Appendix III–6 Contaminated Soils & Groundwater

Contaminated Soils & Groundwater

A. 02 61 13 - Excavation and Handling of Regulated Substances
B. BDE Forms 2741, 2742, 2743

DIVISION 2 – EXISTING CONDITIONS
Section 02 61 13 – Excavation & Handling of Regulated Substances

1. GENERAL

1.1. WORK INCLUDES

A. Base Bid:

1. General:

a. Contractor to provide excavation, handling, temporary storage, hauling, and legal disposal of regulated soils or other wastes found within the project limits. This includes regulated soil, sediments, or water generated during the excavation process in support of construction activities. All soils classified by BDE and removed as required by the construction documents for completion of the work shall be part of the base bid.

b. An A/E selected environmental firm will be responsible for regulated substance monitoring in accordance with Section 1.6 of this document. The Contractor will be required to coordinate with the A/E selected environmental firm a minimum of 48 hours prior to mobilization to the field.

c. Contractor and A/E selected environmental firm will comply with all Federal, State, and Local law or ordinances regarding the handling and proper disposal of regulated soils.

d. Contractor will procure all permits and licenses, pay all charges and fees, and give all notices necessary and incidental to the lawful completion of the work with assistance from the A/E selected environmental firm, as applicable.

e. The A/E selected environmental firm will prepare all required environmental plans and reports, and conduct monitoring and testing of all excavation work. Submit plans, reports, and testing as specified using IDOT BDE forms 2740, 2742, and 2743 (Available on the IDOT Resources/Forms Design & Environment website). See Section 3.1 of this document for additional details. The environmental firm shall consult with Contractor regarding methods and means of construction to include in the required IDOT forms. Contractor is required to follow the requirements listed in the IDOT BDE form 2741.

f. The A/E selected environmental firm, in accordance to Section 3.1, must be on site at all times during excavation and/or loading of regulated substances designated in Section 3.4.

g. Field sampling and testing results for the purpose of landfill characterization and disposal, shall be completed by the A/E selected environmental firm in accordance to the requirements in Section 3.12 of this specification.

B. Alternate Bid:

(NOT USED)

C. Unit Prices apply to this section: See Sections 00 41 00 & 01 22 00.

1. Method of Measurement:

a. Handling, hauling, legal disposal and temporary storage, of regulated soils or other wastes will be measured for payment in their original positions (i.e. in situ), and the volume(s) in cubic yards; as computed by the method of average end areas. Unit price will apply for only regulated soils being removed from the site and disposed of legally in the appropriate landfill. (Refer to paragraphs in Section 3.4.A.12)

Material moved more than once at either stage construction measured for payment only once.

2. Basis of Payment

a. The transportation and disposal of regulated soil, sediment and other materials from an excavation will be paid for as part of the Unit Prices per cubic yard for NON-SPECIAL WASTE DISPOSAL, SPECIAL WASTE DISPOSAL, or HAZARDOUS WASTE DISPOSAL.

b. The transportation, management, and disposal of uncontaminated soils that is deemed as CCDD/USFO DISPOSAL will be disposed of as a lump sum item by contractor with construction debris.

1.2. RELATED WORK

A. Specified Elsewhere

1. 00 31 32 – Soil Boring Report
2. 00 41 00 – Bid Form
3. 01 11 00 – Project Summary
4. 01 22 00 – Unit Prices
5. 01 33 23 – Shop Drawings, Product Data, & Samples Schedule
6. 01 45 29 – Testing Laboratory Services
7. 31 22 14 – Earthwork

1.3. REFERENCES

A. Project Site Specific Investigation Reports. Site-specific information including the Preliminary Site Investigation (PSI), Preliminary Environmental Site Assessment (PESA), and USDA web soil survey. (available upon request).

B. IDOT Standard Specifications for Road and Bridge Construction [SSRBC], including all current edition of Supplemental Specifications, and Recurring Special Provisions (Available for purchase through IDOT).

C. American Petroleum Institute (API) Recommended Practice 1604 (Available for purchase through API).

D. Project Storm Water Pollution Prevention (SWPPP), as applicable (available upon request).

E. Illinois Environmental Protection Agency (IEPA) Forms LPC-663 (available upon request).

F. IDOT Resources/Forms Design & Environment website: http://www.idot.illinois.gov/home/resources/Forms-Folder/d

G. Link to BDE Pre-qual environmental firms and Environmental CDB.

http://www.idot.illinois.gov/doing-business/procurements/engineering-architectural-professional-services/index

1.4. QUALITY ASSURANCE

A. Regulatory Requirements.

1. Shall, at all times, observe and comply with all Federal and State laws, local laws, ordinances, and regulations which in any manner affect the conduct of the work and all such orders or enactments as exist at the present and which may be enacted later, of legislative bodies or tribunals having legal jurisdiction or which may have affect over the work, and no plea or misunderstanding or ignorance thereof will be considered.

2. Procure all permits and licenses, pay all charges and fees, and give all notices necessary and incident to the due and lawful prosecution of the work.

B. Environmental Firm Qualifications per IDOT BDE form 2740:

1. For this project, the A/E firm will select and contract the environmental firm to conduct regulated substance monitoring. The A/E selected environmental firm will be authorized to direct the Contractor regarding soil management in accordance with the requirements of this Section.

2. The A/E selected firm shall be an environmental firm having completed at least five (5) documented leaking underground storage tank (LUST); and/or five (5) Site Remediation Program (SRP)

cleanups following 35 Ill. Admin. Code 734, 740, or 742 within the last ten (10) years; a prequalified firm in “Hazardous Waste – Simple” or “Hazardous Waste – Advanced” by IDOT or “Environmental” by CDB; or in specific cases, with written BDE approval, applicable project experiences outside of the firm may be allowed for key personnel.

3. Documentation includes, but is not limited to; verifying remediation and special waste operations for sites regulated with gasoline, diesel, or waste oil in accordance with all Federal, State, or local regulatory requirements, and shall be provided to the A/E and the Using Agency for review and approvals.

4. Neither the Contractor nor the A/E selected firm shall be a current consultant or have any ties with any of the properties contained within and/or adjacent to this construction project.

5. UST only; the contractor shall be licensed and certified with the Illinois Office of the State Fair Marshall (OSFM) and shall possess all required permits to perform the work as indicated prior to bidding.

1.5. ABBREVIATIONS/DEFINITIONS

A. A/E – Architect/Engineer

B. API – American Petroleum Institute

C. CFR – Code of Federal Regulations

D. CCDD/USFO – Clean Construction and Demolition Debris / Uncontaminated Soil Fill Operation; as defined in 35 Illinois Administrative Code (Ill. Admin. Code), Subtitle J, Chapter I, Section 1100.

E. CDB PM – Capital Development Board Project Manager

F. COCs – Contaminants of Concern

G. Disturbing Soil – Excavation, hauling away from site, transfer of soil from original location to stock-piled location

H. Excavation – the removal or grading of any soil or fill material, including underground utility works such as installation of fiber optic cabling, water service, and sanitary sewer services for the purposes of installing foundations or structures with the exception of aggregate fills which are not considered a soil or fill material of concern. The following types of maintenance projects are not considered excavation when the excavated material is left on, or incorporated within, the IDOT project area for that project:

- bridge maintenance
- ditch cleaning
- working within the subbase or pavement
- removal and replacement of shoulders, curb and gutter, or sidewalk ramps

I. Hazardous waste – as defined by 40 CFR, Part 261; and 35 Ill. Admin. Code, Sections 722, 723, 726, 728, and 729

J. IEMA – Illinois Emergency Management Agency

K. IEPA – Illinois Environmental Protection Agency

L. IDOT - Illinois Department of Transportation

M. IDOT BDE – IDOT Bureau of Design and Environment

N. LUST – Leaking underground storage tank

O. MAC – Maximum Allowable Concentrations for chemical constituents in uncontaminated soil; as defined in 35 Ill. Admin. Code, Section 1100.605.

P. MSA – Metropolitan Statistical Area county; as defined in 35 Ill. Admin. Code, Section 742.200

Q. NPDES – National Pollutant Discharge Elimination System

R. OSHA – Occupational Safety and Health Administration

S. OSFM – Office of the Illinois State Fire Marshall

T. Special Provisions – Additions and/or revisions to standard and supplemental guide specifications covering conditions peculiar to an individual contract.

U. Special waste – As defined in 35 Ill. Admin. Code, Sections 808 and 809

V. UST – Underground Storage Tank

W. Work Zones – As described in IDOT BDE Form 2741 (IDOT BDE form 2741 (Figures 5-9, fillable form is available on IDOT resources/forms site http://www.idot.illinois.gov/Assets/uploads/files/IDOT-Forms/BDE/BDE%202741.pdf)

1.6. SUBMITTALS

A. A BDE 2740 Regulated Substance Pre-Certification Project Experience for CDB/CI Projects (RSPC-PE) shall be submitted by the A/E selected environmental firm to the **Using Agency** for review before the contract is executed for design. This step may occur as much as two years before construction begins. The form shall be signed by an Illinois licensed Professional Engineer, Professional Geologist or Professional Architect. (IDOT BDE form 2740 (Figures 1-4, fillable form is available on IDOT resources/forms site

http://www.idot.illinois.gov/Assets/uploads/files/IDOT-Forms/BDE/BDE%202740.pdf)

The **Using Agency** will require up to 21 calendar days for review of the BDE 2740 (RSPC-PE). The review may involve revision and resubmittal; in which case, an additional 21 days will be required for each subsequent review. After approval, the RSPC-PE shall be revised as necessary to

reflect changes in personnel and/or qualifications to be submitted to the Using Agency for approval prior to construction.

As part of the BDE 2740 (RSPC-PE), the A/E selected environmental firm shall meet the following qualifications.

1. Regulated Substances Monitoring. Qualification for environmental observation and field screening of regulated substances work and environmental observation of UST removal shall require either pre-qualification in Hazardous Waste by the Department or demonstration of acceptable project experience in remediation and operations for regulated sites in accordance with applicable Federal, State, or local regulatory requirements using BDE 2740 (RSPC-PE).

   Qualification for each individual performing regulated substances monitoring shall require a minimum of one-year of experience in similar activities as those required for the project.

2. UST Removal. Qualification for UST removal work shall require licensing and certification with the OSFM and possession of all permits required to perform the work. A copy of the permit shall be provided to the Using Agency prior to tank removal.

B. **Upon receiving Authorization-To-Proceed (ATP) from CDB, the Contractor shall submit 21 calendar days PRIOR to beginning work or working in areas identified herewith**, a Regulated Substance Pre-Construction Plan – CDB/CI Projects (RSPCP-CDB/CI), IDOT BDE form 2741 (Figures 5-9, fillable form is available on IDOT resources/forms site). http://www.idot.illinois.gov/Assets/uploads/files/IDOT-Forms/BDE/BDE%202741.pdf) and all supporting documents for review by the **Using Agency**. The review may involve revision and resubmittal; in which case, an additional 21 days will be required for each subsequent review.

   The form shall be signed by a Prime Contractor representative with signatory authority. The Contractor shall also document it does not have any current ties with any of the properties contained within, adjoining, or potentially affecting the work. (Note. The Contractor is responsible for submitting their own company-specific Site Contamination Health and Safety Plan (SCHASP) as an attachment to BDE 2741.) Work cannot begin until the 2741 has been accepted by the **Using Agency**.

C. The Contractor shall coordinate and cooperate with the A/E selected environmental firm so that they can document, **daily**, all field activities relating to monitoring/excavating/hauling of regulated materials using the IDOT BDE form 2742 (Figures 10-11, fillable form is available on IDOT resources/forms site http://www.idot.illinois.gov/Assets/uploads/files/IDOT-Forms/BDE/BDE%202742.pdf) submit form and all supporting documents to CDB PM, A/E, and Using Agency.

D. The A/E selected environmental firm shall submit a Regulated Substances Final Construction Report using the IDOT BDE Form 2743 (Figures 12-14, fillable form is available on IDOT resources/forms site http://www.idot.illinois.gov/Assets/uploads/files/IDOT-Forms/BDE/BDE%202743.pdf) submit form and supporting documents (i.e. manifests, IEPA forms, etc.) to the **Using Agency** at Substantial Completion for review and approval with copies sent to CDB PM and A/E.

E. Provide a State certified manifest to the A/E selected environmental firm and Using Agency for the transport and disposal of all non-hazardous special waste (hereafter referred to as special waste) or hazardous waste, as well as any removed USTs.

2. PRODUCTS

2.1 MATERIALS

A. Personal Protective Equipment: Ensure each worker has the proper personal protective equipment (PPE) for the zone and location in which he/she is to perform construction or materials management activities. Also, the A/E selected environmental firm and the Contractor are responsible for providing their own required PPE, and defining the provisions for PPE in their own company-specific SCHASP.

B. Warning Devices and Barricades: Adequately identify and guard all hazardous areas and conditions by visual warning devices and, where necessary, physical barriers. As required, excavations from which the public is excluded shall be marked or guarded in a manner appropriate to the hazard.

C. Equipment [SSRBC 669.02]:

1. The Contractor shall notify CDB PM, A/E, A/E selected environmental firm, and Using Agency of all excavation, storage, and transportation equipment to a work area location. The equipment shall comply with OSHA and API guidelines and shall be furnished in a clean condition. Clean condition means the equipment does not contain any residual material classified as a non-special waste, non-hazardous special waste, or hazardous waste. Residual materials include, but are not limited to, petroleum products, chemical products, sludges, or any other material present in or on equipment.

2. Before beginning any associated soils or groundwater management activity, notify CDB PM, A/E, A/E selected environmental firm, and Using Agency with the opportunity to visually inspect and approve the equipment. If the equipment contains any regulated residual material, decontamination shall be performed on the equipment as appropriate to the regulated substance and degree of contamination present according to OSHA and API guidelines. All cleaning fluids

used shall be treated as the contaminant unless laboratory testing proves otherwise.

3. EXECUTION

3.1 PERSONNEL ACTION:

A. The A/E selected environmental firm and the Contractor will develop their own SCHASP. The A/E selected environmental firm will complete their site-specific SCHASP prior to the start of construction and maintain a copy of the SCHASP on-Site at all times during construction. The Contractor will develop a site-specific SCHASP and shall submit it as an attachment using the BDE 2741 (RSPCP-CDB/CI). The Contractor's SCHASP, attached to IDOT BDE form 2741 (Figures 5-9, fillable form is available on IDOT resources/forms site http://www.idot.illinois.gov/Assets/uploads/files/IDOT-Forms/BDE/BDE%202741.pdf), shall pertain to any visitors or State employees at the site.

Both the A/E selected environmental firm and the Contractor are to have their own SCHASPs and are responsible for their own employees. The A/E selected environmental firm cannot take on the role of the Contractor's health and safety officer. (Note. BDE will not review SCHASPs, only verify that they are completed as required and maintained on-site at all times during construction activities.)

B. Health and Safety Training. The Contractor and the A/E selected environmental firm shall each indicate their designated environmental professionals and project safety officers responsible for monitoring activities within designated exclusion or decontamination zones has successfully completed the initial 40-hour Health and Safety Training Course and are current with refresher training pursuant to applicable Federal, State and/or Local standards, including OSHA requirements under 29 CFR 1910.120 (HAZWOPER). At a minimum, the Contractor's Health and Safety Officer and all on site personnel from the A/E selected environmental firm shall have successfully completed the initial 40-hour Health and Safety Training Course and are current with refresher training pursuant to applicable Federal, State and/or Local standards, including OSHA requirements under 29 CFR 1910.120 (HAZWOPER). The personnel required to have training in accordance with 29 CFR 1910.120 shall have certifications of completion for the Annual 8-Hour HAZWOPER Refresher with them on the jobsite while working in areas regulated under the special provision(s). The A/E selected environmental professional responsible for monitoring activities shall also have successfully completed an additional 8-Hour Supervisor Training Course pursuant to applicable federal, State and/or local standards, including OSHA requirements under 29 CFR 1910.120. The Contractor is responsible for ensuring that other contractor and subcontractor personnel required to be trained under 29 CFR 1920.120 have received required training and updates [IDOT BDE form 2741, page 5 (paragraph C)] (Figures

5-9, fillable form is available on IDOT resources/forms site http://www.idot.illinois.gov/Assets/uploads/files/IDOT-Forms/BDE/BDE%202741.pdf).

C. Medical Exams: The A/E selected environmental firm r shall indicate all personnel in his/her work force who are required to have the training described in Section 3 of the IDOT BDE form 2740, page 4 (paragraph C) have received and passed a current medical examination as required under applicable Federal, State and/or Local standards. All on-site personnel from the A/E selected environmental firm shall have the training described in Section 3.C of the IDOT BDE form 2740, page 4 have received and passed a current medical examination as required under applicable Federal, State and/or Local standards. The A/E selected environmental firm is responsible for ensuring that their staff and their subcontractor personnel subject to medical monitoring under 29 CFR 1910.120 have received and passed a current medical examination under applicable Federal, State, and/or Local standards. (Figures 1-4, fillable form is available on IDOT resources/forms site http://www.idot.illinois.gov/Assets/uploads/files/IDOT-Forms/BDE/BDE%202740.pdf). (Note. If Work Zones are required as part of the contract, the Contractor will be subject to the health and safety requirements listed on BDE 2741 Section 4.)

3.2 WORK ZONES: If required, the Contractor will identify three distinct zones (exclusion, decontamination, and support) shall divide the affected portions of the project. [IDOT BDE form 2741] (Figures 5-9, fillable form is available on IDOT resources/forms site http://www.idot.illinois.gov/Assets/uploads/files/IDOT-Forms/BDE/BDE%202741.pdf).

3.3 DECONTAMINATION: The Contractor shall document in IDOT BDE form 2741, page 5. (Figures 5-9, fillable form is available on IDOT resources/forms site http://www.idot.illinois.gov/Assets/uploads/files/IDOT-Forms/BDE/BDE%202741.pdf)

3.4 REGULATED SUBSTANCES MANAGEMENT AND DISPOSAL:

A. The Contractor shall perform excavation activities in a manner that will limit spills and the potential for regulated soil to be mixed with uncontaminated soil. Direct load regulated soil into roll-off containers or trucks for transportation and disposal, as required. The Contractor shall be responsible for obtaining all approvals for final disposal of regulated and uncontaminated soil and providing the documentation to the A/E selected environmental firm for reporting.

Management and disposal of regulated soil shall be according to the following: [SSRBC 669.05]

The Contractor shall coordinate and cooperate with the A/E selected environmental firm to be on site in order to conduct regulated substance monitoring for all excavation and loading work in areas designated under this section. The A/E selected environmental firm shall document all field

activities as the Contractor direct loads regulated soil into roll-off containers or trucks for transportation and disposal, as required.

Management and disposal of regulated soil shall be according to the following: [SSRBC 669.05]

Soil Analytical Results Exceed Most Stringent MAC. When the soil analytical results indicate detected levels exceed the most stringent MAC for chemical constituents in soil established pursuant to Subpart F of 35 Ill. Adm. Code 1100.605, the soil shall be managed as follows:

1. When analytical results indicate inorganic chemical constituents exceed the most stringent MAC but they are still considered within area background levels by the Using Agency, the excavated soil can be utilized within the project area as fill, when suitable. Such soil excavated for storm sewers can be placed back into the excavated trench as backfill, when suitable, unless trench backfill is specified. If the soils cannot be utilized within the project area, they shall be managed and disposed of off-site as NON-SPECIAL WASTE DISPOSAL. [SSRBC 669.05(a)(1)]. **If the soils cannot be utilized within the project area, they shall be managed and disposed of off-site as NON-SPECIAL WASTE DISPOSAL.**

    a. The conditions described above are met and the Contractor shall manage any excavated soils and sediment in accordance with these criteria within the following areas.

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        - Station 5+25 to Station 6+25, 80 to 180 feet RT. The Engineer has determined this material from 0 to 5-foot bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminants of concern sampling parameters include: arsenic, iron.

2. When analytical results indicate chemical constituents exceed the most stringent MAC but do not exceed the MAC for a MSA County, the excavated soil can be utilized within the project area as fill, when suitable, or managed and disposed of off-site at a CCDD facility or an USFO within an MSA County provided the pH of the soil is within the range of 6.25 - 9.0, inclusive. Certification. [SSRBC 669.05(a)(2)]. **If this material cannot be used on site, it must be disposed at a CCDD or USFO.**

    a. The conditions described above are met and the Contractor shall manage any excavated soils and sediment in accordance with these criteria within the following areas:

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3. When analytical results indicate chemical constituents exceed the most stringent MAC but do not exceed the MAC for an MSA County excluding Chicago, or the MAC within the Chicago corporate limits, the excavated soil can be utilized within the project area as fill, when suitable, or managed and disposed of off-site at a CCDD facility or an USFO within an MSA County excluding Chicago or within the Chicago corporate limits provided the pH of the soil is within the range of 6.25 - 9.0, inclusive. [SSRBC 669.05.a.3]. **If this material cannot be used on site, it must be disposed at a CCDD or USFO**

Hanley Building (HHH) – New Laboratory – None

4. When analytical results indicate chemical constituents exceed the most stringent MAC but do not exceed the MAC for an MSA County excluding Chicago, the excavated soil can be utilized within the project area as fill, when suitable, or managed and disposed of off-site at a CCDD facility or an USFO within an MSA County excluding Chicago provided the pH of the soil is within the range of 6.25 - 9.0, inclusive. [SSRBC 669.05(a)(4)]. **If this material cannot be used on site, it must be disposed at a CCDD or USFO.**

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5. When the Using Agency determines soil cannot be managed according to paragraphs 3.4.A.1 through 3.4.A.4 above and the materials do not contain special waste or hazardous waste, as determined by the Using Agency, the soil shall be managed and disposed of at a landfill as NON-SPECIAL WASTE DISPOSAL. [SSRBC 669.05(a)(5)]. **This material must be disposed at a licensed landfill as NON-SPECIAL WASTE DISPOSAL.**

   a. The conditions described above are met and the Contractor shall manage any excavated soils and sediment in accordance with these criteria within the following areas:

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      - Station 5+25 to Station 6+25, 25' LT to 125 feet LT. The Engineer has determined this material from 0 to 5-foot bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(a)(5). Contaminants of concern sampling parameters include: iron and manganese.

6. When analytical results indicate soil is hazardous by characteristic or listing pursuant to 35 Ill. Admin. Code 721, contains radiological constituents, or the Using Agency otherwise determines the soil cannot be managed according to paragraphs 3.4.A.1 through 3.4.A.5

above, the soil shall be managed and disposed of off-site as SPECIAL WASTE DISPOSAL or HAZARDOUS WASTE DISPOSAL, as applicable. [SSRBC 669.05(a)(6)]. **This material must be managed and disposed at a permitted facility as SPECIAL WASTE DISPOSAL or HAZARDOUS WASTE DISPOSAL, as applicable.**

a. The conditions described above are met and the Contractor shall manage any excavated soils and sediment in accordance with these criteria within the following areas:

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7. Soil Analytical Results Do Not Exceed Most Stringent MAC. When the soil analytical results indicate that detected levels do not exceed the most stringent MAC, the excavated soil can be utilized within the project area as fill, when suitable, or managed and disposed of off-site according to Article 202.03 of the SSRBC. However, the excavated soil cannot be taken to a CCDD facility or an USFO for any of the following reasons. **This material can be used on site, taken to another IDOT, CDB project, or disposed of legally at a BDE pre-approved waste site.**

a. The conditions described above are met and the Contractor shall manage any excavated soils and sediment in accordance with these criteria within the following areas:

1. The pH of the soil is less than 6.25 or greater than 9.0. [SSRBC 669.05(b)(1)]

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- Station 3+75 to Station 5+25, 0 to 275 feet RT and 25 feet LT. The Engineer has determined this material from 0 to 5-foot bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(b)(1). Contaminants of concern sampling parameters include: iron and pH.
- Station 4+50 to Station 5+40, 125 to 230 feet LT. The Engineer has determined this material from 0 to 5-foot bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(b)(1). Contaminants of concern sampling parameters include: iron.
- Station 5+25 to Station 6+25, 80 to 180 feet RT. The Engineer has determined this material from 5 to 12-foot bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(b)(1). Contaminants of concern sampling parameters include: arsenic, iron.

- Station 5+25 to Station 6+25, 80' RT to 25 feet LT. The Engineer has determined this material from 0 to 5-foot bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(b)(1). Contaminants of concern sampling parameters include: iron.

2. The soil exhibited elevated photoionization detector (PID) utilizing a lamp of 10.6eV or greater or a flame ionization detector (FID) readings. [SSRBC 669.05(b)(2)]

8. Soil Analytical Results Exceed Most Stringent MAC but Do Not Exceed Tiered Approach to Corrective Action Objectives (TACO) Residential. When the soil analytical results indicate that detected levels exceed the most stringent MAC but do not exceed TACO Tier 1 Soil Remediation Objectives for Residential Properties pursuant to 35 Ill. Admin. Code 742 Appendix B Table A, the excavated soil can be utilized within the project area as fill, when suitable, or managed and disposed of off-site according to Article 202.03 of the SSRBC. However, the excavated soil cannot be taken to a CCDD facility or an USFO. [SSRBC 669.05(c)]. **This material can be used on site, taken to another IDOT, CDB project, or disposed of legally at a BDE pre-approved waste site.**

a. The conditions described above are met and the Contractor shall manage any excavated soils and sediment in accordance with these criteria within the following areas:

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- Station 3+75 to Station 5+25, 80 to 180' RT. The Engineer has determined this material from 10 to 12-foot bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(c). Contaminants of concern sampling parameters include: iron.
- Station 3+75 to Station 4+50, 125 to 230 feet LT. The Engineer has determined this material from 0 to 5-foot bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(c). Contaminants of concern sampling parameters include: iron.
- Station 4+50 to Station 5+40, 80 to 170 feet RT. The Engineer has determined this material from 0 to 5-foot bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(c). Contaminants of concern sampling parameters include: iron and manganese.
- Station 4+50 to Station 5+40, 25 to 125 feet LT. The Engineer has determined this material from 0 to 5-foot bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(c). Contaminants of concern sampling parameters include: manganese.

- Station 5+25 to Station 6+25, 80' RT to 25 feet LT. The Engineer has determined this material from 10 to 12-foot bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(c). Contaminants of concern sampling parameters include: iron.
- Station 5+25 to Station 6+25, 25' LT to 125 feet LT. The Engineer has determined this material from 5 to 12-foot bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(c). Contaminants of concern sampling parameters include: iron.
- Station 5+25 to Station 6+25, 125 feet LT to 230 feet LT. The Engineer has determined this material from 0 to 12-foot bgs in the vicinity of the station and off-set meets the criteria of and shall be managed in accordance with Article 669.05(c). Contaminants of concern sampling parameters include: iron.

9. Work Zones

Three (3) distinct OSHA HAZWOPER work zones (exclusion, decontamination, and support) shall apply to projects adjacent to or within sites with documented leaking underground storage tank (LUST) incidents, or sites under management in accordance with the requirements of the Site Remediation Program (SRP), Resource Conservation and Recovery Act (RCRA), or Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), or as deemed necessary. For this project, the work zones apply for the following ISGS PESA Sites:

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Additional information on the above sites collected during the Phase I Engineering process is available through the Using Agency.

10. Aside from the materials listed above in Regulated Soils, Most Stringent MAC and Do Not Exceed Most Stringent MAC, all other construction and demolition debris or waste shall be disposed of in a licensed landfill, recycled, reused, or otherwise disposed of as allowed by State or Federal laws and regulations. When the Contractor chooses to dispose of uncontaminated soil at a clean construction and demolition debris (CCDD) facility or at an uncontaminated soil fill operation, it shall be the Contractor's responsibility to have the pH of the material tested to ensure the value is between 6.25 and 9.0, inclusive. A copy of the pH test results shall be provided to the A/E and the Using Agency.

11. Suitable excavated materials naturally occurring within the project area shall not be wasted without permission of the Using Agency. The Contractor shall dispose of all surplus, unstable, unsuitable, and organic materials in such a manner that public or private property will not be damaged or endangered.

12. The quantities listed below are estimated volumes of “Special Waste”, “Non-Special Waste”, “Hazardous Waste”, or of “Unregulated Soil” are in situ soils to be removed and disposed. These are the A/E’s best estimate of in situ or in place quantities**. It is up to the Contractor’s means and methods to estimate his own quantity and include it in the base bid per lump sum to complete the construction documents.** These differ from haul quantities and the Contractor shall use *in-situ* quantities as reference only.

Hanley Building (HHH) New Laboratory – 4,651

a. ***The volume of soil to be managed as non-special waste to a licensed landfill facility is estimated at 284 cubic yards (CY) in situ. [Paragraph 3.5.A.1] [SSRBC 669.05(a)(1)]***

b. ***The volume of soil to be managed as non-special waste to a licensed landfill facility is estimated at 284 cubic yards (CY) in situ. [Paragraph 3.5.A.5] [SSRBC Article 669.05(a)(5)]***

c. *The volume of soil to be managed as special waste or hazardous waste to a permitted disposal facility is estimated at Zero cubic yards (CY) in situ. [Paragraph 3.5.A.6] [SSRBC Article 669.05(a)(6)]*

d. *The volume of soil to be managed as uncontaminated soils to a CCDD/USFO facility is estimated at Zero CY in situ. [Paragraphs 3.5.A.2, 3.5.A.3, 3.5.A.4] [SSRBC 669.05(a)(2)/(a)(3)/(a)(4)]*

e. ***The volume of soil to be managed as uncontaminated soil but not eligible to be disposed at a CCDD/USFO facility due to pH or PID readings is estimated at 2,098 CY in situ. (This pay item is for excavation only, which is included in the base bid.) [Paragraph 3.5.A.7.a.1, 3.5.A.7.a.2] [SSRBC Article 669.05(b)(1)/(b)(2)]***

f. ***The volume of soil to be managed as uncontaminated soil but not eligible to be disposed at a CCDD/USFO facility due to the iron/manganese result is estimated at 1,985 CY in situ. (This pay item is for excavation only, which is included in the base bid.) [Paragraph 3.5.A.8] [SSRBC Article 669.05(c)]***

3.5 GROUNDWATER:

A. When groundwater analytical results indicate the detected levels are above Appendix B, Table E of 35 Ill. Admin. Code 742, the most stringent Tier 1 Groundwater Remediation Objectives for Groundwater Component of the Groundwater Ingestion Route for Class 1 groundwater, the groundwater shall be managed off-site as a special waste or hazardous waste as applicable. The Contractor or Contractor’s Selected waste transportation firm shall containerize special waste groundwater and transport it to an off-site treatment facility, or it may be discharged to a sanitary sewer or combined sewer when permitted by the local sewer authority. Groundwater discharged to a sanitary sewer or combined sewer shall be pre-treated to

remove particulates and measured with a calibrated flow meter to comply with applicable discharge limits. A copy of the permit shall be provided to the Using Agency prior to discharging groundwater to the sanitary sewer or combined sewer.

1. Groundwater encountered within trenches may be managed within the trench and allowed to infiltrate back into the ground. If the groundwater cannot be managed within the trench, it may be discharged to a sanitary sewer or combined sewer when permitted by the local sewer authority, or it shall be containerized and trucked to an off-site treatment facility as a special waste or hazardous waste. The Contractor is prohibited from discharging groundwater within the trench through a storm sewer. The Contractor shall install backfill plugs within the area of groundwater contamination.

2. One backfill plug shall be placed down gradient to the area of groundwater contamination. Backfill plugs shall be installed at intervals not to exceed 50 ft (15 m). Backfill plugs are to be 4 ft (1.2 m) long, measured parallel to the trench, full trench width and depth. Backfill plugs shall not have any fine aggregate bedding or backfill, but shall be entirely cohesive soil or any class of concrete. The Contractor shall provide test data that the material has a permeability of less than 10^{-7} cm/sec according to ASTM D 5084, Method A or per another test method approved by the Using Agency.

Hanley Building (HHH) **New Laboratory**

The volume of groundwater to be managed as special waste is estimated at 100 gallons (gal.) in situ [Paragraph 3.6.A.3] [SSRBC 669.05(d)]

3.6 WASTE MINIMIZATION

A. The Contractor shall minimize the generation of regulated substances to the extent practicable. Take all necessary precautions to avoid mixing regulated substances of differing characteristics.

3.7 TRANSPORTATION OF REGULATED MATERIALS

A. Arrange for all transportation needs of regulated soils or groundwater management and disposal. Ensure the transporters are licensed special/hazardous waste haulers in the State of Illinois.

B. Provide complete manifests necessary and required for transportation and disposal of all regulated waste materials and have them in hand while transporting wastes.

C. Ensure all required placarding and labeling complies with all applicable Federal, State, or local regulations and requirements.

D. Remove all soils, dust, rocks, etc., from the exterior of trucks, trailers, or any other heavy equipment involved with regulated soil excavation, loading, or transportation before they leave the project site.

3.8 TEMPORARY STAGING

A. It is the Contractor's responsibility to coordinate the excavation plan that may include temporary staging with the A/E selected environmental firm for incorporation into the BDE 2741 (RSPCP-CDB/CI).

B. Soil classified according to paragraphs 3.4.A.2, 3.4.A.7.a., or 3.4.A.8 may be temporarily staged at the Contractor's option. Soil classified according to paragraphs 3.4.A.1, 3.4.A.3, through 3.4.A.6, or 3.4.A.7 shall be managed and disposed of without temporary staging to the greatest extent practicable. If circumstances beyond the Contractor's control require temporary staging of these latter materials, the Contractor shall request approval from the Using Agency in writing using BDE 2741 (RSPCP-CDB/CI). [SSRBC 669.05(a)(2), 669.05(b)(1), 669.05(c); 669.05(a)(1), 669.05(a)(3) through 669.05(a)(6), or 669.05(b)(2)]

C. Temporary staging shall be accomplished within the project area and the Contractor's means and methods shall be described in the approved or amended RSPCP. Staging areas shall not be located within 200 feet (61 m) of a public or private water supply well; nor within 100 feet (30 m) of sensitive environmental receptor areas, including wetlands, rivers, streams, lakes, or designated habitat zones.

D. The method of staging shall consist of containerization or stockpiling as applicable for the type, classification, and physical state (i.e., liquid, solid, semisolid) of the material. Materials of different classifications shall be staged separately with no mixing or co-mingling.

E. When containers are used, the containers and their contents shall remain intact and inaccessible to unauthorized persons until the manner of disposal is determined. The Contractor shall be responsible for all activities associated with the storage containers including, but not limited to, the procurement, transport, and labeling of the containers. The Contractor shall not use a storage container if visual inspection of the container reveals the presence of free liquids or other substances that could cause the waste to be reclassified as a hazardous or special waste.

F. When stockpiles are used, they shall be covered with a minimum 20-mil plastic sheeting or tarps secured using weights or tie-downs. Perimeter berms or diversionary trenches shall be provided to contain and collect for disposal any water that drains from the soil. Stockpiles shall be managed to prevent or reduce potential dust generation.

G. When staging non-special waste, special waste, or hazardous waste, the following additional requirements shall apply:

1. Non-Special Waste. When stockpiling soil classified according to paragraph 3.4.A.1 or 3.4.A.5, an impermeable surface barrier between

the materials and the ground surface shall be installed. The impermeable barrier shall consist of a minimum 20-mil plastic liner material and the surface of the stockpile area shall be clean and free of debris prior to placement of the liner. Measures shall also be taken to limit or discourage access to the staging area. [SSRBC 669.05(a)(1) or 669.05(a)(5)]

2. Special Waste and Hazardous Waste. Soil classified according to paragraph 3.4.A.6 shall not be stockpiled but shall be containerized immediately upon generation in containers, tanks or containment buildings as defined by RCRA, Toxic Substances Control Act (TSCA), and other applicable State or local regulations and requirements, including 35 Ill. Admin. Code Part 722, Standards Applicable to Generators of Hazardous Waste. [SSRBC 669.05(a)(6)]

   The staging area(s) shall be enclosed (by a fence or other structure) to restrict direct access to the area, and all required regulatory identification signs applicable to a staging area containing special waste or hazardous waste shall be deployed.

   Storage containers shall be placed on an all-weather gravel-packed, asphalt, or concrete surface. Containers shall be in good condition and free of leaks, large dents, or severe rusting, which may compromise containment integrity. Containers must be constructed of, or lined with, materials that will not react or be otherwise incompatible with the hazardous or special waste contents. Containers used to store liquids shall not be filled more than 80 percent of the rated capacity. Incompatible wastes shall not be placed in the same container or comingled.

   All containers shall be legibly labeled and marked using pre-printed labels and permanent marker in accordance with applicable regulations, clearly showing the date of waste generation, location and/or area of waste generation, and type of waste. The Contractor shall place these identifying markings on an exterior side surface of the container.

   Storage containers shall be kept closed, and storage pads covered, except when access is needed by authorized personnel.

   Special waste and hazardous waste shall be transported and disposed within 90 days from the date of generation.

3.9 UNDERGROUND STORAGE TANKS: [SSRBC 669.08]

A. Prior to removing an UST, IDOT D&E will determine whether the Department is considered an "owner" or "operator" of the UST as defined by the UST regulations (41 Ill. Adm. Code Part 176). Ownership of the UST refers to the Department's owning title to the UST during storage, use or dispensing of regulated substances. The Department may be considered an "operator" of the UST if it has control of, or has responsibility for, the daily operation of the UST. The Department may however voluntarily undertake actions to remove an UST from the ground without being deemed an "operator" of the UST.

B. In the event the Department is deemed not to be the "owner" or "operator" of the UST, the OSFM removal permit shall reflect who was the past "owner" or "operator" of the UST. If the "owner" or "operator" cannot be determined from past UST registration documents from OSFM, then the OSFM removal permit will state the "owner" or "operator" of the UST is the Department. The Department's Office of Chief Counsel (OCC) will review all UST removal permits prior to submitting any removal permit to the OSFM. If the Department is not the "owner" or "operator" of the UST then it will not register the UST or pay any registration fee.

C. The Contractor shall be responsible for obtaining all permits required for removing the UST, notification to the OSFM, using an OSFM certified tank contractor, removal and disposal of the UST and its contents, and preparation and submittal of the OSFM Site Assessment Report in accordance with 41 Ill. Adm. Code Part 176.330.

D. The Contractor shall contact IDOT (DOT.CI@illinois.gov) and the OSFM's office at least 72 hours prior to removal to confirm the OSFM inspector's presence during the UST removal. Removal, transport, and disposal of the UST shall be according to the applicable portions of the latest revision of the " API Recommended Practice 1604".

E. The Contractor shall collect and analyze tank content (sludge) for disposal purposes. The Contractor shall remove as much of the regulated substance from the UST system as necessary to prevent further release into the environment. All contents within the tank shall be removed, transported and disposed of, or recycled. The tank shall be removed and rendered empty according to IEPA definition.

F. The Contractor shall collect soil samples from the bottom and sidewalls of the excavated area in accordance with 35 Ill. Adm. Code Part 734.210(h) after the required backfill has been removed during the initial response action, to determine the level of contamination remaining in the ground, regardless if a release is confirmed or not by the OSFM on-site inspector.

G. In the event the UST is designated a leaking underground storage tank (LUST) by the OSFM's inspector, or confirmation by analytical results, the Contractor shall notify the CDB PM, A/E, IDOT (DOT.CI@illinois.gov). Upon confirmation of a release of contaminants from the UST and notifications to the Using Agency, the Contractor shall report the release to

the Illinois Emergency Management Agency (IEMA) (e.g., by telephone or electronic mail) and provide them with whatever information is available ("owner" or "operator" shall be stated as the past registered "owner" or "operator", or the IDOT District in which the UST is located. Contact the Using Agency for the specific personnel to list);

H. The Contractor shall perform the following initial response actions if a release is indicated by the OSFM inspector:

1. Take immediate action to prevent any further release of the regulated substance to the environment, which may include removing, and disposing of up to 4 ft (1.2 m) of the regulated material, as measured from the outside dimension of the tank

2. Identify and mitigate fire, explosion and vapor hazards;

3. Visually inspect any above ground releases or exposed below ground releases and prevent further migration of the released substance into surrounding soils and groundwater; and

4. Continue to monitor and mitigate any additional fire and safety hazards posed by vapors and free product that have migrated from the UST excavation zone and entered into subsurface structures (such as sewers or basements).

I. The UST excavation shall be backfilled according to applicable portions of SSRBC Sections 205, 208, and 550 with a material that will compact and develop stability. The material shall be approved prior to placement. All uncontaminated concrete and soil removed during tank extraction may be used to backfill the excavation, at the discretion of the Using Agency.

J. After backfilling the excavation, the site shall be graded and cleaned.

3.10 ENGINEERED BARRIER

A. The Contractor shall provide engineered barriers, when required, and shall include materials sufficient to completely line excavation surfaces, including sloped surfaces, bottoms, and sidewall faces, within the areas designated for protection

3.11 SEALING ABANDONED WELLS

A. The work shall consist of sealing abandoned water wells and monitoring wells.

B.

Work shall be performed according to the "Illinois Water Well Construction Code" (77 Ill. Admin. Code 920) and shall be performed by a licensed water

well driller. A list of licensed water well drillers is available from the Illinois Department of Public Health offices in Springfield.

Any available information, such as well type, diameter, depth and geological data will be shown on the plans. Unless otherwise noted, monitoring wells are assumed to be 2 in. (50 mm) in diameter and a maximum of 25 ft (7.6m) deep.

3.12 DISPOSAL FACILITY ACCEPTANCE SAMPLING AND ANALYSIS

A. When the waste material requires sampling for landfill disposal acceptance, the Contractor shall instruct the A/E environmental firm where they intend to dispose of regulated substances. The A/E environmental firm will secure a written list of the specific analytical parameters and analytical methods required by the landfill The A/E environmental firm shall collect and analyze the required number of samples for the parameters required by the landfill using the appropriate analytical procedures. A copy of the required parameters and analytical methods (from landfill email or on landfill letterhead) shall be provided as Attachment 3 of the BDE 2743 (Regulated Substances Final Construction Report-CDB/CI). The price shall include all sampling materials and effort necessary for collection and management of the samples, including transportation of samples from the job site to the laboratory. The Contractor shall be responsible for determining the specific disposal facilities to be utilized; and the A/E environmental firm shall collect and analyze any samples required for disposal facility acceptance using a NELAP certified analytical laboratory registered with the State of Illinois..

3.13 NON-SPECIAL WASTE CERTIFICATION [SSRBC 669.06]:

A. An authorized representative of the Using Agency shall sign and date all non-special waste certifications. These certifications may include but not limited to *Special Waste Profile, Generator Non-Special Waste Certification, and Third Party Signature Authorization*. The Contractor shall be responsible for providing the Using Agency with the required information and/or report that will allow the Using Agency to certify the waste is not a special waste.

1. Definition. A waste is considered a non-special waste as long as it is not:

a. A potentially infectious medical waste.

b. A hazardous waste as defined in 35 Ill. Admin. Code 721.

c. An industrial process waste or pollution control waste that contains liquids, as determined using the paint filter test set forth in subdivision (3)(A) of subsection (m) of 35 Ill. Admin. Code 811.107.

d. A regulated asbestos-containing waste material, as defined under the National Emission Standards for Hazardous Air Pollutants in 40 CFR 61.141.

e. A material containing polychlorinated biphenyls (PCB's) regulated pursuant to 40 CFR Part 761.

f. A material subject to the waste analysis and record keeping requirements of 35 Ill. Admin. Code 728.07 under land disposal restrictions of 35 Ill. Admin. Code 728.

g. A waste material generated by processing recyclable metals by shredding and required to be managed as special waste under Section 22.29 of the Environmental Protection Act.

h. An empty portable device or container, in which a special or hazardous waste has been stored, transported, treated, disposed of, or otherwise handled.

2. Certification information. All information used to determine the waste is not a special waste shall be attached to the certification. The information shall include but not be limited to:

a. The means by which the generator has determined the waste is not a hazardous waste;

b. The means by which the generator has determined the waste is not a liquid;

c. If the waste undergoes testing, the analytic results obtained from testing, signed and dated by the person responsible for completing the analysis;

d. If the waste does not undergo testing, an explanation as to why no testing is needed;

e. A description of the process generating the waste; and

f. Relevant material safety data sheets.

3.14 SPECIAL ENVIRONMENTAL CONDITIONS:

None

3.15 REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT [IDOT BDE Form 2743]:

A. At substantial completion, the A/E selected environmental firm shall submit a hard copy and electronic files of the Regulated Substances Final Construction Report [IDOT BDE Form 2743] on the activities conducted during the life of the project. The form shall be signed by an Illinois licensed Professional Engineer or Professional Geologist and distributed as follows:

1. One (1) electronic copy (pdf.) shall be submitted to the CDB Project Manager.

2. One (1) hardcopy and electronic copy (pdf.) shall be submitted to the A/E.

3. One (1) electronic (pdf.) shall be emailed to the Using Agency (DOT.CI@illinois.gov).

3.16 UNEXPECTED SUBSTANCES:

A. If abnormal conditions are exposed during the construction which may indicate the presence of a regulated substance, work in this area shall be immediately discontinued. Notify the A/E and Using Agency immediately. A regulated substance is a hazardous substance, special waste or petroleum or any fraction thereof, as those terms are defined in the Illinois Compiled Statutes. The A/E selected environmental firm shall also complete a BDE 2730A and provide to the Using Agency. Work shall not continue in this area until the BDE 2730A is accepted by the Using Agency. http://www.idot.illinois.gov/Assets/uploads/files/IDOT-Forms/BDE/BDE%202730A.pdf

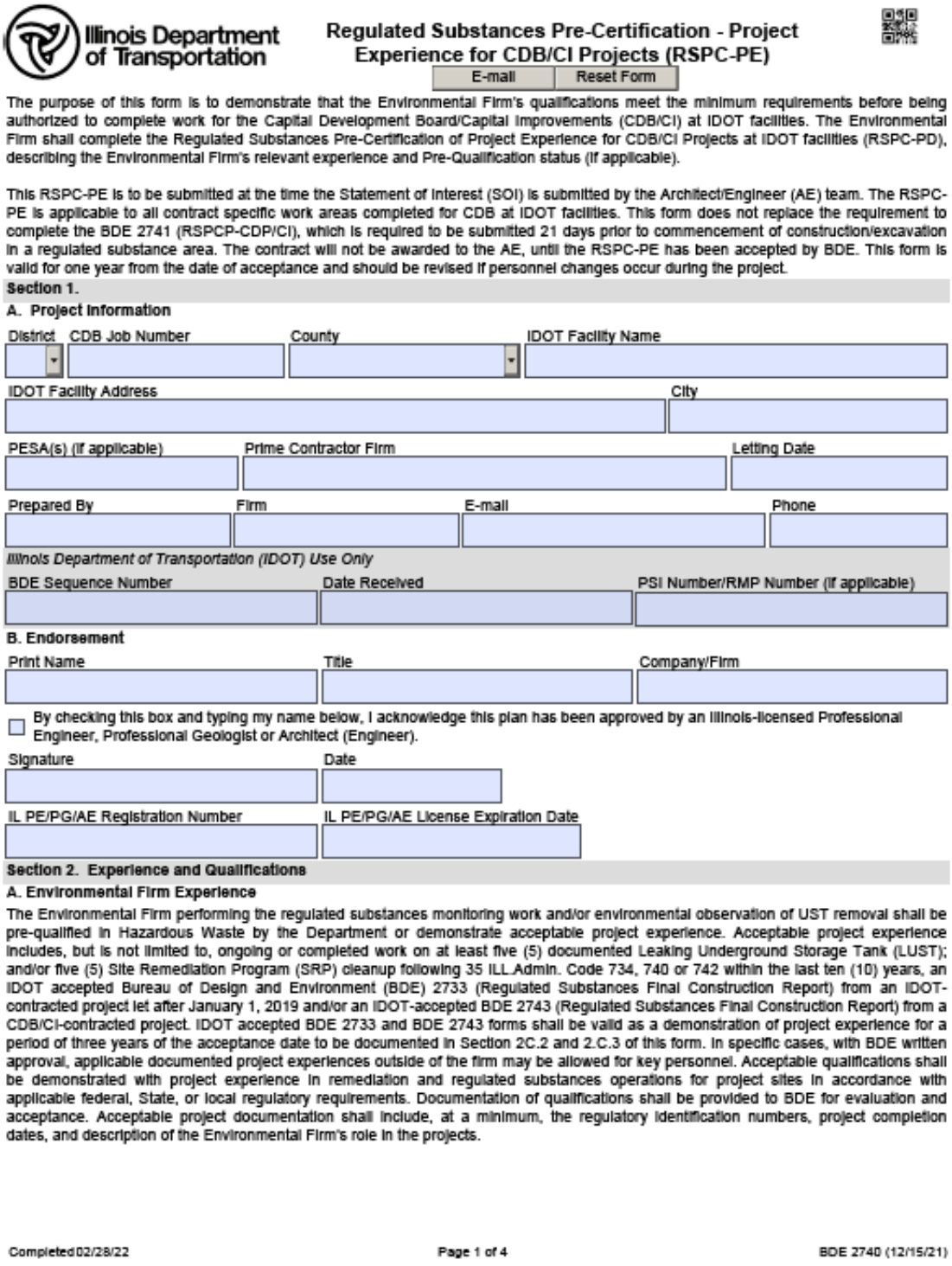
B. Abnormal conditions include but are not limited to the following: Presence of underground storage tanks (UST's), drums, barrels, discolored earth, metal, wood, etc. Visible fumes, obnoxious or unusual odors, excessively hot earth, smoke, or any other condition which appears abnormal and be a possible indicator of the presence of regulated substances. The conditions shall be treated with extraordinary caution. Appropriate action shall be taken to ensure public and employee safety.

C. Operations shall not resume until directed by the A/E or the Using Agency. The Using Agency may contact the Illinois Emergency Management Agency (IEMA) and/or the Illinois Environmental Protection Agency (IEPA). Further removal and disposal operations shall be in accord to the project specifications and the CDB SDC.

D. Disposition of regulated substances shall be made according to the requirements of the IEMA. Any waste generated as a special waste or hazardous waste shall be manifested off-site using the IDOT facility generator number. The Contractor will sign all manifests for the disposal of the regulated material and confirm the transported volume. Copies of the manifests shall be provided to the A/E selected environmental firm.

E. Any waste generated as a non-special waste may be disposed of off-site at a facility permitted by the IEPA without a manifest, a special waste transporter, and a generator number.

Figure 1: IDOT BDE Form 2740 - Regulated Substances Pre-Certification Project Experience for CDB/CI Projects (RSPC-PE), page 1



Illinois Department of Transportation

Regulated Substances Pre-Certification - Project Experience for CDB/CI Projects (RSPC-PE)

E-mail | Reset Form

The purpose of this form is to demonstrate that the Environmental Firm's qualifications meet the minimum requirements before being authorized to complete work for the Capital Development Board/Capital Improvements (CDB/CI) at IDOT facilities. The Environmental Firm shall complete the Regulated Substances Pre-Certification of Project Experience for CDB/CI Projects at IDOT facilities (RSPC-PD), describing the Environmental Firm's relevant experience and Pre-Qualification status (if applicable).

This RSPC-PE is to be submitted at the time the Statement of Interest (SOI) is submitted by the Architect/Engineer (AE) team. The RSPC-PE is applicable to all contract specific work areas completed for CDB at IDOT facilities. This form does not replace the requirement to complete the BDE 2741 (RSPCP-CDP/CI), which is required to be submitted 21 days prior to commencement of construction/excavation in a regulated substance area. The contract will not be awarded to the AE, until the RSPC-PE has been accepted by BDE. This form is valid for one year from the date of acceptance and should be revised if personnel changes occur during the project.

Section 1.

A. Project Information

District | CDB Job Number | County | IDOT Facility Name

IDOT Facility Address | City

PESA(s) (if applicable) | Prime Contractor Firm | Letting Date

Prepared By | Firm | E-mail | Phone

Illinois Department of Transportation (IDOT) Use Only

BDE Sequence Number | Date Received | PSI Number/RMP Number (if applicable)

B. Endorsement

Print Name | Title | Company/Firm

☐ By checking this box and typing my name below, I acknowledge this plan has been approved by an Illinois-licensed Professional Engineer, Professional Geologist or Architect (Engineer).

Signature | Date

IL PE/PG/AE Registration Number | IL PE/PG/AE License Expiration Date

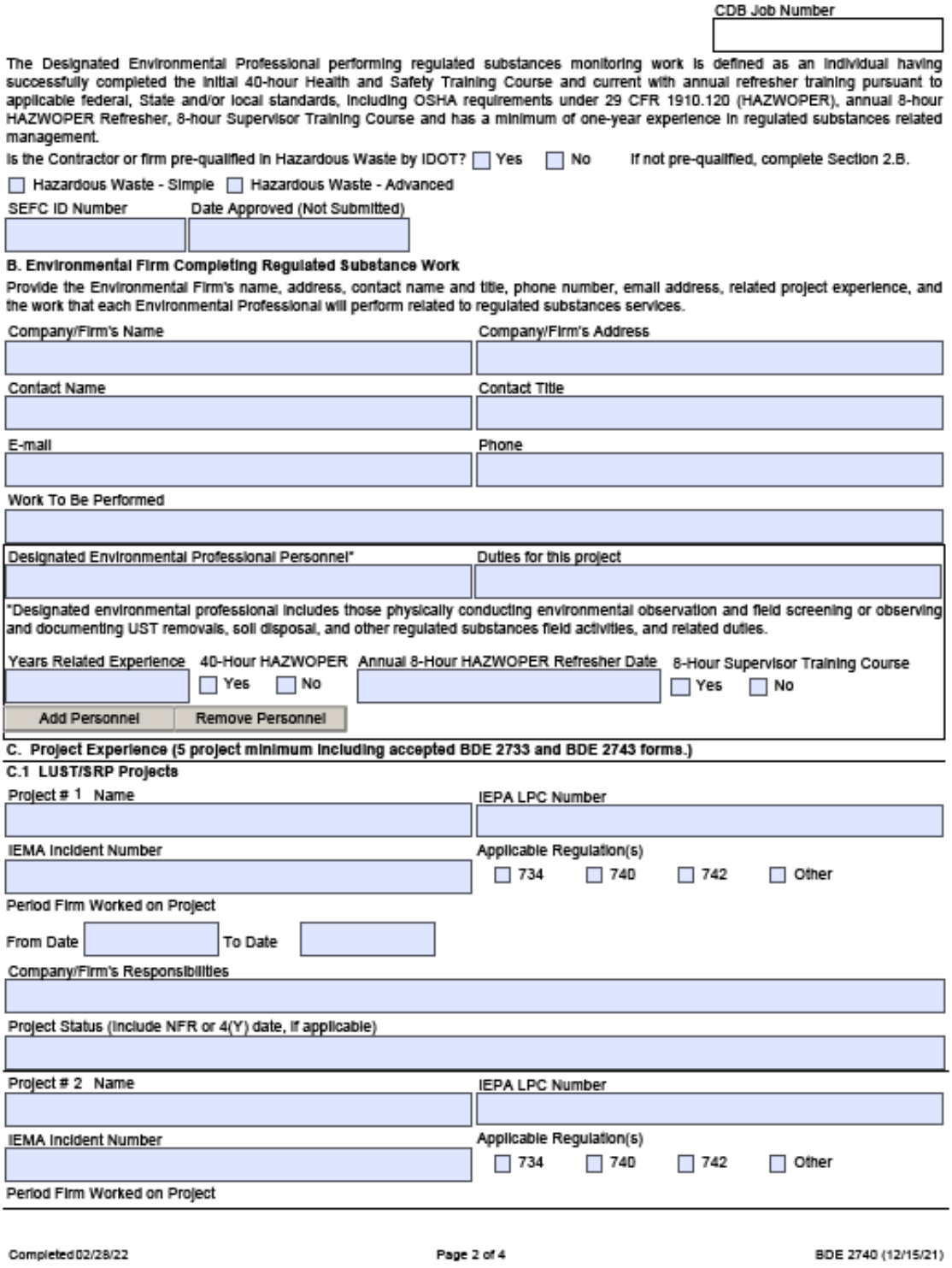
Section 2. Experience and Qualifications

A. Environmental Firm Experience

The Environmental Firm performing the regulated substances monitoring work and/or environmental observation of UST removal shall be pre-qualified in Hazardous Waste by the Department or demonstrate acceptable project experience. Acceptable project experience includes, but is not limited to, ongoing or completed work on at least five (5) documented Leaking Underground Storage Tank (LUST); and/or five (5) Site Remediation Program (SRP) cleanup following 35 ILL.Admin. Code 734, 740 or 742 within the last ten (10) years, an IDOT accepted Bureau of Design and Environment (BDE) 2733 (Regulated Substances Final Construction Report) from an IDOT-contracted project let after January 1, 2019 and/or an IDOT-accepted BDE 2743 (Regulated Substances Final Construction Report) from a CDB/CI-contracted project. IDOT accepted BDE 2733 and BDE 2743 forms shall be valid as a demonstration of project experience for a period of three years of the acceptance date to be documented in Section 2C.2 and 2.C.3 of this form. In specific cases, with BDE written approval, applicable documented project experiences outside of the firm may be allowed for key personnel. Acceptable qualifications shall be demonstrated with project experience in remediation and regulated substances operations for project sites in accordance with applicable federal, State, or local regulatory requirements. Documentation of qualifications shall be provided to BDE for evaluation and acceptance. Acceptable project documentation shall include, at a minimum, the regulatory identification numbers, project completion dates, and description of the Environmental Firm's role in the projects.

Completed 02/28/22 | Page 1 of 4 | BDE 2740 (12/15/21)

Figure 2: IDOT BDE Form 2740 - Regulated Substances Pre-Certification Project Experience for CDB/CI Projects (RSPC-PE), page 2



CDB Job Number

The Designated Environmental Professional performing regulated substances monitoring work is defined as an individual having successfully completed the initial 40-hour Health and Safety Training Course and current with annual refresher training pursuant to applicable federal, State and/or local standards, including OSHA requirements under 29 CFR 1910.120 (HAZWOPER), annual 8-hour HAZWOPER Refresher, 8-hour Supervisor Training Course and has a minimum of one-year experience in regulated substances related management.

Is the Contractor or firm pre-qualified in Hazardous Waste by IDOT? ☐ Yes ☐ No If not pre-qualified, complete Section 2.B.

☐ Hazardous Waste - Simple ☐ Hazardous Waste - Advanced

SEFC ID Number | Date Approved (Not Submitted)

B. Environmental Firm Completing Regulated Substance Work

Provide the Environmental Firm's name, address, contact name and title, phone number, email address, related project experience, and the work that each Environmental Professional will perform related to regulated substances services.

Company/Firm's Name | Company/Firm's Address

Contact Name | Contact Title

E-mail | Phone

Work To Be Performed

Designated Environmental Professional Personnel* | Duties for this project

*Designated environmental professional includes those physically conducting environmental observation and field screening or observing and documenting UST removals, soil disposal, and other regulated substances field activities, and related duties.

Years Related Experience | 40-Hour HAZWOPER ☐ Yes ☐ No | Annual 8-Hour HAZWOPER Refresher Date | 8-Hour Supervisor Training Course ☐ Yes ☐ No

Add Personnel | Remove Personnel

C. Project Experience (5 project minimum including accepted BDE 2733 and BDE 2743 forms.)

C.1 LUST/SRP Projects

Project # 1 Name | IEPA LPC Number

IEMA Incident Number | Applicable Regulation(s) ☐ 734 ☐ 740 ☐ 742 ☐ Other

Period Firm Worked on Project

From Date | To Date

Company/Firm's Responsibilities

Project Status (include NFR or 4(Y) date, if applicable)

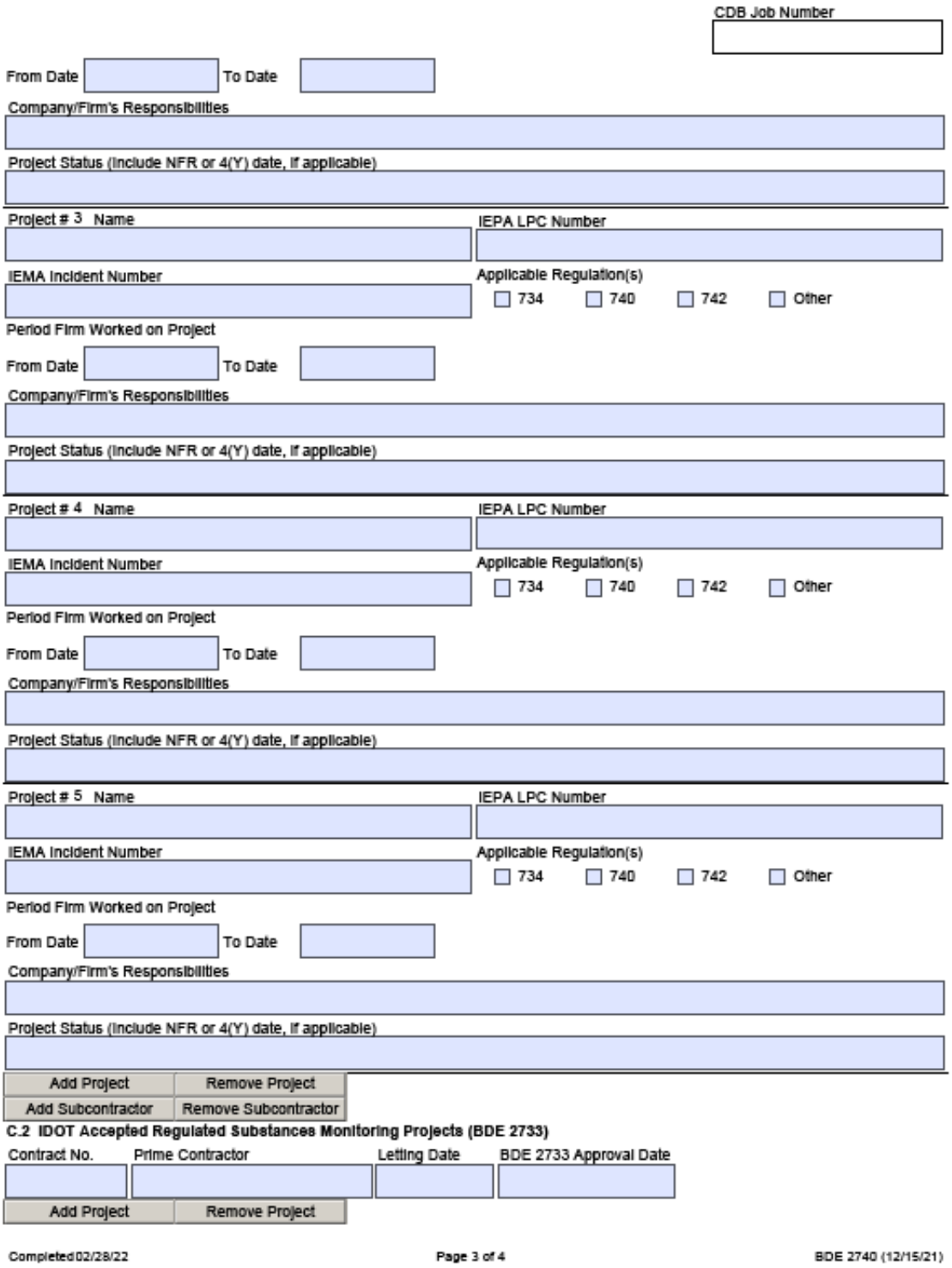
Project # 2 Name | IEPA LPC Number

IEMA Incident Number | Applicable Regulation(s) ☐ 734 ☐ 740 ☐ 742 ☐ Other

Period Firm Worked on Project

Completed 02/28/22 Page 2 of 4 BDE 2740 (12/15/21)

Figure 3: IDOT BDE Form 2740 - Regulated Substances Pre-Certification Project Experience for CDB/CI Projects (RSPC-PE), page 3



CDB Job Number

From Date To Date

Company/Firm's Responsibilities

Project Status (Include NFR or 4(Y) date, if applicable)

Project # 3 Name

IEPA LPC Number

IEMA Incident Number

Applicable Regulation(s)

☐ 734 ☐ 740 ☐ 742 ☐ Other

Period Firm Worked on Project

From Date To Date

Company/Firm's Responsibilities

Project Status (Include NFR or 4(Y) date, if applicable)

Project # 4 Name

IEPA LPC Number

IEMA Incident Number

Applicable Regulation(s)

☐ 734 ☐ 740 ☐ 742 ☐ Other

Period Firm Worked on Project

From Date To Date

Company/Firm's Responsibilities

Project Status (Include NFR or 4(Y) date, if applicable)

Project # 5 Name

IEPA LPC Number

IEMA Incident Number

Applicable Regulation(s)

☐ 734 ☐ 740 ☐ 742 ☐ Other

Period Firm Worked on Project

From Date To Date

Company/Firm's Responsibilities

Project Status (Include NFR or 4(Y) date, if applicable)

Add Project | Remove Project

Add Subcontractor | Remove Subcontractor

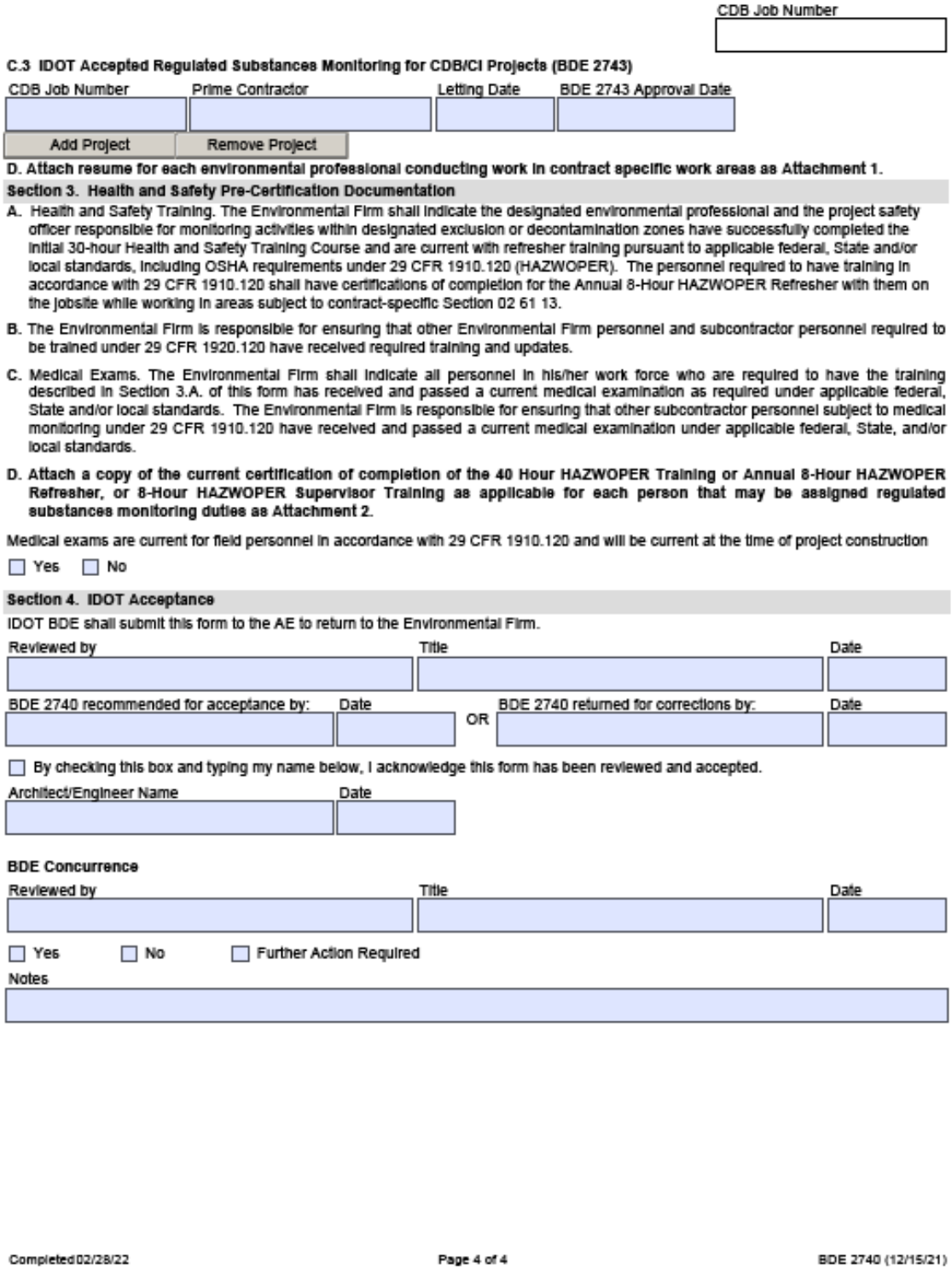
C.2 IDOT Accepted Regulated Substances Monitoring Projects (BDE 2733)

Contract No. | Prime Contractor | Letting Date | BDE 2733 Approval Date

Add Project | Remove Project

Completed 02/28/22 Page 3 of 4 BDE 2740 (12/15/21)

Figure 4: IDOT BDE Form 2740 - Regulated Substances Pre-Certification Project Experience for CDB/CI Projects (RSPC-PE), page 4



CDB Job Number

C.3 IDOT Accepted Regulated Substances Monitoring for CDB/CI Projects (BDE 2743)

CDB Job Number	Prime Contractor	Letting Date	BDE 2743 Approval Date

Add Project | Remove Project

D. Attach resume for each environmental professional conducting work in contract specific work areas as Attachment 1.

Section 3. Health and Safety Pre-Certification Documentation

A. Health and Safety Training. The Environmental Firm shall indicate the designated environmental professional and the project safety officer responsible for monitoring activities within designated exclusion or decontamination zones have successfully completed the initial 30-hour Health and Safety Training Course and are current with refresher training pursuant to applicable federal, State and/or local standards, including OSHA requirements under 29 CFR 1910.120 (HAZWOPER). The personnel required to have training in accordance with 29 CFR 1910.120 shall have certifications of completion for the Annual 8-Hour HAZWOPER Refresher with them on the jobsite while working in areas subject to contract-specific Section 02 61 13.

B. The Environmental Firm is responsible for ensuring that other Environmental Firm personnel and subcontractor personnel required to be trained under 29 CFR 1920.120 have received required training and updates.

C. Medical Exams. The Environmental Firm shall indicate all personnel in his/her work force who are required to have the training described in Section 3.A. of this form has received and passed a current medical examination as required under applicable federal, State and/or local standards. The Environmental Firm is responsible for ensuring that other subcontractor personnel subject to medical monitoring under 29 CFR 1910.120 have received and passed a current medical examination under applicable federal, State, and/or local standards.

D. Attach a copy of the current certification of completion of the 40 Hour HAZWOPER Training or Annual 8-Hour HAZWOPER Refresher, or 8-Hour HAZWOPER Supervisor Training as applicable for each person that may be assigned regulated substances monitoring duties as Attachment 2.

Medical exams are current for field personnel in accordance with 29 CFR 1910.120 and will be current at the time of project construction

☐ Yes ☐ No

Section 4. IDOT Acceptance

IDOT BDE shall submit this form to the AE to return to the Environmental Firm.

Reviewed by	Title	Date

BDE 2740 recommended for acceptance by:	Date	OR	BDE 2740 returned for corrections by:	Date

☐ By checking this box and typing my name below, I acknowledge this form has been reviewed and accepted.

Architect/Engineer Name	Date

BDE Concurrence

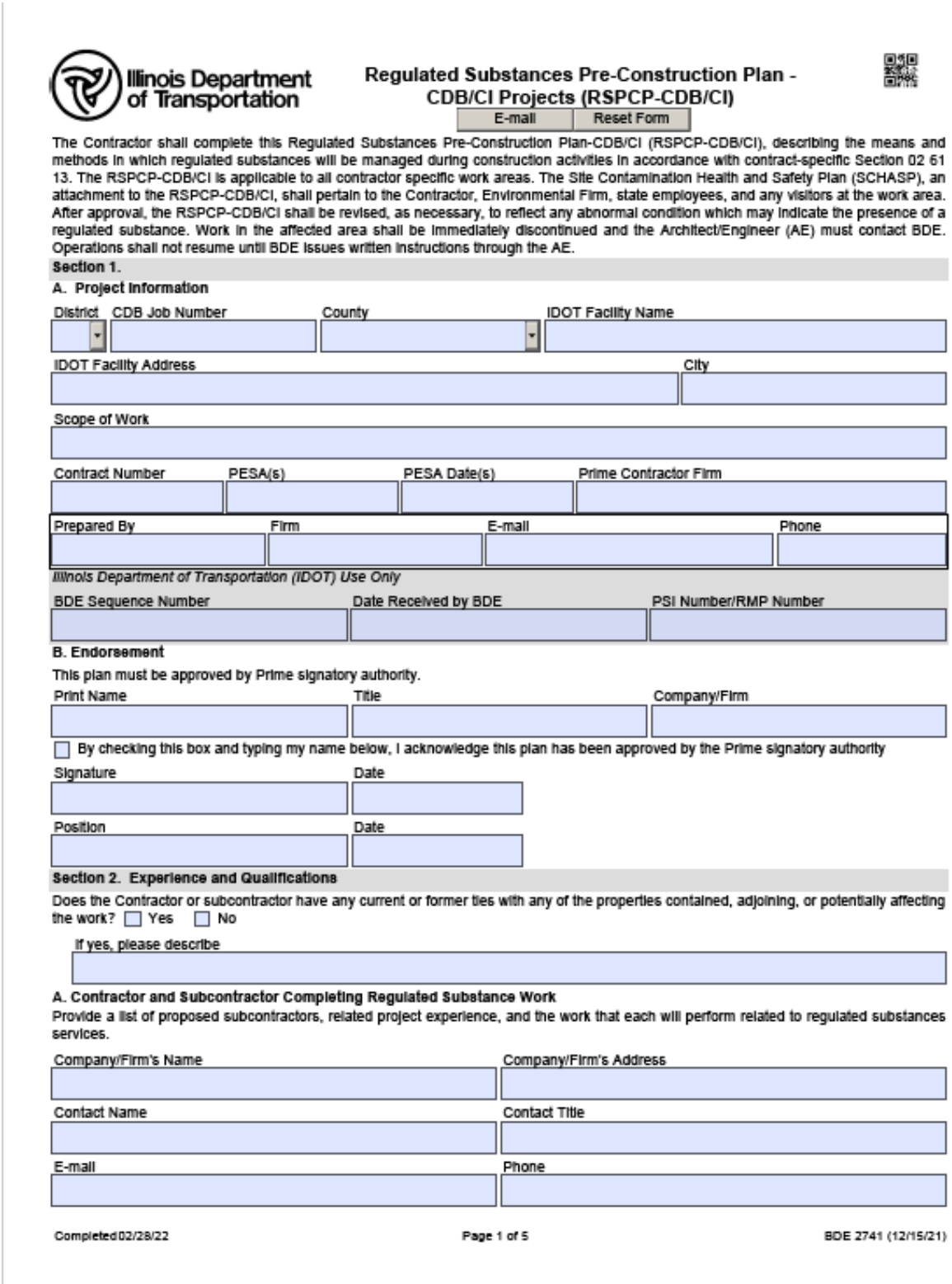
Reviewed by	Title	Date

☐ Yes ☐ No ☐ Further Action Required

Notes

Completed 02/28/22 Page 4 of 4 BDE 2740 (12/15/21)

Figure 5: IDOT BDE Form 2741 - Regulated Substances Pre-Construction Plan - CDB/CI Projects (RSPCP-CDB/CI), page 1



Illinois Department of Transportation

Regulated Substances Pre-Construction Plan - CDB/CI Projects (RSPCP-CDB/CI)

E-mail | Reset Form

The Contractor shall complete this Regulated Substances Pre-Construction Plan-CDB/CI (RSPCP-CDB/CI), describing the means and methods in which regulated substances will be managed during construction activities in accordance with contract-specific Section 02 61 13. The RSPCP-CDB/CI is applicable to all contractor specific work areas. The Site Contamination Health and Safety Plan (SCHASP), an attachment to the RSPCP-CDB/CI, shall pertain to the Contractor, Environmental Firm, state employees, and any visitors at the work area. After approval, the RSPCP-CDB/CI shall be revised, as necessary, to reflect any abnormal condition which may indicate the presence of a regulated substance. Work in the affected area shall be immediately discontinued and the Architect/Engineer (AE) must contact BDE. Operations shall not resume until BDE issues written instructions through the AE.

Section 1.

A. Project Information

District | CDB Job Number | County | IDOT Facility Name

IDOT Facility Address | City

Scope of Work

Contract Number | PESA(s) | PESA Date(s) | Prime Contractor Firm

Prepared By | Firm | E-mail | Phone

Illinois Department of Transportation (IDOT) Use Only

BDE Sequence Number | Date Received by BDE | PSI Number/RMP Number

B. Endorsement

This plan must be approved by Prime signatory authority.

Print Name | Title | Company/Firm

☐ By checking this box and typing my name below, I acknowledge this plan has been approved by the Prime signatory authority

Signature | Date

Position | Date

Section 2. Experience and Qualifications

Does the Contractor or subcontractor have any current or former ties with any of the properties contained, adjoining, or potentially affecting the work? ☐ Yes ☐ No

If yes, please describe

A. Contractor and Subcontractor Completing Regulated Substance Work

Provide a list of proposed subcontractors, related project experience, and the work that each will perform related to regulated substances services.

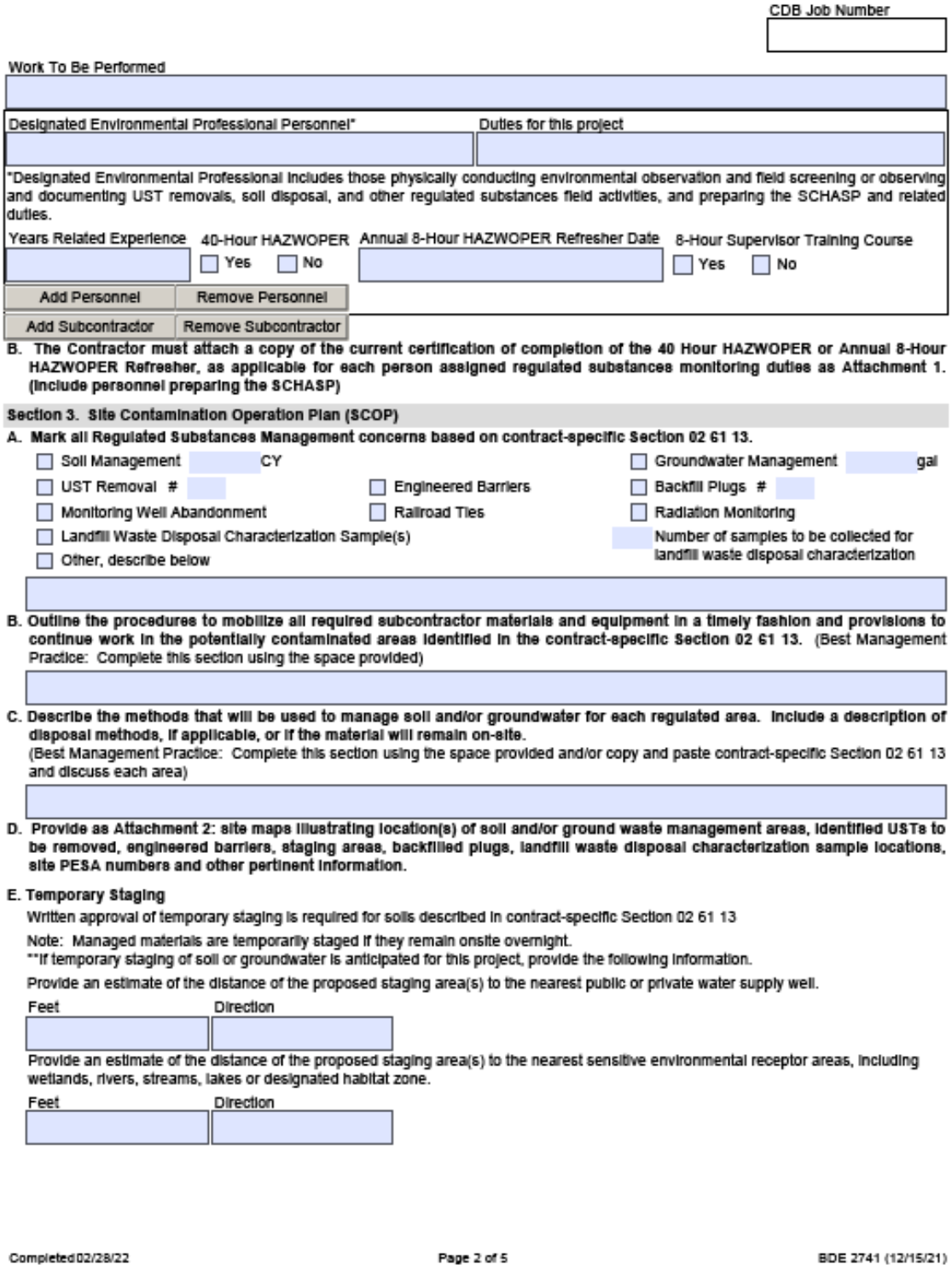
Company/Firm's Name | Company/Firm's Address

Contact Name | Contact Title

E-mail | Phone

Completed 02/28/22 | Page 1 of 5 | BDE 2741 (12/15/21)

Figure 6: IDOT BDE Form 2741 - Regulated Substances Pre-Construction Plan - CDB/CI Projects (RSPCP-CDB/CI), page 2



CDB Job Number

Work To Be Performed

Designated Environmental Professional Personnel* | Duties for this project

*Designated Environmental Professional includes those physically conducting environmental observation and field screening or observing and documenting UST removals, soil disposal, and other regulated substances field activities, and preparing the SCHASP and related duties.

Years Related Experience | 40-Hour HAZWOPER ☐ Yes ☐ No | Annual 8-Hour HAZWOPER Refresher Date | 8-Hour Supervisor Training Course ☐ Yes ☐ No

Add Personnel | Remove Personnel

Add Subcontractor | Remove Subcontractor

B. The Contractor must attach a copy of the current certification of completion of the 40 Hour HAZWOPER or Annual 8-Hour HAZWOPER Refresher, as applicable for each person assigned regulated substances monitoring duties as Attachment 1. (Include personnel preparing the SCHASP)

Section 3. Site Contamination Operation Plan (SCOP)

A. Mark all Regulated Substances Management concerns based on contract-specific Section 02 61 13.

☐ Soil Management CY
☐ Groundwater Management gal
☐ UST Removal #
☐ Engineered Barriers
☐ Backfill Plugs #
☐ Monitoring Well Abandonment
☐ Railroad Ties
☐ Radiation Monitoring
☐ Landfill Waste Disposal Characterization Sample(s)
Number of samples to be collected for landfill waste disposal characterization
☐ Other, describe below

B. Outline the procedures to mobilize all required subcontractor materials and equipment in a timely fashion and provisions to continue work in the potentially contaminated areas identified in the contract-specific Section 02 61 13. (Best Management Practice: Complete this section using the space provided)

C. Describe the methods that will be used to manage soil and/or groundwater for each regulated area. Include a description of disposal methods, if applicable, or if the material will remain on-site.
(Best Management Practice: Complete this section using the space provided and/or copy and paste contract-specific Section 02 61 13 and discuss each area)

D. Provide as Attachment 2: site maps illustrating location(s) of soil and/or ground waste management areas, identified USTs to be removed, engineered barriers, staging areas, backfilled plugs, landfill waste disposal characterization sample locations, site PESA numbers and other pertinent information.

E. Temporary Staging

Written approval of temporary staging is required for soils described in contract-specific Section 02 61 13

Note: Managed materials are temporarily staged if they remain onsite overnight.
**If temporary staging of soil or groundwater is anticipated for this project, provide the following information.

Provide an estimate of the distance of the proposed staging area(s) to the nearest public or private water supply well.

Feet | Direction

Provide an estimate of the distance of the proposed staging area(s) to the nearest sensitive environmental receptor areas, including wetlands, rivers, streams, lakes or designated habitat zone.

Feet | Direction

Completed 02/28/22 Page 2 of 5 BDE 2741 (12/15/21)

Figure 7: IDOT BDE Form 2741 - Regulated Substances Pre-Construction Plan - CDB/CI Projects (RSPCP-CDB/CI), page 3

CDB Job Number

	Source Material Stationing (To/From)	Source Material Classification from Section 02 61 13	Planned Staging Area	Containerization Type Used (required for Special Waste, Hazardous Waste, and Groundwater Waste)	Impermeable Layer (required for Non-Special Waste)	Cover type (required for all staging and pre-approved stock-piling)
+ -						
+ -						
+ -						

Provide on Attachment 2, maps illustrating the planned temporary staging area(s).

Section 4. Site Contamination Health and Safety Plan (SCHASP)

The Contractor shall develop a project specific SCHASP and submit the plan as Attachment 3.

The SCHASP shall specify procedures and equipment to protect site workers and observers from hazards encountered during activities in locations containing contaminated material. **A Health and Safety Specialist shall prepare the Site Contamination Health and Safety Plan. The Contractor's Corporate Officer responsible for worker health and safety shall approve and sign the plan before submittal to the Department.**

A qualified Health and Safety Specialist is defined as having a minimum of three years' experience in hazardous waste operations, familiar with applicable health and safety procedures and protocols, and holds current training status according to 29 CFR 1910.120.

The Contractor's corporate officer responsible for the Contractor's health and safety program and approval of the SCHASP shall be able to identify hazards; assess employee exposure and risk; have knowledge of Occupational Safety and Health Administration (OSHA) standards, hazards correction techniques and practices, work place safety, and health program requirements. This person shall also be able to effectively communicate this knowledge both orally and in writing or contract for these abilities with a qualified Industrial Hygienist or Health and Safety Specialist.

The responsibility for the selection, determination, implementation, and enforcement of all health and safety requirements including Personal Protective Equipment (PPE) and equipment lies solely with the Contractor. The Contractor shall take all necessary precautions for the safety of, and provide the necessary protection to prevent damage, injury or loss to construction personnel performing work within the exclusion and decontamination zones. The Contractor shall ensure all workers involved in any activities within the contaminated locations or associated with the contaminated materials are conversant with all the requirements of SCHASP and have signed off and dated personal acknowledgment of the plan. The Contractor shall post copies of SCHASP at various locations throughout the work area to facilitate spontaneous review.

A. Zones. Three distinct zones (exclusion, decontamination, and support) shall apply to projects adjacent to or within documented Leaking Underground Storage Tank (LUST) incidents, or under management in accordance with the requirements of the Site Remediation Program (SRP) Resource Conservation and Recovery Act (RCRA) or Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), or as deemed necessary in the special provision(s).

1. Exclusion zones are the areas where contamination does or could occur. These zones have the highest inhalation exposure potential and/or a high probability of skin contact with potential contaminants/contaminated materials. The exclusion zone designation shall remain until the entire excavated area has been completely backfilled. The Contractor shall ensure that neither their employees nor subcontractors execute maintenance repair operations on equipment located in the exclusion zone.

2. Decontamination zones are areas established to prevent the transfer of contaminants outside the exclusion zones. This zone eliminates the possibility of the physical transfer of contaminating substances on people, equipment, or in the air to unregulated areas. A combination of decontamination, distance from active work areas, zone restrictions, and work function shall eliminate the possibility of physical transfer of contamination. This zone has the next highest inhalation hazard but does not pose a high probability of skin contact. This zone shall contain the equipment decontamination facility, areas designated for personnel decontamination, and emergency equipment.

3. Support zones shall include the remaining areas of the job site. This zone shall contain the change and shower rooms, lunch and break areas, operation direction, and support facilities (including supplies, equipment storage, and maintenance areas). No equipment or personnel shall enter the support zone from the exclusion zone without passing through the personnel or equipment decontamination zone. Eating, drinking, smoking, etc., shall be allowed only in this zone.

Completed 02/28/22 Page 3 of 5 BDE 2741 (12/15/21)

Figure 8: IDOT BDE Form 2741 - Regulated Substances Pre-Construction Plan - CDB/CI Projects (RSPCP-CDB/CI), page 4

CDB Job Number

B. Decontamination. All personnel who have participated in construction or soil management activities involving special waste or hazardous waste shall go through decontamination. Additionally, the Contractor shall perform a wet and/or dry decontamination process on excavation and construction equipment as specified when equipment is in contact with non-special waste, special waste, or hazardous waste. No equipment or vehicle shall track visible material from a contaminated facility.

1. Personnel Decontamination. All outer protective clothing used by personnel who contact contaminated material while in the exclusion zone shall be collected in plastic bags and placed in leak-proof sealable containers. The Contractor shall inform the Engineer of the time and manner of disposal of containers containing contaminated protective clothing. The Contractor shall be responsible for transporting and disposing of the containers.

2. Equipment Decontamination.

a. Dry Decontamination. The Contractor shall perform dry decontamination on equipment that has contacted material classified as a non-special waste, special waste, or hazardous waste before moving that equipment to any other location, whether the new location is contaminated or uncontaminated. Dry equipment decontamination shall consist of the removal of material from excavation and construction equipment parts, such as shovels, wheel tracks, and buckets. During dry decontamination, the Contractor shall ensure that removed contaminated material does not contact the ground surface.

b. Wet Decontamination. The Contractor shall perform the wet decontamination process when construction/soil management activities associated with non-special waste, special waste, or hazardous waste are followed by construction/soil management activities associated with uncontaminated excavation or fill material. Before departure from the project area, all equipment and vehicles contacting contaminated material shall be wet decontaminated by the Contractor.

Personnel shall perform all wet equipment decontamination within the decontamination zone on equipment decontamination pad(s). The Contractor shall be responsible for the construction and maintenance of the decontamination pad(s) and for all equipment, materials, and personnel. The pad(s) shall be designed to prevent loss of decontamination liquids to the surrounding environment through vertical infiltration and/or surface runoff from any part of the pad(s).

The Contractor shall place all removed wastes from the decontamination pad(s) in leak-proof containers and store temporarily in a secure staging area. The Contractor shall be responsible for the transport and disposal of all waste generated from the decontamination process.

C. Health and Safety Training. The Contractor shall indicate the Designated Environmental Professional(s) and the project safety officer responsible for monitoring activities within designated exclusion or decontamination zones have successfully completed the initial 40-hour Health and Safety Training Course and are current with refresher training pursuant to applicable federal, State and/or local standards, including OSHA requirements under 29 CFR 1910.120 (HAZWOPER). The personnel required to have training in accordance with 29 CFR 1910.120 shall have certifications of completion for the Annual 8-Hour HAZWOPER Refresher with them on the jobsite while working in areas regulated under the contract-specific Section 02 61 13. The Designated Environmental Professional responsible for monitoring activities shall also have successfully completed an additional 8-Hour Supervisor Training Course pursuant to applicable federal, State and/or local standards, including OSHA requirements under 29 CFR 1910.120. The Contractor is responsible for ensuring that other contractor and subcontractor personnel required to be trained under 29 CFR 1920.120 have received required training and updates.

D. Medical Exams. The Contractor shall indicate all personnel in his/her work force who are required to have the training described in Section 4.C. of this form have received and passed a current medical examination as required under applicable federal, State and/or local standards. The Contractor is responsible for ensuring that other contractor and subcontractor personnel subject to medical monitoring under 29 CFR 1910.120 have received and passed a current medical examination under applicable federal, State, and/or local standards.

SCHASP is attached and signed by the Prime Contractor responsible for worker health and safety: ☐ Yes ☐ No

Medical exams are current for field personnel in accordance with 29 CFR 1910.120 ☐ Yes ☐ No

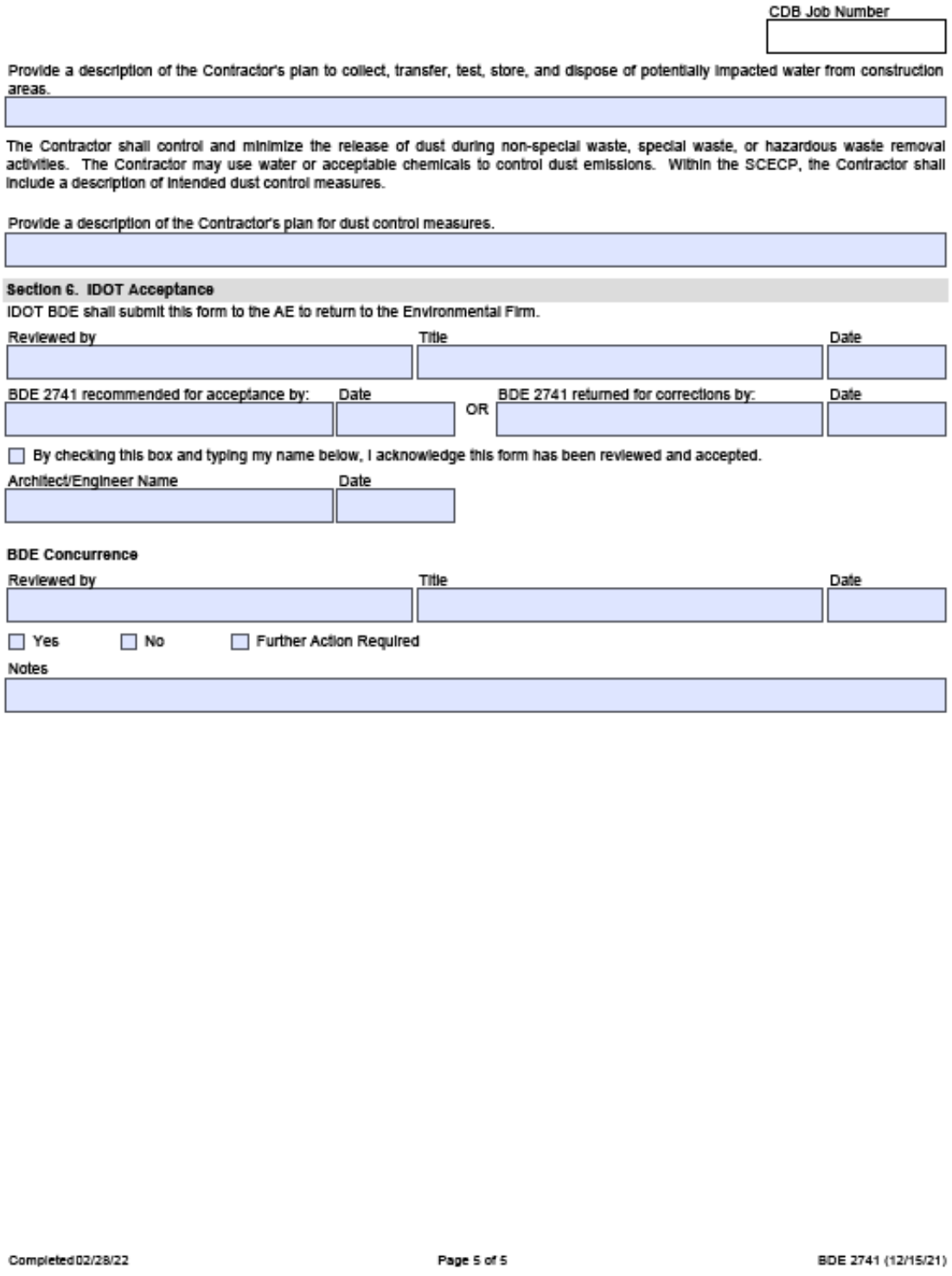
Section 5. Site Contamination Erosion Control Plan (SCECP)

The Contractor shall prevent flow of storm water into excavated contaminated areas. The Contractor shall divert storm water away from the exclusion and decontamination zones using appropriate storm water erosion control methods.

Provide a description of how the Contractor plans to prevent precipitation storm water flowing into excavated areas and how all storm water will be diverted away from the exclusion and decontamination zones.

Completed 02/28/22 Page 4 of 5 BDE 2741 (12/15/21)

Figure 9: IDOT BDE Form 2741 - Regulated Substances Pre-Construction Plan - CDB/CI Projects (RSPCP-CDB/CI), page 5



CDB Job Number

Provide a description of the Contractor's plan to collect, transfer, test, store, and dispose of potentially impacted water from construction areas.

The Contractor shall control and minimize the release of dust during non-special waste, special waste, or hazardous waste removal activities. The Contractor may use water or acceptable chemicals to control dust emissions. Within the SCECP, the Contractor shall include a description of intended dust control measures.

Provide a description of the Contractor's plan for dust control measures.

Section 6. IDOT Acceptance

IDOT BDE shall submit this form to the AE to return to the Environmental Firm.

Reviewed by | Title | Date

BDE 2741 recommended for acceptance by: | Date | OR | BDE 2741 returned for corrections by: | Date

☐ By checking this box and typing my name below, I acknowledge this form has been reviewed and accepted.

Architect/Engineer Name | Date

BDE Concurrence

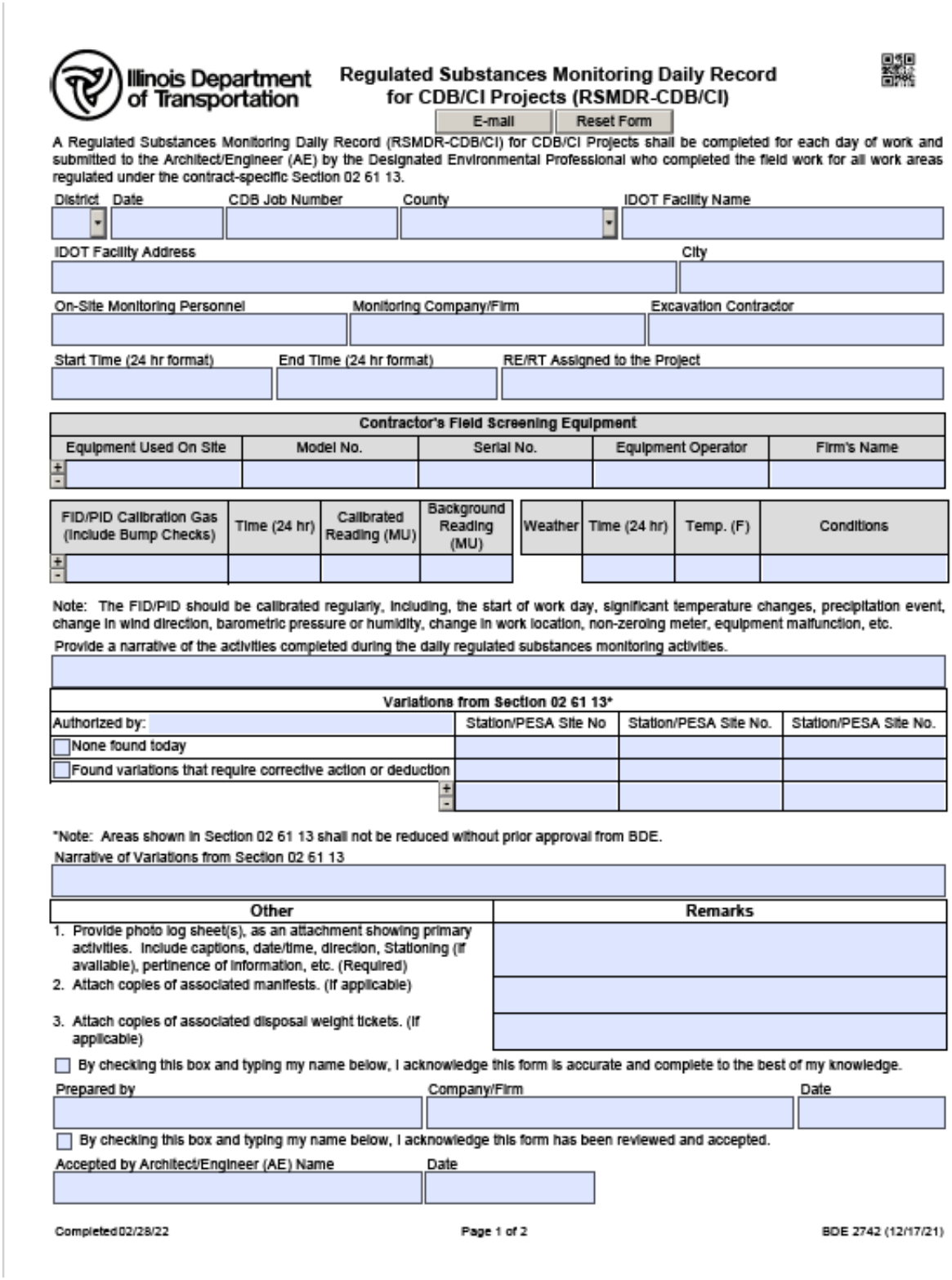
Reviewed by | Title | Date

☐ Yes ☐ No ☐ Further Action Required

Notes

Completed 02/28/22 Page 5 of 5 BDE 2741 (12/15/21)

Figure 10: IDOT BDE Form 2742 - Regulated Substances Monitoring Daily Record for CDB/CI Projects (RSMDR-CDB/CI), page 1



Illinois Department of Transportation

Regulated Substances Monitoring Daily Record for CDB/CI Projects (RSMDR-CDB/CI)

E-mail | Reset Form

A Regulated Substances Monitoring Daily Record (RSMDR-CDB/CI) for CDB/CI Projects shall be completed for each day of work and submitted to the Architect/Engineer (AE) by the Designated Environmental Professional who completed the field work for all work areas regulated under the contract-specific Section 02 61 13.

District | Date | CDB Job Number | County | IDOT Facility Name

IDOT Facility Address | City

On-Site Monitoring Personnel | Monitoring Company/Firm | Excavation Contractor

Start Time (24 hr format) | End Time (24 hr format) | RE/RT Assigned to the Project

Contractor's Field Screening Equipment

Equipment Used On Site	Model No.	Serial No.	Equipment Operator	Firm's Name

FID/PID Calibration Gas (Include Bump Checks)	Time (24 hr)	Calibrated Reading (MU)	Background Reading (MU)

Weather	Time (24 hr)	Temp. (F)	Conditions

Note: The FID/PID should be calibrated regularly, including, the start of work day, significant temperature changes, precipitation event, change in wind direction, barometric pressure or humidity, change in work location, non-zeroing meter, equipment malfunction, etc.

Provide a narrative of the activities completed during the daily regulated substances monitoring activities.

Variations from Section 02 61 13*

Authorized by:	Station/PESA Site No	Station/PESA Site No.	Station/PESA Site No.
☐ None found today			
☐ Found variations that require corrective action or deduction			

*Note: Areas shown in Section 02 61 13 shall not be reduced without prior approval from BDE.

Narrative of Variations from Section 02 61 13

Other	Remarks
1. Provide photo log sheet(s), as an attachment showing primary activities. Include captions, date/time, direction, Stationing (if available), pertinence of information, etc. (Required)	
2. Attach copies of associated manifests. (If applicable)	
3. Attach copies of associated disposal weight tickets. (If applicable)	

☐ By checking this box and typing my name below, I acknowledge this form is accurate and complete to the best of my knowledge.

Prepared by | Company/Firm | Date

☐ By checking this box and typing my name below, I acknowledge this form has been reviewed and accepted.

Accepted by Architect/Engineer (AE) Name | Date

Completed 02/28/22 Page 1 of 2 BDE 2742 (12/17/21)

Figure 11: IDOT BDE Form 2742 - Regulated Substances Monitoring Daily Record for CDB/CI Projects (RSMDR-CDB/CI), page 2

Regulated Substances Daily Construction Oversight Record

		Field Data									Office Follow-Up		
		Time (24 Hr)	Station From/ To (Include off-set)	BDE Classification Section 02 61 13	PID/FID Reading (MU)	PID/FID Reading Location	Estimated Volume (CY)	Management Method	Management Location/Facility	Manifest Number (If applicable)	Landfill Weight Ticket Number	Disposal Weight (Tons)	Notes
+ -	1												☐
+ -	2												☐
+ -	3												☐
+ -	4												☐
+ -	5												☐
+ -	6												☐
+ -	7												☐
+ -	8												☐
+ -	9												☐
+ -	10												☐

NSW Landfill - Non-Special Waste Landfill (manifest not required)
SW Landfill - Special Waste Landfill (manifest required)
HW Landfill - Hazardous Waste Landfill (manifest required)
CCDD - Clean Construction / Demolition Debris
USFO - Uncontaminated Soil Fill Operation
TEMP Stage - Temporary Staging/Stock piling
Another IDOT Project - with the same MSA restrictions and approved by both (sending & receiving) project engineers
Other - Provide a full description and copy of written authorization for alternative disposal method.
MU - Meter Unit
CY - Cubic Yard

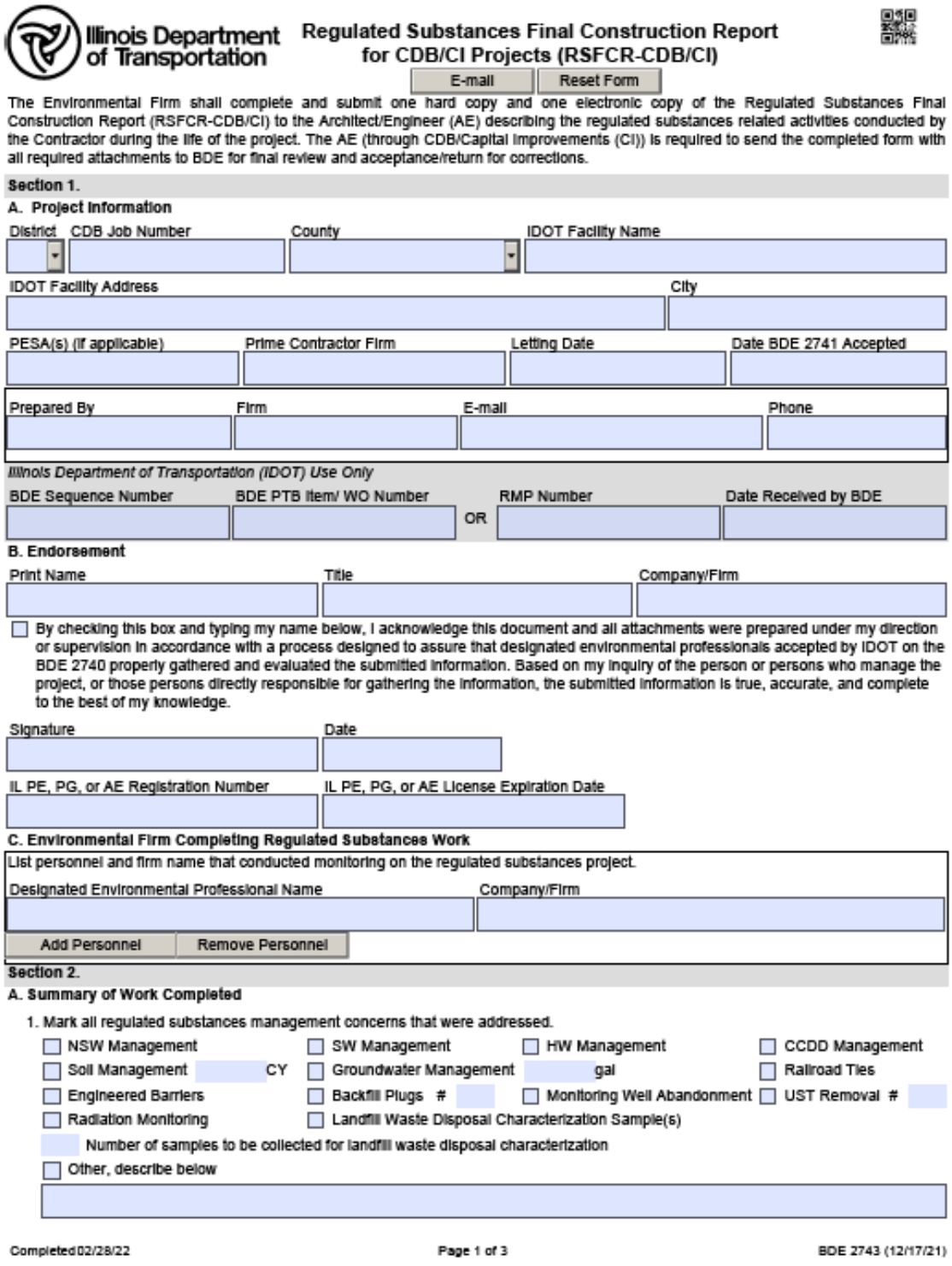
Notes:
If material from one area is managed in multiple ways, i.e. CCDD eligible material is partially used on site and the remaining volume is taken to CCDD, use multiple lines to document how the material was managed.

Duties of Personnel Implementing Regulated Substances Construction Monitoring:

* Accurately read, understand, and implement engineering contract plans, Section 02 61 13 and BDE 2741/2741A.
* Field screening for potential contaminants associated with regulated substances in real-time using field instrumentation. Typically, PID/FID is used but other instruments may be required based on the nature of regulated substances present or suspected.
* Accurately document the management of materials with regards to the project requirements. This includes accurately marking areas of regulated substance, and the materials excavated are manifested and sent to their proper disposal facilities (CCDD, non-special waste landfill, etc.) Notify the AE of any deviations from the BDE issued Section 02 61 13 immediately.
* Observe and document soil destined for CCDD to verify materials will meet entrance criteria with respect to volatile organic compounds and other forbidden materials, as required by 35 Ill. Admin. Code 1100.
* Accurately document how the areas containing regulated substances were managed. Notify AE of any soil or groundwater managed differently than listed in the BDE issued Section 02 61 13.
* Notify AE of any unexpected regulated substances or other conditions that differ from the expected conditions in the Section 02 61 13, and engage BDE for instructions on how to proceed.
* Complete BDE 2743, Regulated Substances Final Construction Report for CDB/CI Projects.

Completed 02/28/22 Page 2 of 2 BDE 2742 (12/17/21)

Figure 12: IDOT BDE Form 2733 - Regulated Substances Final Construction Report for CDB/CI Projects (RSFCR-CDB/CI), page 1



Illinois Department of Transportation

Regulated Substances Final Construction Report for CDB/CI Projects (RSFCR-CDB/CI)

E-mail | Reset Form

The Environmental Firm shall complete and submit one hard copy and one electronic copy of the Regulated Substances Final Construction Report (RSFCR-CDB/CI) to the Architect/Engineer (AE) describing the regulated substances related activities conducted by the Contractor during the life of the project. The AE (through CDB/Capital Improvements (CI)) is required to send the completed form with all required attachments to BDE for final review and acceptance/return for corrections.

Section 1.

A. Project Information

District | CDB Job Number | County | IDOT Facility Name

IDOT Facility Address | City

PESA(s) (if applicable) | Prime Contractor Firm | Letting Date | Date BDE 2741 Accepted

Prepared By | Firm | E-mail | Phone

Illinois Department of Transportation (IDOT) Use Only

BDE Sequence Number | BDE PTB Item/ WO Number | OR | RMP Number | Date Received by BDE

B. Endorsement

Print Name | Title | Company/Firm

☐ By checking this box and typing my name below, I acknowledge this document and all attachments were prepared under my direction or supervision in accordance with a process designed to assure that designated environmental professionals accepted by IDOT on the BDE 2740 properly gathered and evaluated the submitted information. Based on my inquiry of the person or persons who manage the project, or those persons directly responsible for gathering the information, the submitted information is true, accurate, and complete to the best of my knowledge.

Signature | Date

IL PE, PG, or AE Registration Number | IL PE, PG, or AE License Expiration Date

C. Environmental Firm Completing Regulated Substances Work

List personnel and firm name that conducted monitoring on the regulated substances project.

Designated Environmental Professional Name | Company/Firm

Add Personnel | Remove Personnel

Section 2.

A. Summary of Work Completed

1. Mark all regulated substances management concerns that were addressed.

☐ NSW Management ☐ SW Management ☐ HW Management ☐ CCDD Management

☐ Soil Management CY ☐ Groundwater Management gal ☐ Railroad Ties

☐ Engineered Barriers ☐ Backfill Plugs # ☐ Monitoring Well Abandonment ☐ UST Removal #

☐ Radiation Monitoring ☐ Landfill Waste Disposal Characterization Sample(s)

Number of samples to be collected for landfill waste disposal characterization

☐ Other, describe below

Completed 02/28/22 Page 1 of 3 BDE 2743 (12/17/21)

Figure 133: IDOT BDE Form 2733 - Regulated Substances Final Construction Report for CDB/CI Projects (RSFCR-CDB/CI), page 2

CDB Job Number

2. The Environmental Firm shall provide a narrative discussing the regulated substances concerns on the project and how they were addressed. (Best management practice: list each area classified in contract-specific Section 02 61 13, how the material was managed in the field, and how the volume was determined.)

3. Was regulated substances material temporarily staged during the construction project in accordance with contract-specific Section 02 61 13? ☐ Yes ☐ No

Written approval of temporary staging is required through the BDE 2741 for soils described in contract-specific Section 02 61 13.

Provide a narrative of how soil and groundwater were staged in accordance with the approved BDE 2741 and in accordance with Section 02 61 13. Include a discussion of the source location(s) of staged material(s), stationing, Facility Location, where soils were staged, types of containerization used, regulated setback zones from water supply wells and sensitive environmental receptors.

Provide a narrative of the final disposition of temporarily staged materials. For materials requiring management at a clean construction or demolition debris/uncontaminated soil fill operation (CCDD/USFO) non-special waste, special waste or hazardous waste landfill, include dates when temporary staging started and ended. Note: Material that is staged overnight is considered temporarily staged.

B. Project Details

1. Describe the measures taken to mark areas containing regulated substances, manage, and dispose of soil and/or groundwater containing regulated substances to prevent further migration of regulated substances and to protect workers. This information shall be provided as Attachment 1.

2. Provide Regulated Substances Daily Monitoring Records for CDB/CI Projects (BDE 2742). Each BDE 2742 shall be signed by the Designated Environmental Professional completing the regulated substances monitoring and accepted by the AE.

3. Were there deviations from contract-specific Section 02 61 13 for soil and groundwater management? ☐ Yes ☐ No
If yes, describe below.

4. If yes, provide a copy of the prior written documentation from BDE allowing a deviation from contract-specific Section 02 61 13 as Attachment 1A.

C. Provide legible copies of plan sheet excerpts showing the areas containing the regulated substances as defined in contract-specific Section 02 61 13 with delineation of actual removal boundaries. Backfill plugs (unit/location) and all other regulated substances management concerns identified in Section 2.A.1. of this RSFCR-CDB/CI, if applicable, shall also be shown on plan sheets as well as the PESA site number, stationing, and off-sets. This information shall be provided as Attachment 2

D. Provide legible field sampling and testing results collected by the Environmental Firm and disposal as Attachment 3. Provide written documentation of the landfill's required waste characterization and disposal parameters (email form landfill or quote on landfill letterhead and acceptable) as Attachment 3.

E. Provide legible copies of waste manifests for special or hazardous waste disposal, as applicable. This information shall be provided as Attachment 4. Provide a comprehensive summary table of all soil removal associated with contract-specific Section 02 61 13. The table shall include: date removed, ticket ID, manifest number, customer, waste profile number, Facility Location, and weight in tons.

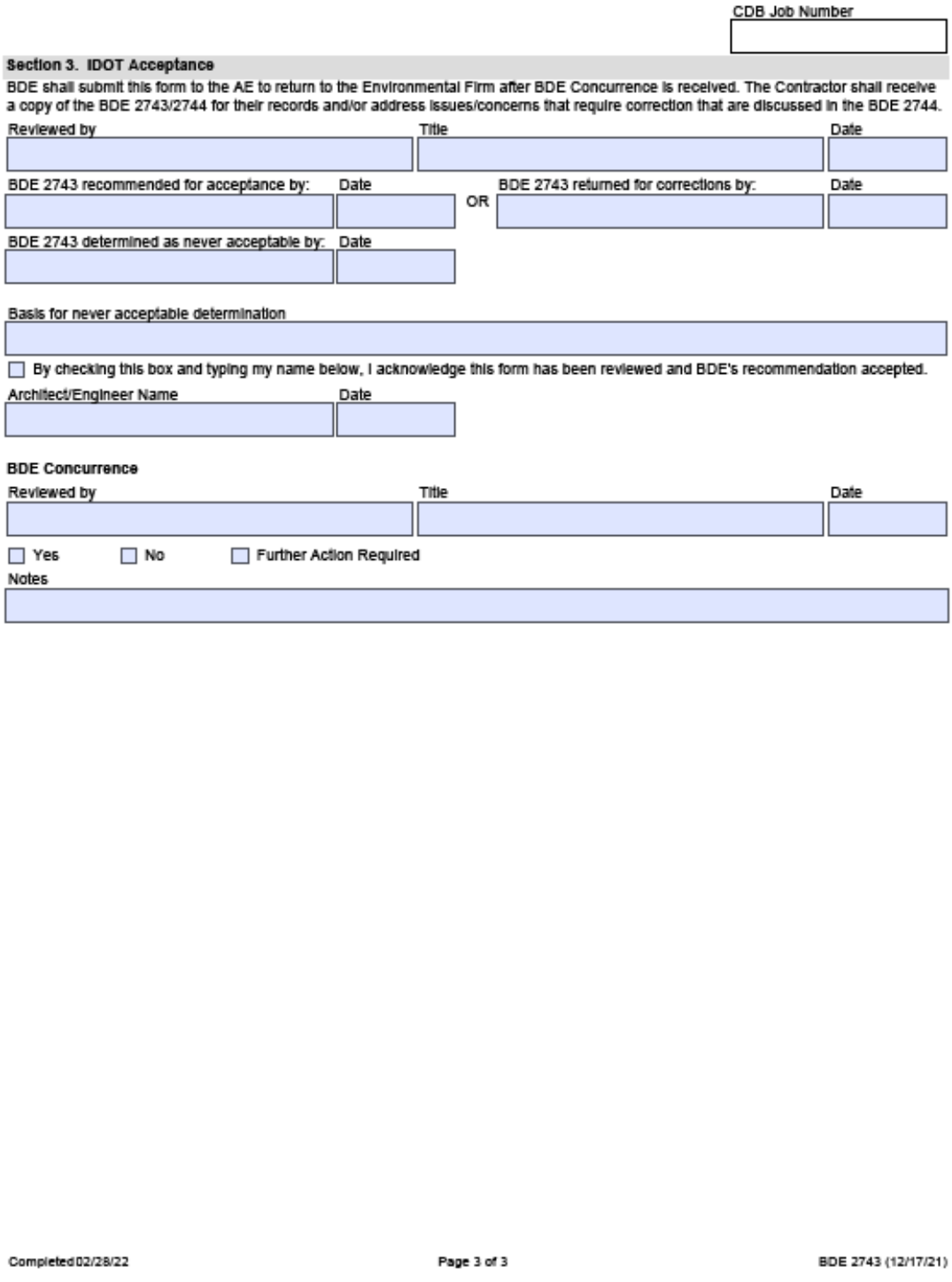
F. Provide legible copies of landfill tickets for non-special, special or hazardous waste disposal. This information shall be provided as Attachment 5. Provide a comprehensive summary table of all soil removal associated with contract-specific Section 02 61 13. The table shall include: date removed, ticket ID, manifest number, customer, profile number, Facility Location, and weight in tons.

G. Provide UST system removal results and diagram, when applicable. Representative photographs shall be provided with captions including date/time, direction, Facility Location, pertinence of information, etc. This information shall be provided as Attachment 6.

H. Provide any additional information relevant to regulated substances activities not described in the above sections (e.g., technical data sheets, well abandonment forms, drawing, photographs, groundwater discharge permit application, and approval, when applicable, etc.)

Completed 02/28/22 Page 2 of 3 BDE 2743 (12/17/21)

Figure 144: IDOT BDE Form 2733 - Regulated Substances Final Construction Report for CDB/CI Projects (RSFCR-CDB/CI), page 3



CDB Job Number

Section 3. IDOT Acceptance

BDE shall submit this form to the AE to return to the Environmental Firm after BDE Concurrence is received. The Contractor shall receive a copy of the BDE 2743/2744 for their records and/or address issues/concerns that require correction that are discussed in the BDE 2744.

Reviewed by | Title | Date

BDE 2743 recommended for acceptance by: | Date

OR

BDE 2743 returned for corrections by: | Date

BDE 2743 determined as never acceptable by: | Date

Basis for never acceptable determination

☐ By checking this box and typing my name below, I acknowledge this form has been reviewed and BDE's recommendation accepted.

Architect/Engineer Name | Date

BDE Concurrence

Reviewed by | Title | Date

☐ Yes ☐ No ☐ Further Action Required

Notes

Completed 02/28/22 Page 3 of 3 BDE 2743 (12/17/21)

End 02 61 13