars)~~ $420,000,000.00 (Four Hundred Twenty Million Dollars)** for five (5) years between all Master Contracts

Revision 3. RFP Section 7. Proposal Content, Category A: Petroleum, Superfund, MDA, and Closed Landfill Program Environmental Services, A.3, Page 31, is amended as follows:

Provide a detailed description of the company's experience as it relates to the scope of services outlined in this RFP; specifically, describe the company's experience with each of the bullets listed in **Section 4 3** of this RFP. The Proposal shall contain the following additional details specific to Category A services:

- A summary of Proposer's experience with agricultural chemical investigation and cleanups.
- A list of remediation technologies with which the Proposer has experience.
- Provide a detailed description of the company's experience as it relates to the scope of services outlined in this RFP for Category A.

Revision 4. RFP Section 3: Scope of Services, Page 3, is amended as follows:

The Contractor shall submit a separate proposal for each Category of Service for which the Contactor would like to be considered. Proposals will be evaluated individually for each Category of Service for which they were submitted. Category B is a subset of Category A. If the Contractor submits Proposals for both Category A and Category B, Category A will be evaluated first for qualification. If the Contractor is not approved for Category A, they will then be evaluated for Category B. Category C will be evaluated individually. Contractors can submit Proposals for all three Categories if desired.

Should a Contractor be approved and selected for more than one Categories, the Contractor will receive only one Master Contract containing all the approved and selected Categories.

Joint ventures and teaming among groups of Contractors is not allowed.

Revision 5. RFP, Attachment C Sample Contract, Clause 38. C. Additional Insurance Conditions, Bullet #5, Page 21, is amended as follows:

- Contractor's policy(ies) shall include legal defense fees in addition to its liability policy limits, with the exception of ~~B.4~~ Professional/Technical, Errors and Omissions, and/or Miscellaneous Liability Insurance above;

Revision 6. RFP, Section 4. Personnel Classifications and Qualifications, Category C: Closed Landfill Program, Project Manager Qualifications,Second Bullet, Page 23, is amended as follows:

- Minimum of three years experience working with landfill, investigation and closure. ~~Minnesota Guidance and Policy with the Superfund/ Petroleum programs. https://www.pca.state.mn.us/waste/cleanup-guidance~~

Revision 7. RFP, Section 6. Supplies and Equipment Pricing, EQUIPMENT RATES, Pages 28 and 29, and RFP, Attachment C, Sample Contract, EQUIPMENT RATES, Pages 5,6,7, is amended as follows:

Equipment	Cost (per day)
Turbidity Meter	$52.00
Oxidation-reduction potential (ORP) Meter	$39.00
~~Hydrolab Quanta~~	~~$80.00~~
Dissolved Oxygen Meter	$46.00
Temperature, pH, conductivity, ORP meter	$68.00
Temperature, pH, conductivity	$35.00
~~YSI Multi Meter w/ Flow Cell~~	~~$117.00~~
Flow Cell	$77.00
Water Quality Meter (6 parameters)	$102.00
2" Trash Pump	$~~18~~975..00
Bladder pump	$118.00
Submersible Pump	$52.00
Peristaltic Pump	$43.00
Diaphram Pump	$53.00
Mechanical Pump Puller	$44.00
Water Level Indicator	$27.00
Hydrocarbon/Water Interface Probe	$55.00
Pump/Slug Testing Equipment	$110.00
Manual direct-push probe equip.	$165.00
X-ray Fluorescent (XRF) for Soil and Lead Paint	$468.00

Nuclear Density Gauge	$69.00
Multi Gas Meter (02/CO/LEL/Methane)	$123.00
O2/Combustible Gas Detector	$110.00
LEL/O2/CO2 Gas Meter	$66.00
LEL/O2Gas Meter	$55.00
Explosimeter	$52.00
Photoionization Detector (PID) 10.6	$99.00
Photoionization Detector (PID) 11.7	$138.00
Flame Ionization Detector (OVA)	$135.00
Velometer / Anemometer	$34.00
Micro Manometer	$64.00
Sound Level Meter	$53.00
Dust Meter	$70.00
Air Compressor	$54.00
Metal/Cable Detector	$47.00
Generator	$65.00
Sump Pump	$33.00
Pressure Washer	$69.00
Magnetometer	$151.00
Coreing Machine with Drill Bits	$110.00
Surveying Equipment - Rotary Laser	$104.00
GPS (Submeter)	$122.00
Laser Level/Lenker Rod	$127.00
Ground Penetrating Radar (GPR)	$426.00
EM-31 Ground Conductivity Meter	$440.00
EM-61 Ground Conductivity Meter	$688.00
55 gal Drums	$70.00
Sub-Slab Soil Gas Sampling Point Insert	$88.00
Screen for Soil Gas Monitoring Points	$51.00
Vapor Pin Installation Kit (per point)	$60.00
Lumex Mercury Monitoring	$187.00
Mercury Analyzer	$179.00
Canoe	$15.68
Boat (Includes motor and trailer)	$58.24
ATV (Hourly Rate)	$16.80

Revision 8. RFP, Section 7. Proposal Content, Category B. Petroleum Only Remdiation Environmental Services B.5., Scenario 1: Petroleum Only Environmental Services, Page 39, is amended as follows:

5. **Scenario ~~1~~ B: Petroleum Only Environmental Services**

   Scenario ~~1~~B:

Revision 9. RFP, Section 6. Supplies and Equipment Pricing, Item cc., Page 27 and RFP, Attachment C, Sample Contract, Clause 8, Page 5, is amended as follows:

cc. Tubing less than $100.00

Revision 10. RFP, Section 7. Proposal Content, 5. Scenario A., Page 33, is amended as follows:

The property owner conducted a limited investigation consisting of several push probes throughout the facility and adjacent property. This investigation identified chlorinated ethenes (most notably trichloroethylene [TCE]) and agricultural chemicals (nitrogen, dicamba, metolachlor, metribuzin, pendimethalin, and triclopyr) in soils and groundwater above agency-regulated cleanup goals. General geology was noted to generally consist of coarse grained sands with thin lenses of silt and clay. The investigation encountered shallow groundwater approximately 6-10 feet bgs, with an assumed flow direction heading into town. All groundwater samples (blue GW samples) were collected at 30 feet for domestic wells, and 15 feet for investigation borings. The investigation did not evaluate the stream.

A single round of vapor points were also advanced off-site as part of the property owner's investigation, with some of the detections exceeding the 33X ISV for TCE (Figure 1). Vapor samples (orange vapor samples) were collected above the water table. MPCA is aware there is a pregnant person at the property with the sub-slab point. A passive soil-gas sample collected in the vehicle/equipment maintenance garage was several orders of magnitude above screening criteria; however, additional characterization nor remediation occurred in the building by the property owner.

Revision 11. RFP, Section 7., Proposal Content, Category A..; Scenario A, 2nd Paragraph, Page 32, is amended as follows:

The site topography is mostly flat, however the elevation does dip downward toward a small stream running through the northern portion of the property. This stream continues into the town which is located in the west adjoining property (see Figure 1). Older portions of the town (situated closer to the former ag-chem plant) are on private well drinking water (blocks 3, 5, and 7) that are 30 feet deep. Newer portions of the town (farther from the former plant) are on community water from the local municipality (blocks 1, 2, 4, and 6).

Revision 12. RFP, Section 7., Proposal Content, Category B. #5. Scenario 1: Petroleum Only Environmental Sercices, 5th Paragraph , Page 39, is amended as follows:

Municipal services are available in the area; however, the lakeside homes are all on private wells. The wells are 80 feet deep. The fueling station is hooked up to municipal water and other utilities at the site include storm sewer, sanitary sewer, and water that run along main street.

This addendum shall become part of the RFP and MUST be returned with the RFP Response.

RESPONDER NAME: _____

TITLE: Wade A. Carlson - President/CEO

DATE: 4/5/18

Event Details

Event ID	Format	Type	Page
R3201-2000008034	Sell	RFx	1
Event Round	**Version**		
1	1		
Event Name			
MPCA PT RFP Remediation Master Contract			
Start Time		**Finish Time**	
02/28/2018 08:00:00		04/11/2018 14:00:00	

CARLSON MCCAIN INC
15650 36TH AVE N #110
PLYMOUTH MN 55446
United States

Submit To:

520 LAFAYETTE RD N
ST PAUL MN 55155-4194
United States

Event Currency: US Dollar
Bids allowed in other currency: No

Contact: Heininger,Mary
Phone: 651/757-2418

Email: Contracts.pca@state.mn.us

Bid Number: 1
Bid Date: 04/11/2018 10:12:01
Total Bid Amount: 0.00

Event Description

Questions and Answers - MPCA PT RFP Remediation Master Contract - March 19, 2018

Addendum 1 - MPCA PT RFP Remediation Master Contract - March 19, 2018

The Minnesota Pollution Control Agency ("MPCA" or "State") and the Minnesota Department of Agriculture ("MDA" or "State") request proposals from qualified experienced environmental contractors (Contractors) to perform environmental investigations and other response actions at sites throughout Minnesota. The State seeks multiple Contractors to provide environmental services, including risk assessments, sampling, investigations, feasibility studies, removal and response actions, remedial design, response action oversight, and long-term operation and maintenance activities statewide. The Scope of Services is divided into three Categories of Service:

- Category A – Petroleum, Superfund, MDA, Closed Landfill Program Environmental Services
- Category B - Petroleum Environmental Services
- Category C - Closed Landfill Program Environmental Services

Refer to attached RFP for additional information.

Proposals due: April 11, 2018
Questions due: March 12, 2018

The RFP and attachments are at the header level. Cost attachment not applicable.

Please note that the link to add or view comments throughout the solicitation is called ' Click here to add or view comments and/or documents related to this line.

VENDORS - DO NOT CLICK THE "NO BID" BOX.

General Comments

- Questions and Answers - Uploaded March 19, 2018

  Addendum 1 - Uploaded March 19, 2018

  See attached RFP and attachments for further details and application instructions.

  ATTENTION PROPOSERS - Attach your proposal and attachments in the Event Header location.

Event Details (cont.)

Event ID	Format	Type	Page
R3201-2000008034	Sell	RFx	2
Event Round	**Version**		
1	1		
Event Name			
MPCA PT RFP Remediation Master Contract			
Start Time		**Finish Time**	
02/28/2018 08:00:00		04/11/2018 14:00:00	

Event Currency: US Dollar
Bids allowed in other currency: No

Bid Number: 1
Bid Date: 04/11/2018 10:12:01
Total Bid Amount: 0.00

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Email: Contracts.pca@state.mn.us

Line Details

N

Line: 1 **Item ID:** **Line Qty:** 1.00 **UOM:** EACH **Bid Qty:** 1

Reserve Price: No

Description: not applicable - costs included in RFP
Comments:
- Attention Proposers: Your proposal and all attachments should be submitted in the Event Header location

Question	Response
What is the price per unit?	0

Response Comments

Event Details (cont.)

Event ID	Format	Type	Page
R3201-2000008034	Sell	RFx	3
Event Round	**Version**		
1	1		
Event Name			
MPCA PT RFP Remediation Master Contract			
Start Time		**Finish Time**	
02/28/2018 08:00:00		04/11/2018 14:00:00	

Event Currency: US Dollar
Bids allowed in other currency: No

Bid Number: 1
Bid Date: 04/11/2018 10:12:01
Total Bid Amount: 0.00

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Phone: 651/757-2418

Email: Contracts.pca@state.mn.us

Bidder Information

Firm Name:

Name: **Signature:** **Date:**

Phone #: **Fax #:**

Street Address:

City & State: **Zip Code:**

Email:

Event Details (cont.)

Event ID	Format	Type	Page
R3201-2000008034	Sell	RFx	4
Event Round	**Version**		
1	1		
Event Name			
MPCA PT RFP Remediation Master Contract			
Start Time		**Finish Time**	
02/28/2018 08:00:00		04/11/2018 14:00:00	

Event Currency: US Dollar
Bids allowed in other currency: No

Bid Number: 1
Bid Date: 04/11/2018 10:12:01
Total Bid Amount: 0.00

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Appendix A - Line Specifications

Line: 1 **Item ID:** **Line Qty:** 1 **UOM:** EACH
Description: not applicable - costs included in RFP

Item Specifications

Manufacturer:
Mfg Item ID:
Item Length: 0
Item Width: 0
Item Volume: 0
Item Weight: 0
Item Size:
Item Height: 0
Dimension UOM:
Volume UOM:
Weight UOM:
Item Color:

Shipping Information

Schedule: 1
Quantity: 1
Due Date: 04/11/2018
Freight Terms:
Ship Via:

Ship To: MPCA REMEDIATION DIVISION
520 LAFAYETTE RD N
ST PAUL MN 55155-4194
United States

Event Details (cont.)

Event ID	Format	Type	Page
R3201-2000008034	Sell	RFx	5
Event Round	**Version**		
1	1		
Event Name			
MPCA PT RFP Remediation Master Contract			
Start Time		**Finish Time**	
02/28/2018 08:00:00		04/11/2018 14:00:00	

Event Currency: US Dollar
Bids allowed in other currency: No

Bid Number: 1
Bid Date: 04/11/2018 10:12:01
Total Bid Amount: 0.00

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Appendix B - General Terms & Conditions

1. Please see attached RFP for General Terms and Conditions.

Last Updated: 11/06/2012

Event Details (cont.)

Event ID	Format	Type	Page
R3201-2000008034	Sell	RFx	6
Event Round	**Version**		
1	1		
Event Name			
MPCA PT RFP Remediation Master Contract			
Start Time		**Finish Time**	
02/28/2018 08:00:00		04/11/2018 14:00:00	

Event Currency: US Dollar
Bids allowed in other currency: No

Bid Number: 1
Bid Date: 04/11/2018 10:12:01
Total Bid Amount: 0.00

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Appendix C - Bid Responses

Line Items

Line: 1 **Item ID:** **Line Qty:** 1 **UOM:** EACH **Bid Qty:** 1
Total Line Bid Amount: 0
Description: not applicable - costs included in RFP

Question	Response
What is the price per unit?	0