From: Huff, Timothy A. <Tim.Huff@wsp.com>
Sent: Friday, May 19, 2023 10:03 AM
To: Rice, Caroline M - DNR
Cc: Ross, Issac A - DNR; Karl Beaster; Wesseldyke, Eric; Oman, Brandon J.
Subject: RE: SVE Design Report - Enbridge Line 13, Jefferson County
Attachments: Sheet 5 - 314V6019.705C-005 (Process and Instrumentation Diagram)-markup.pdf

Caroline,

To elaborate on the method that was described in Section 6.1.2 of the SVE Design Report, WSP will collect vapor samples of the combined influent from the SVE wells upstream of any added dilution air for laboratory analysis of volatile organic compounds (VOCs) by EPA Method TO-15. The attached Sheet 5 from the SVE Design Report includes a comment to show where the combined influent sample will be collected. The combined influent sample point location will be upstream of the catalytic oxidizer in the startup treatment configuration and upstream of the granular activated carbon (GAC) vessel in the later treatment configuration. The concentration of individual VOCs in the air sample will be totaled to determine a combined influent total VOC concentration in the vapor extracted from the wells. The air flow rate of the combined influent from the SVE wells will also be measured upstream of the addition of any dilution air. The total concentration of VOCs will be multiplied by the air flow rate to get an estimated mass removal rate during a specified period of time. Finally, the mass removal rate will be multiplied by the number of blower motor runtime that has elapsed during that period of time to calculate the total mass removed. In order to regularly update the estimated mass removal rate, samples for laboratory analysis will be collected at least once per month, and the flow rate will be measured concurrently during each operation and maintenance (O&M) visit to the Site.

As mass is removed from the subsurface, it is anticipated that the rate of mass recovery will decrease over time. When the rate of mass recovery reaches asymptotic conditions, then verification soil sampling and/or LIF borings will be used to assess any residual soil impacts and verify the effectiveness of the SVE at reducing the concentrations of the contaminants of concern in the treatment area. The locations for the verification samples will be adjacent to the locations of soil samples or LIF borings from the 2021 supplemental site investigation work.

Please let us know if you need any additional information.

Regards,
Tim

From: Rice, Caroline M - DNR <caroline.rice@wisconsin.gov>
Sent: Thursday, May 11, 2023 2:07 PM
To: Huff, Timothy A. <Tim.Huff@wsp.com>; Karl Beaster <karl.beaster@enbridge.com>

Cc: Ross, Issac A - DNR <Issac.Ross@wisconsin.gov>
Subject: SVE Design Report - Enbridge Line 13, Jefferson County

Good afternoon,

Thank you for submitting the SVE design report for DNR review. Please elaborate on how the vapor sampling described will provide sufficient data to calculate the mass of contaminant removed. We will need a reasonably accurate estimate of the mass removed to assess the effectiveness of the system and to determine if additional remedial actions will be required. Further, please confirm that pretreatment samples will be able to be collected after the system transitions to activated carbon treatment.

Thank you,
Caroline

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Caroline Rice
she/her/hers
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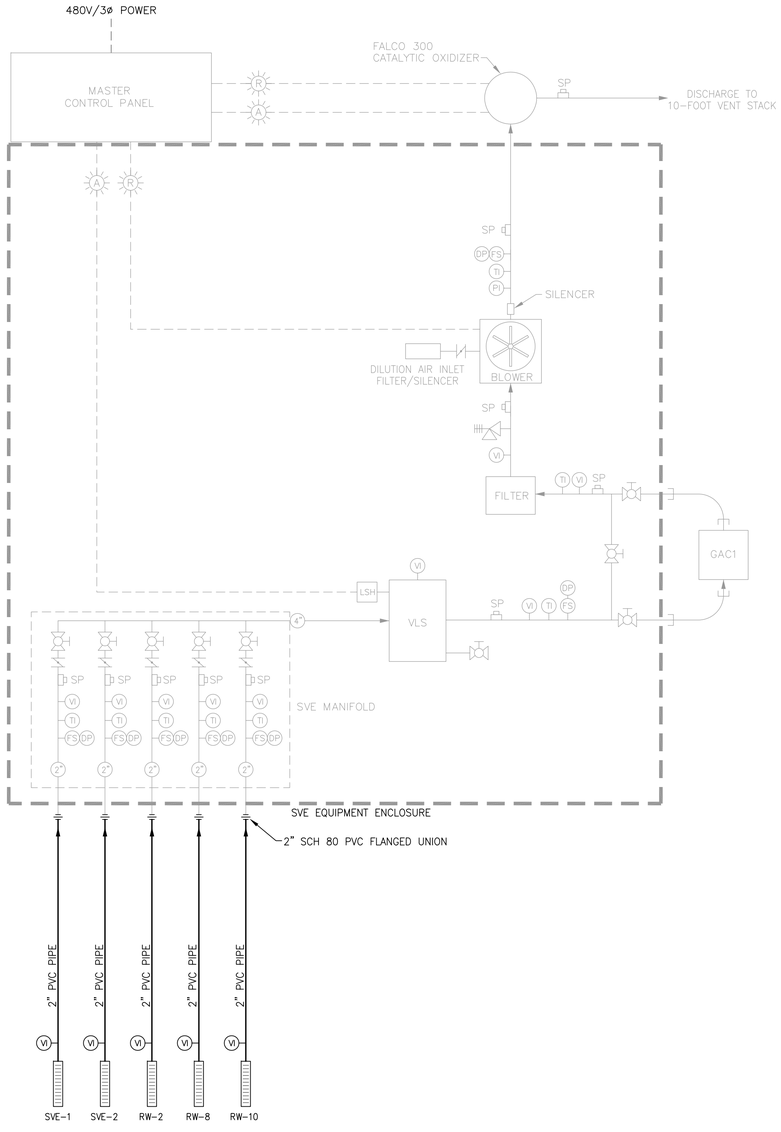

LEGEND

- CONVEYANCE PIPING AND DIRECTION OF FLOW
- CONTROL LINE
- DP FS — FLOW SENSOR WITH DIFFERENTIAL PRESSURE GAGE
- PI — PRESSURE/VACUUM INDICATOR
- TI — TEMPERATURE INDICATOR
- VI — VACUUM INDICATOR
- LSH — LIQUID SENSOR HIGH
- CAMLOCK FITTING
- SP — SAMPLE PORT
- BUTTERFLY VALVE
- BALL VALVE
- GATE VALVE
- VACUUM RELIEF VALVE
- VLS — VAPOR LIQUID SEPARATOR
- GAC — GRANULAR ACTIVATED CARBON
- R — RUN INDICATOR
- A — ALARM CONDITION INDICATOR

INSTALLATION CONTRACTOR

1. CONTRACTOR SHALL INSTALL AND FURNISH COMPONENTS INDICATED IN BOLD.
2. ORDER OF TRANSFER PIPES TO INDIVIDUAL WELLS IS SUBJECT TO CHANGE FROM THE ORDER SHOWN BASED ON FIELD CONDITIONS.
3. SUBCONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING THE ELECTRICAL CONNECTION BETWEEN THE 480V, 3-PHASE POWER SUPPLY AND THE SVE EQUIPMENT ENCLOSURE (SEE SHEET 4).

EQUIPMENT VENDOR

1. VENDOR SHALL INSTALL AND FURNISH ALL COMPONENTS SHOWN IN GRAYSCALE.
2. VENDOR SHALL PRE-INSTALL ALL SYSTEM COMPONENTS WITHIN A WEATHER-TIGHT PORTABLE ENCLOSURE INSULATED FOR SOUND REDUCTION. ENCLOSURE MUST BE DESIGNED FOR TRANSPORT BY TRUCK AND FORKLIFT WITH MAXIMUM EXTERIOR DIMENSIONS OF 10-FEET BY 8-FEET. VENDOR SHALL DELIVER EQUIPMENT ENCLOSURE TO THE SITE WITH THE MASTER CONTROL PANEL MOUNTED SECURELY TO THE EXTERIOR AND READY FOR CONNECTION TO POWER SERVICE AND SVE WELL CONVEYANCE PIPING.
3. THE GAC UNITS WILL BE DELIVERED SEPARATELY AT A LATER DATE AND WILL REPLACE THE CATALYTIC OXIDIZER FOR VAPOR TREATMENT. THE SVE EQUIPMENT ENCLOSURE WILL BE PLUMBED TO ALLOW BYPASS OF THE GAC UNIT CONNECTIONS DURING CATALYTIC OXIDIZER USE.

THE ORIGINAL VERSION OF THIS DRAWING IS IN COLOR. BLACK AND WHITE COPIES MAY NOT ACCURATELY DEPICT CERTAIN INFORMATION.

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REVISIONS

REV	DESCRIPTION			
1	Revised:	Chkd:	Appr.:	
2	Revised:	Chkd:	Appr.:	
3	Revised:	Chkd:	Appr.:	

SEAL

DATE

DRAWN BY EGC
CHECKED EW PJD 2/28/2023
APPROVED

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PROCESS AND INSTRUMENTATION DIAGRAM

LINE 13 MP 312 VALVE SITE
FORT ATKINSON, WISCONSIN
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ENGRIDGE ENERGY LIMITED PARTNERSHIP

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SHEET 5

Drawing Number
314V6019.705C-005