Corrective Action Work Plan

Atlas Project #: 204EM04034

April 25, 2022

FORMER DRY CLEANERS
4103 CENTER POINT ROAD NORTHEAST
CEDAR RAPIDS, IOWA 52402

Prepared By:

Atlas Technical

328 LaPorte Road

Waterloo, Iowa 50702

Prepared For:

RB Investments, LLC

C/o Rick Bartels

4630 Westchester Drive Northeast, Unit A

Cedar Rapids, Iowa 52402

April 25, 2022

RB Investments, LLC
c/o Rick Bartels
4630 Westchester Drive Northeast, Unit A
Cedar Rapids, Iowa 52402

Re: Corrective Action Work Plan
Former Dry Cleaners
4103 Center Point Road Northeast, Cedar Rapids, Iowa 52402
Atlas Project #: 204EM04034

Dear Mr. Bartels,

Atlas Technical (Atlas) is pleased to present this Corrective Action Work Plan outlining the approach to be implemented to address the elevated vapors present in the subsurface at the Former Dry Cleaners site located on Center Point Road Northeast, in Cedar Rapids, Iowa in accordance with Chapter 133 of the Iowa Administrative Code. This work plan is to be submitted to Matt Culp of the Iowa Department of Natural Resources, Contaminated Sites Section 30 days prior to starting the fieldwork activities detailed within.

Atlas appreciates the opportunity to submit this Corrective Action Work Plan and looks forward to working with you on the project. If you have any questions or concerns, please contact us at 319-233-0441.

Remediation Work Plan by:

Doug Sayer
Staff Geologist
Atlas Technical
Office: 515-875-9924
Email: doug.sayer@oneatlas.com

Reviewed by:

Gaylen Hiesterman, CGP
Operations Manager
Atlas Technical
Office: 319-233-0441
Email: gaylen.hiesterman@oneatlas.com

cc: Matt Culp, Contaminated Sites Section, Iowa DNR

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Appendices

1.0 Introduction

Atlas has been retained by RB Investments, LLC (Client) to prepare a Corrective Action Work Plan for the former dry cleaners located at 4103 Center Point Road Northeast, Cedar Rapids, Iowa 52402. The location is composed of one (1) parcel of land, totaling approximately 0.40 acres.

In June of 2018 an Environmental Site Assessment (ESA) was conducted at the property. Soil samples collected during this investigation indicate that all chemicals of concern were less than Iowa Department of Natural Resources (Iowa DNR) action limits. Analytical results of groundwater samples indicate that concentrations of Tetrachloroethylene (PCE) and Trichloroethylene (TCE) exceed Iowa DNR action limits.

From 2019 through 2021, additional groundwater monitoring activities were conducted on the south adjacent property at 4001 Center Point Road Northeast. Analytical results of groundwater samples collected from the southwest monitoring well indicate that concentrations of PCE exceed Iowa DNR action limits.

On February 17, 2022, Atlas conducted sub-slab vapor and indoor air vapor sampling in the structure on the south adjacent property at 4001 Center Point Road Northeast. Analytical results of the sub-slab vapor sampling indicate concentrations of benzene, carbon tetrachloride, 1,4-dioxane, and PCE fails for both potential cancer risk and non-cancer risk for site workers. Analytical results of the indoor air sampling indicate concentrations of carbon tetrachloride, 1,4-dioxane, dicloroethane-1,2 fails for both potential cancer risk and non-cancer risk for site workers.

This corrective action work plan is submitted in response to the IDNR review letter, dated March 16, 2022, which indicated that the site is subject to remedial action. Atlas' purpose in this work plan is to outline field & remediation activities, sample analyses, air permitting, and reporting.

2.0 Pre-Installation Compliance

Atlas will create a site-specific Health and Safety Plan (HASP) to cover all related field activities. All workers and visitors to the site will review and sign the HASP prior to beginning work.

Due to the previously document hazardous materials at the site, all personnel that work at the site are required to have a valid Occupational Safety and Health Administration (OSHA) 40-hour HAZWOPER or annual refresher training in accordance with CFR 1910.120. Modified Level D safety equipment is anticipated to be required at the jobsite.

Approximately one week prior to beginning excavation activities, the IDNR Contaminated Sites Section will be notified to inform them of the anticipated start date.

3.0 Generalized Remediation Protocol

Atlas proposes the work outlined in this section be performed with the goals to retrofit the structure on the south adjacent property with the appropriate vapor mitigation system to reduce the sub-slab vapor concentration and thus protect the indoor air at the property.

3.1 Installation and System Start-Up

3.1.1 Installation

Atlas will acquire the necessary permits, equipment, supplies, and services for the installation of the sub-slab vapor mitigation system. The following are procedures for installing a sub-slab vapor mitigation system:

1. Atlas will mobilize to the site and install three (3) Horizontal Soil Vapor Extraction (HSVE) wells below the foundation of the site building. Two (2) HSVE will be installed in the area of Soil Vapor (SV)-1 (HSVE-1) and SV-2 (HSVE-2) and one (1) HSVE (HSVE-3) will be installed in the southwest corner of the site building. Before installation, each area will be excavated approximately 3 feet below the site buildings concrete slab. Once the excavation is completed, a 4-inch hole will be drilled horizontally into the foundation of the site building to approximately 4 feet at each location. Once the target length is achieved the HSVE wells will be constructed of 4-inch diameter, schedule 40 PVC, 5-foot section of 0.020-inch machine-slotted screen. Each HSVE screen will be ran out of the building.
2. Once HSVE-1 and HSVE-2 screen has been installed, a trench will be made horizontally between the two sections. The two sections will be connected using a 90 degree fitting at each end of the screen with approximately 20-foot section of PVC pipe. The 20-foot sections will be connected with a T fitting. All piping and fittings will be glued together as specified in ASTM D2855 and extended above the edge of the roof.
3. Once HSVE-3 screen has been installed, a section of PVC pipe will be glued to the 5-foot section of screen to extend above the edge of the roof.
4. At each location 6 mil plastic will be installed where the HSVE and the buildings foundation meets. Once the plastic is installed, flowable fill will be installed to create a plug. Six inches of sand pack will be added over the lines for insulation. Sand pack will be compacted with a plate compactor. Clay was placed over the sand in six-inch lifts and compacted. Each location will be finished to pre-existing conditions.
5. At each location two blower motors will be installed approximately 3 feet above grade used to generate negative pressure (up to 5" water column pressure) below the foundation of the site. Based on blower motors and HSVE placements Atlas is utilizing a radius of influence of approximately 20 feet. The blowers will draw soil vapor through the system and discharging the vapors into the atmosphere. Each blower location will be at least 10-feet away from any window or opening.
6. A manometer will be installed within the system to ensure the system is functioning. HSVE-1 and HSVE-2 manometer will be installed midway between the two 20-foot sections. Each manometer for HSVE-1 and HSVE-2 will be protected by an 8-inch flush mount to prevent damage.
7. After installation the site building foundation and concrete slab will be inspected for cracks. If cracks are found Atlas will fill the cracks with silicone caulking to prevent soil vapors from infiltrating into the building and improve the efficiency of the sub-slab mitigation system.

3.1.2 System Start-Up

When installation of the sub-slab vapor mitigation system is finished and all necessary connections for system conduit and electrical lines have been completed, Atlas will start up the system. Alas will inspect the operation of the system and record data daily during the first five days of system operation to ensure that the system is operating both safely and effectively. Atlas will measure PID reading at the sample ports utilizing a hand pump and air sampling bags, PID

readings will also be collected within the building, and Atlas will record the vacuum readings at the manometers.

4.0 Operation & Maintenance

After the first five days of startup monitoring, Atlas will return to the site weekly during the first month of operation to ensure the system is operating at optimal performance. Thereafter, Atlas will reduce the number of site visits to only once a quarter to collect operational data from the system and make any necessary adjustments.

5.0 Monitoring and Reporting

Atlas will mobilize an environmental scientist to the site to conduct quarterly sub-slab, indoor air, and effluent vapor sampling. All samples will be collected via SUMMA canisters and will be analyzed using method TO-15 (VOCs). Atlas will prepare semi-annual site monitoring reports for client submittal to the Iowa DNR.

Note: The electrical usage invoices from the utility company will be paid by Atlas with a standard mark-up rate applied. Atlas will submit a new scope of work and cost estimate for additional yearly Operations, Maintenance and monitoring.

6.0 Project Timetable

6.1 Scheduling of Tasks

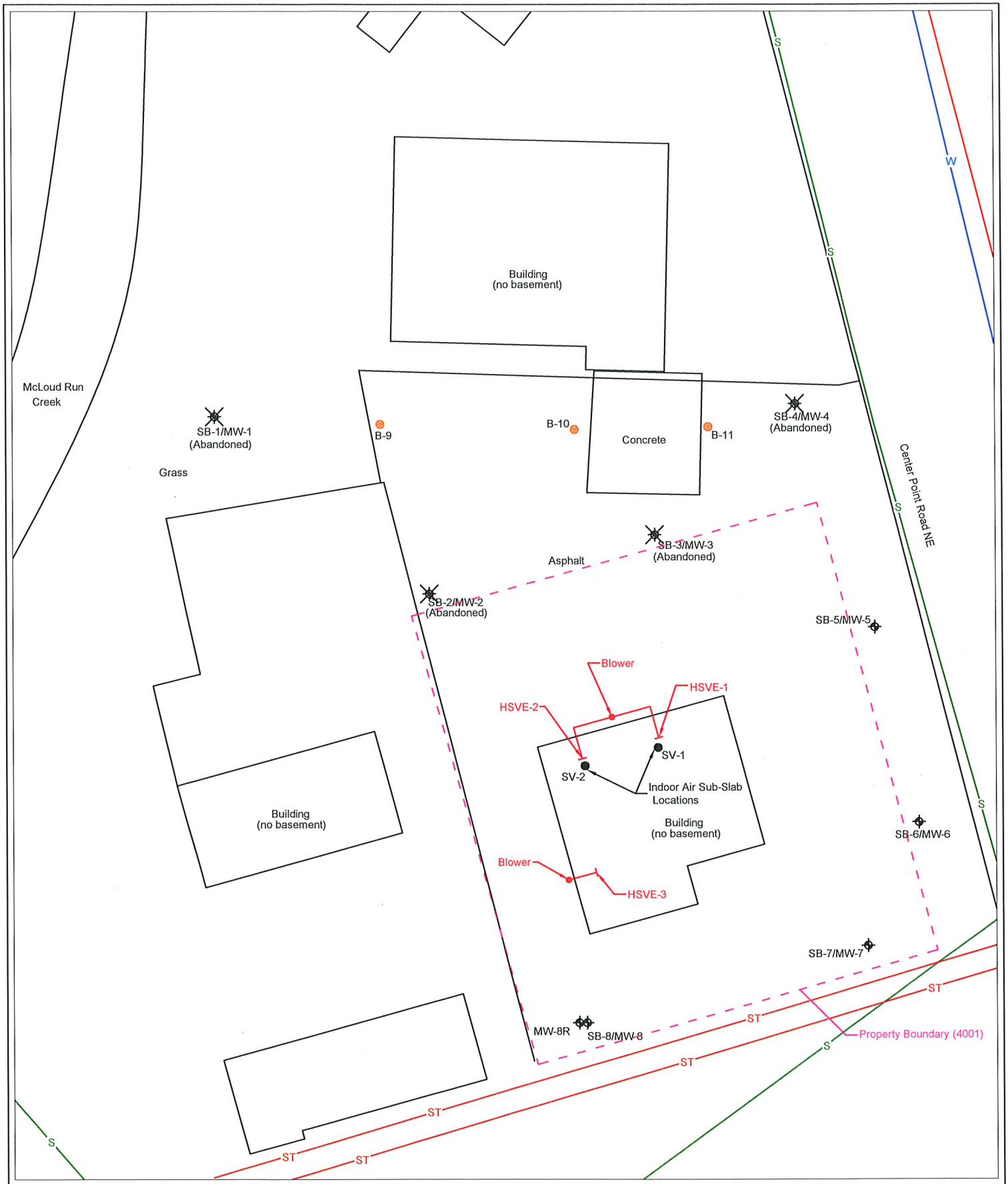
Scheduling of events will proceed upon approval from the IDNR and client. Client contractors will agree to act in good faith to satisfy the terms and conditions / deadlines set forth by the IDNR. The estimated time for the commencement of field activities is approximately 90 days from the date the work plan is approved by the IDNR, or upon the availability of favorable weather and soil moisture conditions. Upon completion of field activities, Atlas anticipates 45 to 60 days are required to prepare a report for submittal to the client.

Atlas appreciates the opportunity to submit this Remedial Action Work Plan and looks forward to working with you on the project. If you have any questions or concerns, please contact us at 319-233-0441.

Sincerely,

Gaylen Hiesterman, CGP
Operations Manager
ATC Group Services LLC
Office: 319-233-0441
Email: gaylen.hiesterman@oneatlas.com

Doug Sayer
Staff Geologist
Atlas Technical Consultants
Office: 515-875-9924
Email: doug.sayer@oneatlas.com



N

LEGEND

- Soil Boring
- Boring/Monitoring Well
- Previous Soil Sample Locations
- W — Water Line
- S — Sanitary Sewer
- ST — Sanitary Sewer

ATLAS
328 LaPorte Road
Waterloo, IA 50702
Ph. (319) 233-0441

Proposed Vapor Extraction System
Former Dry Cleaners
4001 Center Point Road NE
Cedar Rapids, IA

DWN BY	SCALE	
SLH	1" = 50'	
DATE	JOB NUMBER	SHEET
4/28/2022	204EM04034	1 of 1

Appendix A

Permits

Linn County Public Health
ATTN: Air Quality Division
1020 6th Street SE
Cedar Rapids, IA 52401

FORM ATI FI: AUTHORIZATION TO INSTALL FACILITY INFORMATION

Please see instructions on reverse side.

FACILITY INFORMATION

1. **Company/Facility Name** RB Investments, LLC **2. Facility Number** N/A
3. **Facility Address** 4103 Center Point Road Northeast
   City Cedar Rapids **State** Iowa **Zip Code** 52402
4. **Facility Contact** Rick Bartels ☒ Mr. ☐ Ms. ☐ Dr.
   Position Title
   Phone Number **Extension** **Email**
5. **Equipment Location Address** (if different than #3) 4001 Center Point Road Northeast
   City Cedar Rapids **State** Iowa **Zip Code** 52402
6. **Person Permit Should Be Sent to** (if different than #4) ☐ Mr. ☐ Ms. ☐ Dr.
   Phone Number **Extension** **Email**
7. **Mailing Address** (if different than #3) 4630 Westchester Drive Northeast, Unit A
   City Cedar Rapids **State** Iowa **Zip Code** 52402
8. **Do you want to review draft permits?** ☐ Yes ☒ No
9. **Is the Equipment Portable?** ☐ Yes ☒ No
   If "Yes" is checked, please attach a separate sheet labeled FI-7A listing all locations at which the equipment will be used.

PERMIT PREPARER

Complete this section if the application was prepared by a Professional Engineer outside of the company.

10. **Name** Scott Hanson ☒ Mr. ☐ Ms. ☐ Dr.
    Address 328 LaPorte Road
    City Waterloo **State** Iowa **Zip Code** 50702
    Email Address scott.hanson@oneatlas.com **Phone Number** 319-233-0441
    Iowa P.E. Number
11. **PERMIT PREPARER'S SIGNATURE**

CERTIFICATION

I certify that based on information and belief formed after reasonable inquiry, the enclosed documents, including the attachments are true, accurate, and complete. Legal entitlement to install and operate the equipment covered by and on the property identified in the permit application has been obtained. I certify that making a false statement, representation, or certification of electronic submissions for which I am the signatory may result in civil or criminal penalties.

12. **Responsible Official's Name** Gaylen Hiesterman ☒ Mr. ☐ Ms. ☐ Dr.
    Responsible Official's Position Title Branch Manager
    Address
    City 328 LaPorte Road **State** Iowa **Zip Code** 50702
    Email Address gaylen.hiestermen@oneatlas.com **Phone Number** 319-233-0441
13. **Responsible OFFICIAL'S SIGNATURE** **14. Date**

Instructions for Form FI: Facility Information

- **Only one (1) Form FI is required for each application.**
- **This form identifies the company, locations and personnel involved in the permit application.**

Understanding the FI Form: Each number provides an explanation for the corresponding field on the form.

1. **Company/Facility Name:** Name of the company or organization applying for the permit.

2. **Facility Number:** If known, provide the facility number assigned by the Department. This number will be in the format of a five numeric digits and can be found on previously issued permits or correspondence from the department. If you do not know your facility number, you may leave this question blank.

3. **Facility Address:** Provide the address where the facility is located.

4. **Contact Person:** Provide the name and contact information for the person within the company who should be contacted regarding questions or other pertinent information related to the permit application. This is also the person to whom the permit will be mailed, unless otherwise specified in #6.

5. **Equipment Location Address:** Provide the address for where the equipment will be or is already installed, if different than #3. If equipment is portable use the staging area address.

6. **Person Permit Should be mailed to:** Provide the contact information for the person who the permit should be mailed, if different than #4.

7. **Mailing Address:** Provide the mailing address where the permit should be mailed, if different than #3.

8. **Draft Permits:** Indicate if you would like to review draft permits prior to permit issuance. Draft permits will be sent electronically to the email address of the Facility Contact Person. A hard copy of the draft permit will NOT be mailed. **Please note:** The applicant will be allowed a maximum of three (3) business days to review the draft permits and make comments. After the review period is over, the permit will be issued. This is not considered a formal comment period; therefore, the comments will not be responded to in a formal manner, nor will the comments be automatically incorporated into the final permit.

9. **Portable Equipment:** If the equipment is portable (such as a portable asphalt plant), identify by marking "yes." **If portable equipment will be used in other locations, attach a separate sheet labeled FI-7A to list all locations known at the time of application submittal.**

10. **Permit Preparer's Information:** If the permit application was prepared by a Professional Engineer outside the company (i.e. consultant), provide the person's name and contact information. **(IAC 567 22.1(3)"b")**

11. **Signature of Permit Preparer.** If a Professional Engineer outside the company prepared the permit, the person must provide their signature on this form.

12. **Responsible Official's Name.** Provide the name and contact information of the Responsible Official associated with this permit. The Responsible Official is someone who has the authority to submit the application on behalf of the company.

13. **Signature of Responsible Official.** The person designated as the responsible official must provide their signature on this form. The application will not be assigned a Project Number for engineering review until a signed Form ATI FI is received.

14. **Date** application is signed.

Linn County Public Health
ATTN: Air Quality Division
1020 6th Street SE
Cedar Rapids, IA 52401

FORM CP: APPLICATION COVER PAGE

Please see instructions on reverse side.

Company Name: RB Investments, LLC

COMPANY DESCRIPTION

1. Please provide a description of the company/facility:
(if additional space is needed please provide an attachment labeled "Form CP-1A")

Currently the site is vacant; however, was previously a dry cleaners. Contamination from the former dry cleaners migrated and impacted the south adjacent property. Sub-slab vapor samples and indoor air samples collected from the south adjacent property indicate concentrations of VOCs fail for both potential cancer risk and non-cancer risk for site workers.

APPLICATION DESCRIPTION

2. Please provide a description of the application and the goals/objectives of this permit request:
(if additional space is needed please provide an attachment labeled "Form CP-2A")

A sub-slab vapor mitigation system will be installed on the south adjacent property. The sub-slab vapor mitigation system will draw contaminated air from beneath the foundation of the building and discharge it above the edge of the roof, 10-feet away from any opening.

3. Would you like Linn County to issue permits under a Collection of Air Permits (CAP) document? ☐ Yes ■ No

If yes, please list the emission point(s) you would like in the CAP: _____

4. SIC Code(s): N/A

5. NAICS Code(s): N/A

6. Identify any facilities within five miles of the permitted facility that this company owns and/or operates: N/A

7. Do you know if any emission units in this application are subject to Part 60 NSPS? ☐ Yes ■ No

If yes, please list the emission unit(s) and the applicable NSPS Subpart(s): _____

If additional space is needed please include an attachment labeled "CP-6A".

8. Do you know if the facility or any emission units in this application are subject to a Part 61 or Part 63 NESHAP standard? ■ Yes ☐ No

If yes, please list the emission unit(s) and the applicable NESHAP Subpart(s): Benzene, carbon tetrachloride and perchloroethylene detected beneath the foundation

If additional space is needed please include an attachment labeled "CP-7A".

9. Are Greenhouse Gases (GHG) emitted from any emission unit in this project? ☐ Yes ■ No

If "No", Form GHG does not have to be completed.

10. Please attach a process flow diagram for the application and label it "Form CP-8A".

Instructions for Form CP: Project Cover Page

- **Only one (1) Form CP is required for each application.**
- **This form provides information about what the company and facility do, and gives Linn County a better understanding of the purpose for the proposed application.**

Understanding CP Form Information: Each number provides an explanation for the corresponding field on the form.

Company Name: This is useful if application pages become separated.

1. **Company Description:** Briefly describe the operations of your company. This description can include product(s) made and/or services provided, the company headquarters and size, subsidiaries of the company, and a website address for the company, etc. The purpose is to provide the engineer with some background of the overall company.

2. **Application Description:** Provide a description for the permit application(s) being submitted. Some of the possible reasons for the permit application(s) could be new equipment/process line, amending a permit based on a stack test, correcting a permit based on an inspection or Title V review, changing operating limits, or requesting permit limits to avoid a program (i.e. PSD, Title V, NESHAP, etc.). Please also describe any facility-wide operational limitations that are being required as a part of this application.

3. **Collection of Air Permits (CAP) Document:** Please select whether you would like your permits to be issued under a CAP document. Information on CAPs can be found at www.iowadnr.gov/airconstructionpermits under tab "Genral Guidance".

4. **SIC Code(s):** Provide the four digit Standard Industrial Classification (SIC) code(s) for your facility. If your facility has more than one (1) major activity, provide the one related to the permit application first.

   SIC codes were an attempt to classify industries according to similarities in products, services, and production & delivery systems. The SIC Manual can be found at http://www.osha.gov/pls/imis/sic_manual.html and a search for SIC codes can be found at http://www.osha.gov/pls/imis/sicsearch.html.

5. **NAICS Code(s):** Provide the North American Industrial Classification System (NAICS) code(s) for your facility. If your facility has more than one (1) major activity, provide the one related to the permit application first.

   The Occupational Safety & Health Administration (OSHA) began using NAICS on January 1, 2003. NAICS uses a six (6) digit hierarchical coding system to classify all economic activity into twenty (20) industry sectors. For more information on the conversion from SIC codes to NAICS codes go to http://www.bls.gov/ces/cesnaics.htm#1. A search for your NAICS code(s) can be found at http://www.census.gov/eos/www/naics/concordances/concordances.html.

6. **Other Facilities:** Provide any other facilities, branches, or divisions of the company located within five (5) miles of the facility in this permit application.

7. **Emission Units Subject to NSPS:** List all applicable New Source Performance Standards (NSPS) for each emission unit included in this application. NSPS are Federal Regulations that apply to a wide range of sources of criteria air pollutants. To locate possible NSPS rules an emission unit may be subject to you may visit EPA's website at: https://www.epa.gov/caa-permitting/air-technology-standards-region-7.

8. **Emission Units subject to NESHAP:** List all applicable National Emission Standards for Hazardous Air Pollutants (NESHAP) for each emission unit included in this application. Part 63 NESHAP regulations apply to sources of hazardous air pollutants. See Table A for a list of hazardous air pollutants (http://www.epa.gov/ttn/atw/orig189.html). Part 61 NESHAP regulations apply to sources of the following pollutants: beryllium, mercury, vinyl chloride, radionuclides, benzene, asbestos and arsenic. To locate specific rules for Part 63 and Part 61 NESHAP source categories go to https://www.epa.gov/caa-permitting/air-technology-standards-region-7.

9. **Greenhouse Gas (GHG) Emissions:** Please indicate whether or not your application has any GHG emissions. If it does not have any GHG emissions the Form GHG does not have to be completed or submitted.

10. **Process Flow Diagram:** The process flow diagram for the application should include what raw materials or products enter and exit the emission unit(s), how they flow through the emission unit(s), fuel usage which occurs at the emission unit(s), and any other material or product that flows into and out of the emission unit(s) associated with this application. In addition, the diagram must show the pathway of air emissions from each emission unit through each piece of control equipment (if any) to the emission point. Identification numbers used in the diagram should be consistent with the labeling of EU IDs, CE IDs and EP IDs used through this application. The applicant may either attach a block flow diagram with this form or include a drawing as a part of each Form EU.

Linn County Public Health
ATTN: Air Quality Division
1020 6th Street SE
Cedar Rapids, IA 52401

FORM EU: EMISSION UNIT INFORMATION

Please see instructions on reverse side.

Company Name: RB Investments, LLC

EMISSION UNIT (PROCESS) IDENTIFICATION & DESCRIPTION

1. Emission Unit Type: Sub-slap vapor mitigation system

2. Date of On-Site Installation: To be determined

3. Emission Unit (EU) ID: Unknown **4. Emission Unit Name:** Unknown

5. Type: ☒ New Unit ☐ Unpermitted Existing Unit ☐ Modification to the Permitted Unit with Construction Permit No.:

6. Manufacturer: Unknown **7. Model:** Unknown

8. Maximum Nameplate Capacity: Unknown

9. Maximum Process Design Capacity (if different than #8): Unknown

10. Material Processed: Unknown

11. Date of Last or Proposed Modification (if applicable)**:** Unknown

REQUESTED LIMITS

12. Are you requesting any limits? ☐ Yes ☒ No If yes, check the box(es) below and list all requested limits.

☐ **Operation Hour Limits:** ☐ Hours per day ☐ Hours per year

☐ **Production Limits:** Unit of Measure:

☐ **Material Usage Limits:** Unit of Measure:

☐ **Emission Limits:**

☐ **Other Limits:**

Rationale for Requested Limit:

PROCESS AND AIR EMISSIONS DIAGRAM

13. Provide a description and a diagram to show both how material flows through this emission unit and also how air emissions will flow through the emission point connected to this emission unit. Include product input and output, fuel throughput, and any parameters which impact air emissions.

Piping consisting of PVC will be set below the foundation and ran out of the building, above the roof and 10-feet away from any opening. A fan will be installed within the piping system. The fan will draw contaminated air from beneath the foundation of the building and discharge it above the roof.

14. Control Equipment: ☐ Yes ☐ No If yes, provide CE ID: Unknown

15. Emission Point (EP) ID: Unknown

Instructions for Form EU: Emission Unit Information

- **Complete one Form EU for each emission unit in the application even if multiple emission units vent through the same emission point. (Note: you may submit one Form EU describing multiple emission units if either: the emission units are functionally similar or emission units were previously permitted, vent to the same emission point and vent to the same control device. If submitting on same Form EU please uniquely identify each Emission Unit Name and EU ID.)**

Understanding EU Form Information: Each number provides an explanation for the corresponding field on the form.

Company Name: This is useful if application pages become separated.

Emission Unit Identification & Description

1. **Emission Unit Type:** Provide the type of emission. Examples are provided in the following table:

Air Gas Furnace	Open Tank or Vat
Calciner	Other combustion
Chemical Reactor	Other evaporative sources
Chipper/Flaker/Hammermill	Other fugitive
Condensate Stripper	Other process equipment
Conveyor	Oxidation Unit
Crusher	Primary Condenser
Curing Oven	Primary Tube Dryer
Degreaser	Printing Line
Direct-fired Dryer	Process Equipment and Process Area Drains
Distillation Column/Stripper	Process Equipment Fugitive Leaks
Dryer, unknown if direct or indirect.	Process Heater
Duct Burner	Process Vent
Engine Test Cell	Regenerative Furnace
Evaporator	Roof vents/Building vents
Finish Mill	Saw
Flare	Screen
Furnace	Silo
Gasoline Loading Rack or Arm	Sludge Storage Lagoons/Drying Beds
Grinder	Storage bin
Incinerator	Storage Tank
Indirect-fired Dryer	Thin Film Evaporator
Kiln	Transfer Point
Miscellaneous Coating Operation	Transfer System
Mixer or Blender	Turbine
Non-TSDF Treatment, Storage, Disposal System	Unclassified
Open Air Fugitive Source	Vapor Incinerator
Open Storage Pile	

2. **Date of On-Site Installation:** Provide the date when on-site installation of the equipment began or will begin, including the month and year. If you don't know the month, please use January.

3. **Emission Unit (EU) ID:** Called the emissions unit (EU) identification (ID). Each source in the application must have its

own identifier. It can be any combination of letters or numbers up to 16 characters in length. The ID should match the ID for this equipment used on other construction permit applications and within this application. If also submitting an operating permit application, the ID used in this application should be consistent with those used in the operating permit application.

4. **Emission Unit Name:** Provide name of the emission unit, such as Printer #4, Curing Oven #3, Storage Tank #2, etc.

5. **Type:** Indicate "new unit" for an emission unit intended to be installed at the site, or "unpermitted existing unit" for an emission unit already installed at the site. If the emission unit already has a construction permit and is being modified, indicate so and provide the current construction permit number.

6. **Manufacturer:** Provide the name of the manufacturer of the emission unit. If the unit is custom-designed or homemade, indicate so.

7. **Model**: Provide the model number of the emission unit. If the unit is custom-designed or homemade, indicate so.

8. **Maximum Nameplate Capacity:** Provide the maximum capacity of the emission unit. For example, a bake oven capacity may be in mmBTU/hr in terms of heat input of natural gas; an assembly line capacity may be in parts produced per hour. Capacity should be based on a rated nameplate or capacity in the manufacturer's literature. If it is a batch operation, list the individual batch capacity. Examples provided in table below:

ACRE	KILOWATTS
AMPERE-HOURS	MEGAGRAMS
BARRELS	MEGAWATTS
BARRELS PER DAY	MILES PER YEAR
BARRELS PER HOUR	MILLION BTU PER HOUR
BARRELS PER YEAR	MILLION BTU PER YEAR
BOARD FEET PER DAY	MILLION CUBIC FEET PER HOUR
BOARD FEET PER HOUR	MILLION CUBIC FEET PER YEAR
BTU PER HOUR	MILLION GALLONS PER YEAR
BUSHELS PER HOUR	MILLION POUNDS PER HOUR
CUBIC FEET PER DAY	MILLION STANDARD CUBIC FEET PER HOUR
CUBIC FEET PER HOUR	Other
CUBIC FEET PER MINUTE	POUNDS
CUBIC FEET PER YEAR	POUNDS PER DAY
CUBIC METERS	POUNDS PER HOUR
CUBIC YARDS PER HOUR	POUNDS PER MINUTE
DRY STANDARD CUBIC FEET PER HOUR	POUNDS PER YEAR
DRY STANDARD CUBIC FEET PER MINUTE	SQUARE FEET
FEET PER HOUR	STANDARD CUBIC FEET PER HOUR
FEET PER MINUTE	STANDARD CUBIC FEET PER MINUTE
GALLONS	TONS
GALLONS PER DAY	TONS PER DAY
GALLONS PER HOUR	TONS PER HOUR
GALLONS PER MINUTE	TONS PER YEAR
GALLONS/YEAR	UNIT/HR
HORSEPOWER	VMT/HR
INCHES/HR	

9. **Maximum Process Design Capacity:** Provide the maximum process design capacity of the emission unit, if different than maximum nameplate capacity; it could be a long term capacity. If there are multiple components or operational considerations, list the maximum capacity the process can achieve. If the capacity is limited due to a bottleneck,

please indicate it. Examples are provided in table under maximum nameplate capacity.

10. **Material Processed:** Provide the type of raw material processed, finished product(s) and any types of fuels used in the emission unit.

11. **Date of Last or Proposed Modification:** Provide the month and year of the last modification. In the case of a proposed modification, provide the best estimate of the modification date. For the purpose of this form, ***Modification*** means any physical change or change in the method of operation of any existing equipment or control equipment.

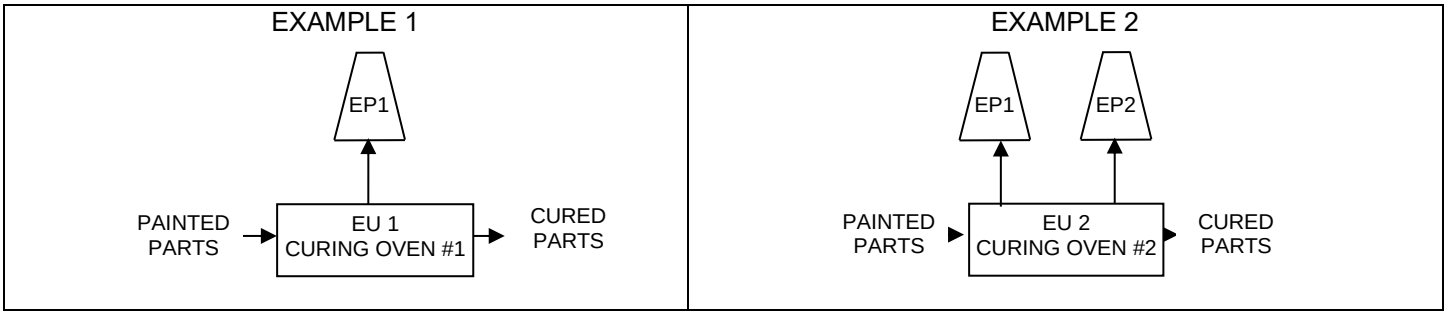
Requested Limits

12. If you are requesting any limits, mark "Yes". Then provide the requested limit that applies to this emission unit.
    - **Operation Hour Limits:** operation hour limits may be in terms of number of hours per day or hours per year.
    - **Production Limits:** production limits may be in terms of parts produced per hour or per year.
    - **Material Usage Limits:** material usage limits may be in gallons per day or gallons per year.
    - **Emission Limits:** emission limits may be in terms of pounds per hour or tons per year for each pollutant. If requesting synthetic minor limits to stay out of Title V or PSD programs, please indicate this. List any limits requested because of federal rules, such NSPS or NESHAP.
    - **Other Limits:** any other type of limits may be specified here.
    - **Rationale for Requested Limit:** If requesting a permit limit(s), indicate the rationale for the requested limit. If you are not sure about a requested operating limit, contact the Linn County Public Health Air Quality Division at (319) 892-6000.

Process and Air Emissions Diagram

13. The process description and diagram should include what raw materials or products enter and exit the emission unit, how they flow through the emission unit, fuel usage which occurs at the emission unit, and any other material or product that flows into and out of the emission unit. In addition, show the pathway of air emissions from each emission unit through each piece of control equipment (if any) to the emission point. Identification numbers used in the diagram should be consistent with the labeling of EU IDs, CE IDs and EP IDs used through this application.

    The applicant may create and save an image and insert in box 13 of the form. Alternatively, the applicant may attach the Process Flow Diagram and label it "Form EU-13A".



14. **Control Equipment:** Indicate if the emission unit is equipped with air pollution control equipment. Provide the control equipment ID. Also complete the appropriate control equipment form. The name and ID for this equipment should be the same as those used on control equipment form and throughout the application.
15. **Emission Point (EP) ID:** Called the emission point (EP) identification (ID). It can be any combination of letters or numbers. The ID should match the ID for this equipment used on other construction permit applications and within this application. If also submitting an operating permit application, the ID used in this application should be consistent with those used in the operating permit application.

Linn County Public Health
ATTN: Air Quality Division
1020 6th Street SE
Cedar Rapids, IA 52401

FORM EP: EMISSION POINT INFORMATION

Please see instructions on reverse side.

Company Name: RB Investments

STACK/VENT CHARACTERISTICS

1. Emission Point (EP) ID: Unknown

2. Emission Point Name: Unknown

3. Stack Opening Size:
- ☐ Circular, diameter (inches) _____
- ☐ Other, size (inches x inches) Unknown

4. Height From Ground (feet)**:** Unknown

5. Discharge Style:
- ☐ Vertical (without rain cap or obstruction)
- ☐ Vertical with rain cap or obstruction
- ☐ Downward discharge; for example, a goose neck stack
- ☐ Horizontal discharge
- ☐ I (Inside-Vent inside building)
- ☐ Fugitive (Not reasonably captured and vented to a stack)

EXHAUST INFORMATION

6. Moisture Content % (if known)**:** Unknown **7. Exit Temperature** (°F)**:** Unknown

8. Rated Flow Rate: ☐ ACFM: Unknown ☐ SCFM: Unknown

Instructions for Form EP: Emission Point Information

- **Complete one (1) Form EP for each emission point in the application (Note: You may submit one Form EP describing multiple emission points if the emission point information is identical. If submitting on the same Form EP please uniquely identify each point ID, EPID.)**
- **This form is used by the Linn County Public Health Air Quality Division to identify the emission point (stack or vent) used for the emission unit(s) proposed in this permit application.**

Understanding EP Form Information: Each number provides an explanation for the corresponding field on the form.

Company Name: This is useful if application pages become separated.

Stack/Vent Characteristics:

1. **Emission Point (EP) ID:** Called the emission point (EP) identification (ID). It can be any combination of letters or number up to 16 characters in length. The ID should match the ID for this equipment used on other construction permit applications and within this application. If also submitting an operating permit application, the ID used in this application should be consistent with those used in the operating permit application.

2. **Emission Point (EP) Name:** Provide a unique name for the emission point (EP). It can be any combination of letters or number up to 16 characters in length. The (EP) name should match the name for this equipment used on other construction permit applications and within this application.

3. **Stack Opening Size:** Indicate whether the stack or vent opening is circular or other. Provide the stack opening dimensions in inches. For "Stack-in-a Stack" discharge styles, the stack opening size is based on the outer stack.

4. **Height from the Ground:** Provide the height of the emission point from the ground to the top of the stack in feet. For "Stack-in-a Stack" discharge styles, the stack height is based on the height of the outer stack.

5. **Discharge Style:** Check if the stack opening discharge style is a vertical discharge, "goose neck" stack (downward discharge), horizontal stack (horizontal discharge) or stack with a rain cap that does not allow for an unobstructed, upward vertical flow to the atmosphere. If the air stream is vented vertically to the atmosphere and not obstructed in any manner while operating then the discharge style is vertical. If the emission unit(s) does not vent directly to the atmosphere but rather, vents into the building, mark inside. If the emission unit(s) does not vent through a stack and is not reasonable captured and vented to a stack, mark fugitive. Examples include but are not limited to plant roadways, storage piles and fitting/piping losses (equipment leaks).

   Examples of stacks that are equipped with rain guards that the Linn County Public Health Air Quality Division has considered vertical unobstructed discharges include but are not limited to:

   "Stack-in-a Stack" - This design is based on the principle that rain falls at an angle. The inner stack is surrounded by an outer stack with space between the two. Rain runs down the inside wall of the outer stack, instead of the inside wall of the inner stack.

   Hexagonal Stack - This design diverts air around an internal wedge used to catch rain and air is discharged in a vertical manner. A hose is connected to the bottom of the wedge to drain collected water.

   Hinged Stack - A hinged damper opens when air exhausted through the stack and closes when air is not being exhausted to prevent rain from entering the stack.

Exhaust Information:

6. **Moisture Content:** Provide the moisture content in percent of the exhaust gas, if known. If unknown, leave blank.

7. **Exit Temperature:** Provide the temperature of the exhaust gases at the emission point in degrees in Fahrenheit (°F). You may also indicate "ambient" (exit temperature is dependent on the temperature of the outdoor environment) or "building ambient" (exit temperature is dependent on the temperature of the indoor environment) as the exit temperature.

8. **Rated Flow Rate:** If there is a fan equipped with the emission point, give the rated capacity of the fan in actual cubic feet per minute (ACFM) or standard cubic feet per minute (SCFM).