91 Fulton Street
Boonton, NJ 07005
Tel: 973.334.0003 Fax: 973.334.0928
www.firstenvironment.com

February 13, 2017

Mr. William G. McKercher, P.E.
Branch Chief
Groundwater Assessment and
Remediation Division – GARD I
Mississippi Department of Environmental Quality
515 E. Amite Street
Jackson, MS 39201

Re: Interim Subslab Depressurization System - Proposal
Borg-Warner, Inc. Facility
Former Holley Automotive
Water Valley, Yalobusha Co., Mississippi

Dear Mr. McKercher:

First Environment, Inc. (First Environment), on behalf of EnPro Industries, Inc., is submitting this proposal for your review. The proposal outlines the installation of an interim subslab depressurization (SSD) system at the Borg Warner facility located in Water Valley, Mississippi ("the Site"). The proposed location of the subslab depressurization system is within the maintenance room where the indoor air sample IA-1 was collected, as depicted in Figure A. Historical documentation indicates this room is in the vicinity of the Plant's former degreaser operation. Based on the results of the recent vapor intrusion (VI) investigation conducted in January 2017, which included ambient and indoor air and corresponding subslab vapor samples, a subslab depressurization system is recommended as an interim remedial measure (IRM) to address the potential vapor intrusion issues around this area, located in the central portion of the Plant. Figure A attached to this proposal summarizes these locations as well as the results of the ambient and indoor air samples collected throughout the plant.

The proposed interim SSD system is not intended to remediate any impacted soil or groundwater beneath the Plant; the design objective of this SSD is to prevent soil gases from infiltrating the stated areas. However, even though remediation is not the design objective of the proposed SSD system, it is an ancillary effect and betterment of the existing subslab condition(s). Specifically, by venting soil gases, the proposed SSD system facilitates the mass removal of any contaminants from the subsurface media. Moreover, every volume of vented soil gas has to be replaced by an equal volume of air, resulting in an influx of oxygen into impacted areas, which may facilitate the aerobic biodegradation of contaminants.

The SSD system is designed to create a negative pressure field directly under the maintenance room, as well as the adjoining training room and the ATS room, and the surrounding manufacturing areas in the vicinity of these rooms; thus becoming a "sink" for any soil gases present in the vicinity. Any volatile organic constituents (VOCs) caught in the

advective sweep of this negative pressure field will be collected and piped to an ambient air discharge point located on the roof of the Plant. The following summarizes the construction of the SSD system:

- A four to six-inch diameter extraction hole will be created in the slab by concrete coring machine.
- Three to four-inch diameter PVC pipe will be utilized as vertical suction piping inserted into the extraction hole, which will in turn exit out of the maintenance room and be directed vertically to the Plant's roof. A proper seal will be constructed and established around the extraction hole by using polyurethane sealants (or similar products) containing "low" or no volatile organic compounds;
- The suction line will be equipped with a magnehelic and/or U-tube manometer type device to measure differential pressure.
- An inline Radon type electric fan or equivalent will be installed on the exterior wall of the maintenance room for easy access for servicing.
- A sampling port will be installed on the exhaust side of the piping for easy access to monitor VOC concentrations within the system.
- An exhaust vent, with the adaptability of the placement of an activated carbon filter, will be installed on the roof of the building, which will be connected to the PVC exhaust piping.
- Labels will be placed on the SSD system components that identify the purpose of the system, as well as a name and phone number of a contact in case there are any problems. In the electrical panel, the appropriate electrical breaker or the fuse that powers the SSD system shall be labeled accordingly.
- A communication test will be subsequently conducted by First Environment personnel after the SSD system is fully operational. Subslab sampling points utilized in the recent VI Investigation, which are depicted in the attached Figure A, will be "re-drilled" and utilized as observation holes to determine the lateral extent of the negative pressure (vacuum). Handheld magnehelic gauges will be utilized to quantify the vacuum readings at the observation holes.

The following pictures are examples of a typical SSD mitigation system, similar in construction of what is being proposed for the stated application.

An example of extraction point and exhaust piping equipped with a negative pressure manometer

An example of stack piping equipped with an electrical fan

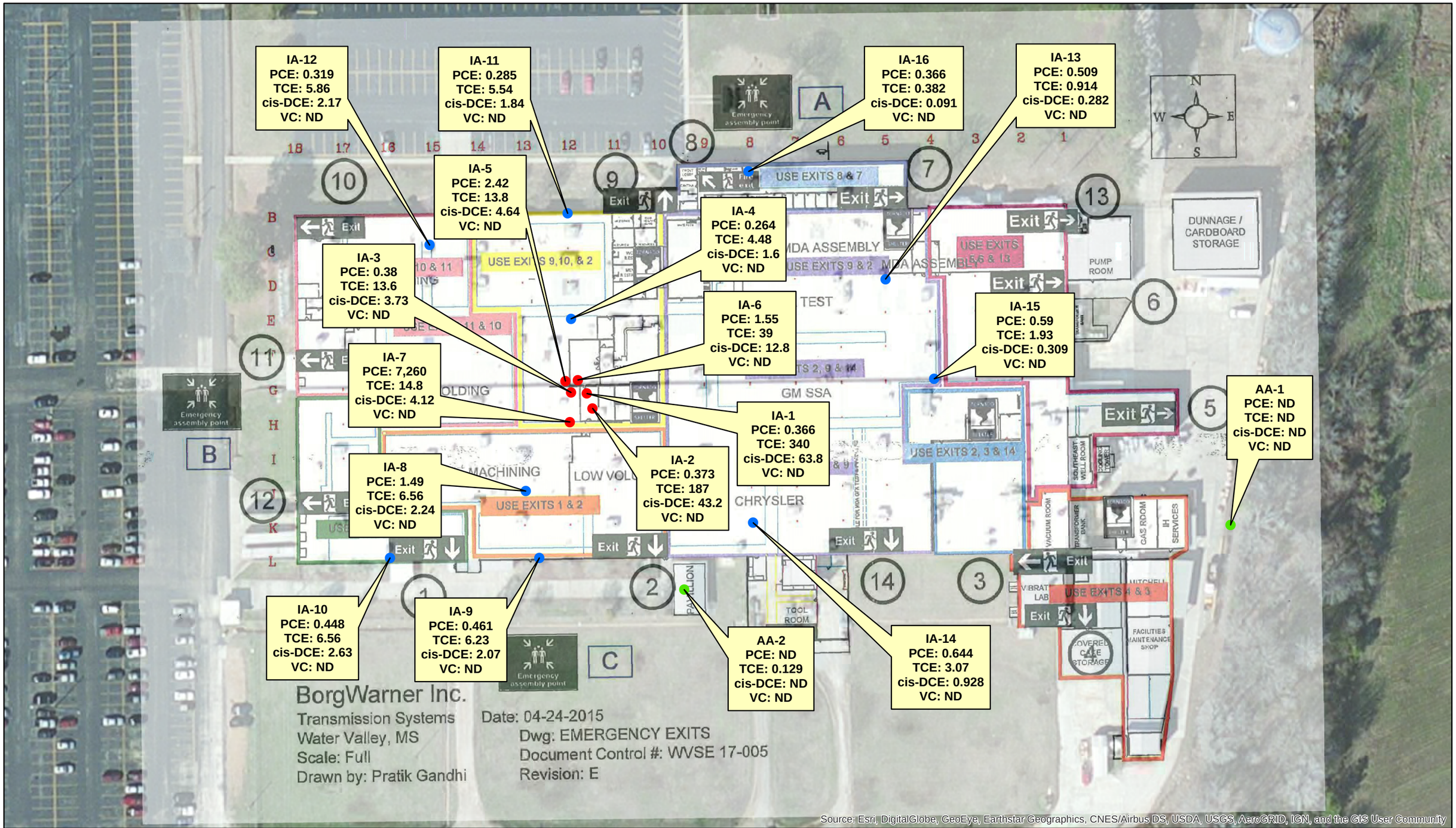
If you have any questions or comments or require additional information, please do not hesitate to contact me.

Very truly yours,

FIRST ENVIRONMENT, INC.

Mete Talimcioglu, Ph.D., P.E., CGWP, LSRP
Senior Associate

FIGURE A



Legend

- IA-1: Indoor air concentrations in ug/m3
- AA-1: Ambient air concentrations in ug/m3
- Subslab location to be checked for vacuum distribution of the interim subslab depressurization mitigation system

ND Concentration not detected above laboratory reported limits

0 20 40 80 Feet

1 inch = 80 feet

FIRST ENVIRONMENT

91 Fulton Street
Boonton, New Jersey 07005

BORG WARNER FACILITY
600 Highway 32E
Water Valley, MS

FIGURE A

AMBIENT AND INDOOR AIR SAMPLING RESULTS

Revised	Drawn	Checked	Approved	Date
	NMT		TCB	2/10/2017