

Agenda
Cornwall City Council

Meeting #: 2020-21
Date: Monday, August 17, 2020, 5:00 PM
Location: Cornwall Civic Complex, 100 Water Street East, Cornwall, Ontario, K6H 6G4, Salon B, Lower Level
Chair: Bernadette Clement, Mayor
Prepared By: Manon L. Levesque, City Clerk

Pages

Roll Call

Opening

We acknowledge that we are gathering on the traditional territory of the Mohawk people of Akwesasne.

Adoption of Agenda

The following Agenda is being presented for adoption as presented.

Disclosures of Interest

Committee of the Whole

Presentations and Reports

**6.1 Nouryon Chemical and Jacobs Fire Station #2 Property
Remediation Presentation, 2020-222-Fire Services**

1

Action Recommended
That Council receive the presentation.

Adjournment

The next Regular Public Meeting of Council will be held on Monday, September 14, 2019.



The Corporation of the City of Cornwall
Regular Meeting of Council
Report

Department: Fire Services
Division: Fire
Report Number: 2020-222-Fire Services
Prepared By: Jeff Weber, Deputy Fire Chief
Meeting Date: August 17, 2020
Subject: Nouryon Chemical and Jacobs Fire Station #2 Property
Remediation Presentation

Purpose

Presentation by Jacobs along with representation from Nouryon Chemicals regarding the proposed remediation efforts for 1351 Second Street East Cornwall, Fire Station 2. Jeremy Piper will be the lead presenter in attendance. Joining Jeremy will be the follow representatives.

Ryan Manning (Jacobs Environmental Construction Manager)

Joining the meeting through video conference will be Emily Chan, Mark Strong and Jeff Minchak representing Jacobs

Joseph Lang and Katherine Rahill from Nouryon Chemicals. Nouryon is the current owner of the former Courtaulds Canada site.

Recommendation

That Council receive the presentation.

Document Title:	Nouryon Chemicals LLC - Fire Hall Property Contamination Council Presentation - 2020-222-Fire Services.docx
Attachments:	- City of Cornwall_Fire Hall Remediation Plan.pdf
Final Approval Date:	Aug 14, 2020

This report and all of its attachments were approved and signed as outlined below:

Jeff Weber - Aug 13, 2020 - 2:12 PM

Mark A. Boileau - Aug 13, 2020 - 2:32 PM

Tracey Bailey - Aug 13, 2020 - 2:41 PM

No Signature - Task assigned to Maureen Adams was completed by workflow administrator Manon L. Levesque

Maureen Adams - Aug 14, 2020 - 9:07 AM

City of Cornwall – Fire Hall #2 Remediation Proposal

Nouryon Chemicals LLC

August 17, 2020

Agenda

- Introduction
- Project Background
- Planned Remediation
- Biosparge System
- Subslab Depressurization System
- Next Steps



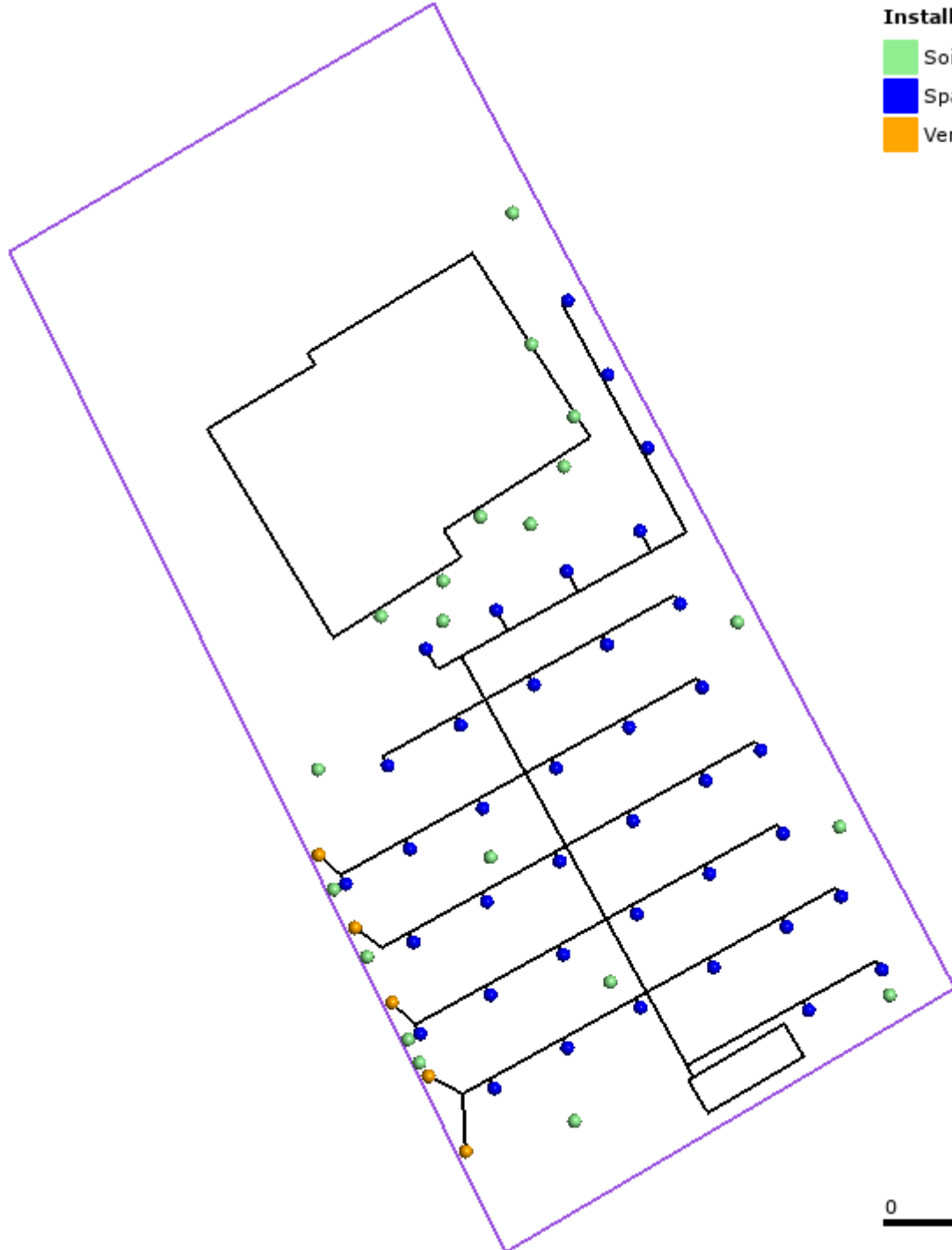
Project Background

- Actions driven by Ministry of the Environment Conservation and Parks (MECP) based on:
 - Elevated contaminant concentrations from historical operations
 - 1,1-dichloroethylene and vinyl chloride
 - Presence of closed landfill with current ECA permit on Nouryon property
- Voluntary response from Nouryon to tasks requested by MECP
- Risk assessments to determine required remedial measures to prevent adverse impact
 - RA for Fire Hall property completed in June 2017 and approved by MECP in December 2017
- Nouryon completes semi-annual groundwater sampling events and annual reporting

Planned Remediation on Fire Hall property

- Remedial Objectives
 - Remediate 1,1-dichloroethylene and vinyl chloride concentrations below the O.Reg. 153/04 (as amended) Table 3 Groundwater Standards
 - Remove the potential vapour intrusion risk to fire hall building
 - New conditions identified in May 2020
 - Potential biosparge system-related effects
- Planned technologies to achieve objectives
 - Biosparge System
 - Subslab Depressurization System

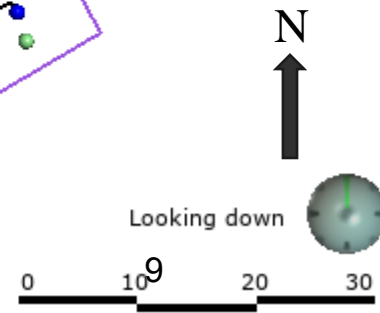
Biosparge System

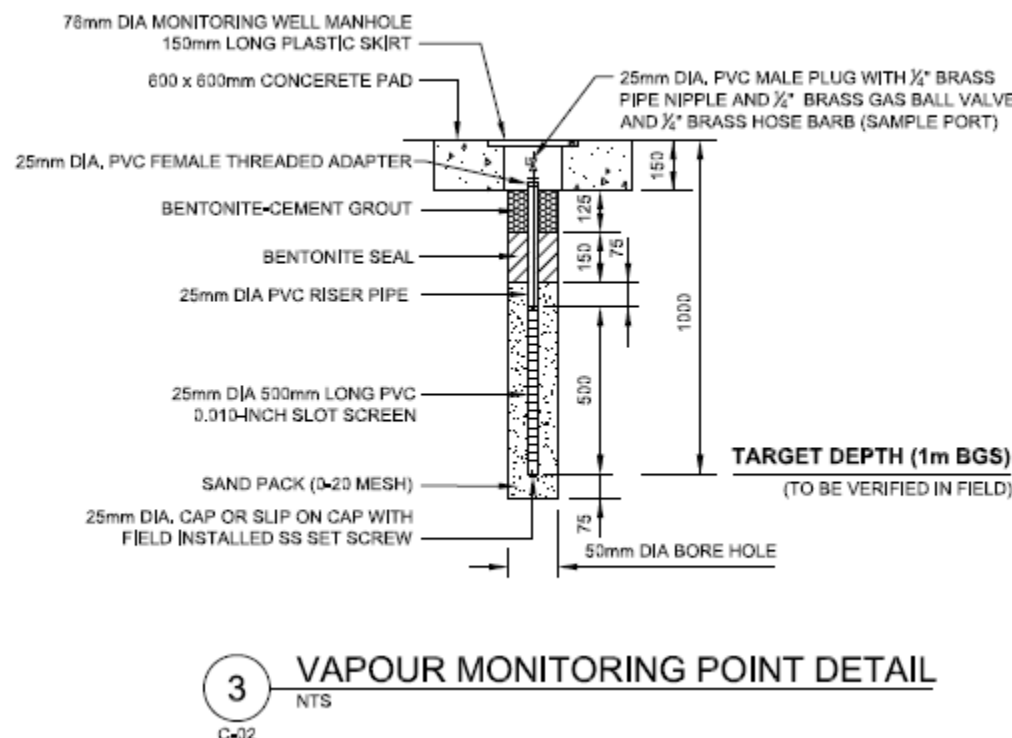
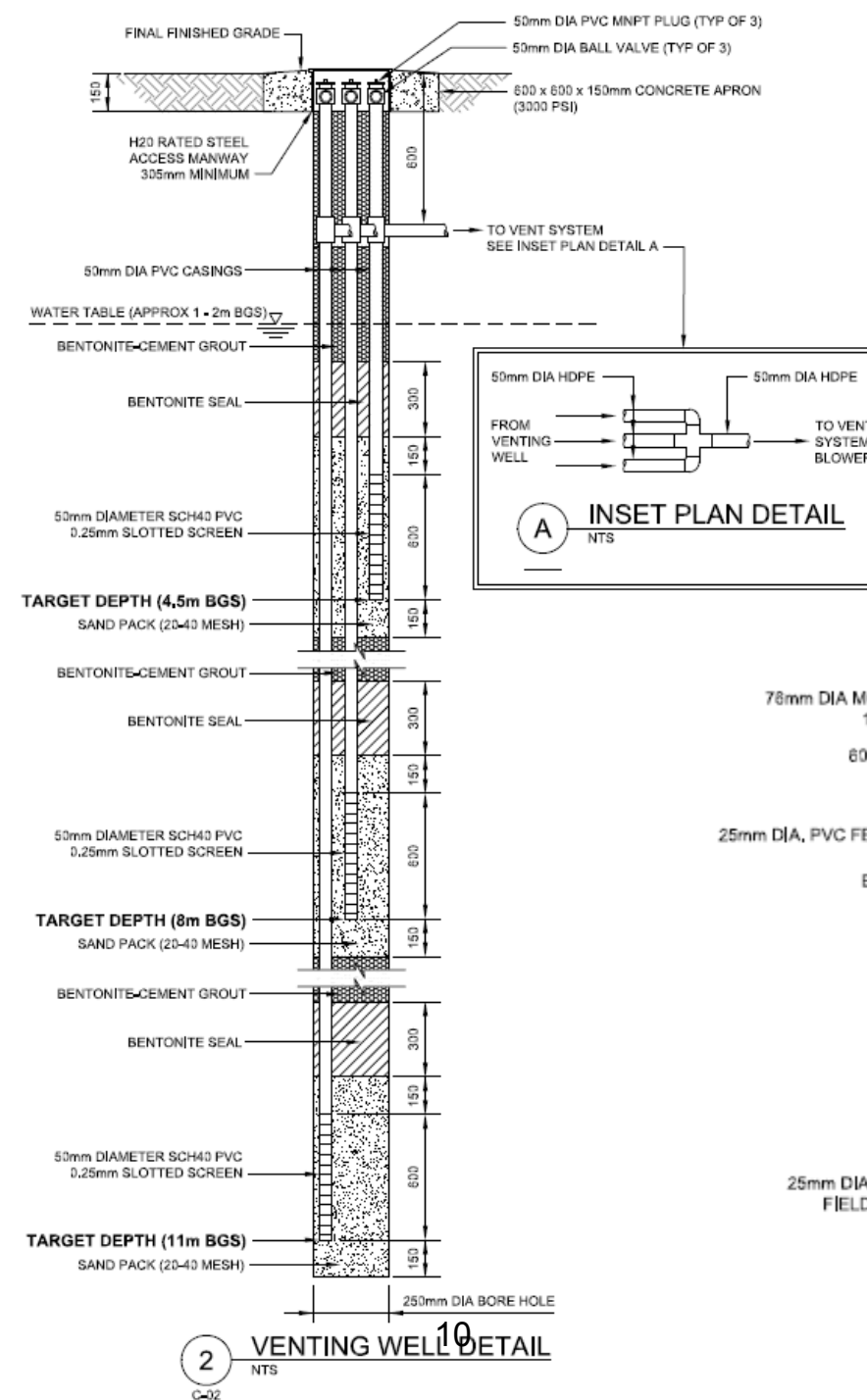
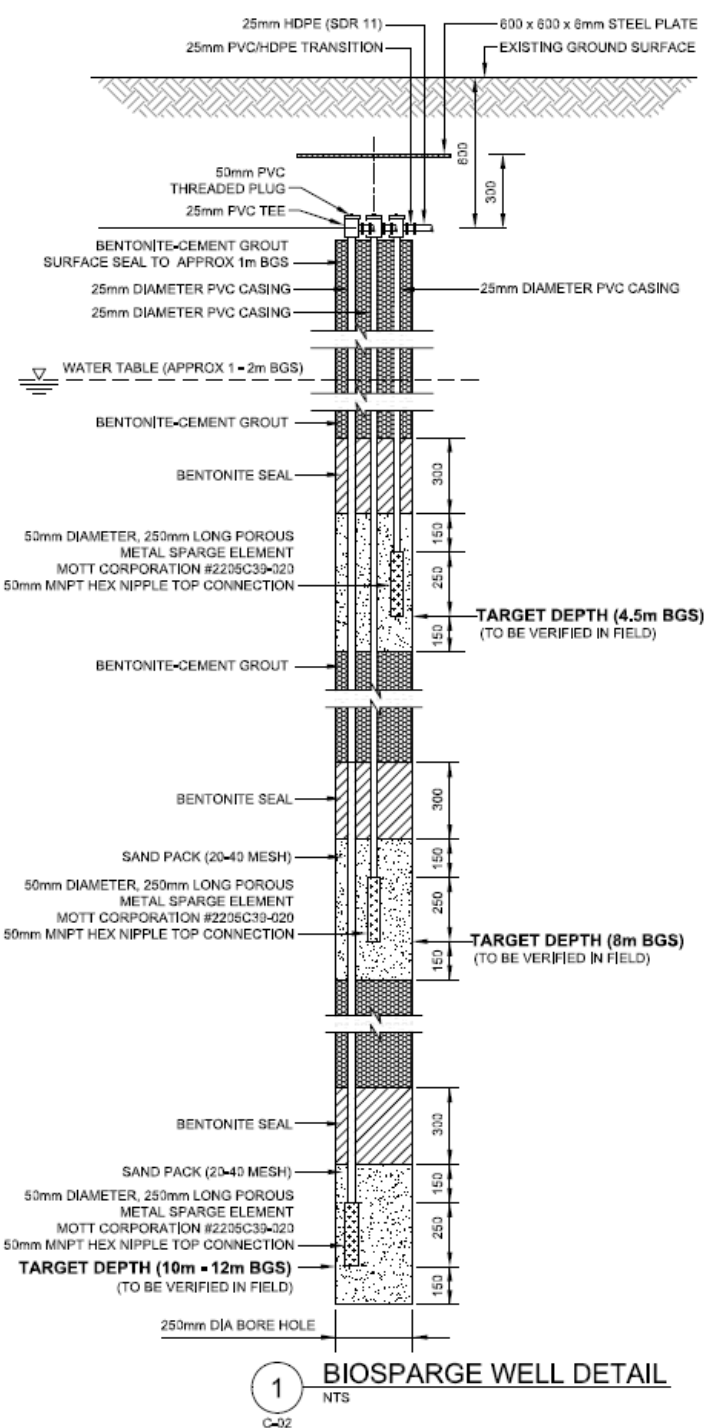


Installation_Type

- Soil Vapour Monitoring Probe
- Sparge Well
- Venting Well

- 114 Biosparge Wells
- 5 Vapour Venting Wells
- 20 Soil Vapour Monitoring Probes
- 5,337 metres of buried conveyance piping





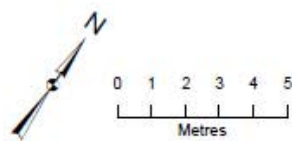
Biosparge System Construction

- Drilling program
 - 2 month duration
 - 1 Sonic drilling rig, support crew and Jacobs field geologist
- Biosparge system installation
 - 2 month construction duration to commence once drilling completed
 - Remediation contractors will trench and install piping, and complete wellhead connections.
 - All wellhead connections will be completed in subsurface vaults, with all vaults buried following installation and ground surface rehabilitated to either grass or asphalt.
 - All piping will be buried and trenches will be backfilled and ground surface rehabilitated to either grass or asphalt.
 - Temporary remediation system enclosure placement, power drop, mechanical and electrical connections, field testing.

Biosparge System Operation

- Expected operation duration of 5 years
- 26 monitoring wells to be sampled semi-annually during system operation
- Daily monitoring during initial startup
- Quarterly maintenance on remediation enclosure and equipment
- Quarterly vapour sampling from soil vapour monitoring probes
- Quarterly vapour sampling from the vapour phase carbon system at the remediation enclosure
- System decommissioning to follow once site remediation objectives met.

Subslab Depressurization System



- Subslab Probe for Pressure Monitoring
- Subslab Soil Vapor Sampling Location
- VIMS SSD Test Node
- Room Division
- Building Footprint
- Site Boundary

Notes:
1. Background Imagery: World Aerial ESRI 2020.

Subslab Depressurization System Construction

- SSDS field work and detailed design
 - Field work, 2 weeks
 - 9 subslab borings for vapour pin installation
 - 4 subslab borings for subslab depressurization test nodes
 - Air flow testing and subslab vapour sampling
 - Detailed design, 2 months

- SSDS system installation
 - 2 month construction duration
 - Remediation contractors will horizontal drill under building and install piping.
 - Air blower unit connected to piping to be installed on roof of fire hall building
 - Will operate for the duration of the biosparge system operation (~5 years)
 - Operation and maintenance program will be developed as part of the detailed design

Next Steps

Step	
Gain acceptance from MECP and City of Cornwall for remedial design	
Receive property access approval from City of Cornwall	
Tender and award remedial construction	
Permitting	
Drill biosparge wells	
Remediation contractor mobilization to site for construction	
Remediation operation	
System decommissioning	

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19

