Jolly, Becky <becky.jolly@dnr.iowa.gov>

# Faircast, Inc. (formerly Fairfield Castings LLC) - Executed Closure Permit

1 message

**Stobbe, Chad** <chad.stobbe@dnr.iowa.gov> Tue, Jun 30, 2020 at 4:32 PM
To: "Jolly, Becky" <becky.jolly@dnr.iowa.gov>
Cc: Kurt Levetzow <kurt.levetzow@dnr.iowa.gov>, Brian Lee <brian.lee@dnr.iowa.gov>

Becky -

Please file this executed Closure Permit and as-built drawing under 51-SDP-06-19C. Prior correspondence for this site was included under 92-SDP-05-92 despite the project being located in Jefferson County and not Washington County. We'll need to link these two project IDs together in DocDNA for a complete picture of prior site correspondence. Please call me with any questions. Thanks

**Chad A. Stobbe** | Environmental Specialist Senior

**Iowa Department of Natural Resources**

502 East 9th Street, Des Moines, IA 50319

P 515-725-8351 | C 515-201-8272

www.iowadnr.gov

---------- Forwarded message ---------
From: **Trueline** <trueline.trevorb@gmail.com>
Date: Tue, Jun 30, 2020 at 12:07 PM
Subject: RE: DRAFT Closure Permit
To: Stobbe, Chad <chad.stobbe@dnr.iowa.gov>

Chad,

Attached is the permit and as built drawing for this project. Please let me if you need any additional information.

Thanks

Trevor C. Brown, PE, PLS

Trueline Design Solutions, LLC

1701 S Main Street

Fairfield, Iowa 52554

Ph. 641-472-9499

Cell 641-919-7420

trueline.trevorb@gmail.com

**2 attachments**

**AS-BUILT WITH PROPOSED WELL LOCATIONS.PDF**
664K

**Executed Faircast Closure Permit.pdf**
1026K

# IOWA DEPARTMENT OF NATURAL RESOURCES

# FOUNDRY SAND DISPOSAL SITE CLOSURE PERMIT

I. Permit Number: **51-SDP-06-19C**

II. Permitted Agency: **Faircast, Inc.**
(formerly Fairfield Castings, LLC)

Project Location: **Existing Foundry Sand Disposal Site**
NW of the Intersection of North 23rd Street & West Grimes Ave.
(NW ¼ of Section 27, T72N, R10W, Jefferson County, IA)
Parcel IDs: 0627200041, 0627200040, 0627200042

III. Responsible Official:
Name: Ken Ledoux, President/General Manager
Address: **Faircast, Inc.**
905 West Depot
Fairfield, IA 52556
Email: ken@faircastinc.com
Phone: (641) 209-4115

IV. Licensed Design Engineer:
Name: Trevor Brown, PE, PLS
Address: **True Line Design Solutions, LLC**
1701 South Main Street
Fairfield, IA 52554
Email: trueline.trevorb@gmail.com
Phone: (641) 472-9499
Iowa License #: P15552

V. Permit Issuance Date: July 1, 2020
Site Closure Completion: August 1, 2020

VI. Permit Expiration Date: August 1, 2050

VII. Issued by:

Chad A. Stobbe
Environmental Services Division

VIII. General Conditions

1) The above-named permitted agency is hereby authorized to close the above-referenced foundry sand disposal site at the described project location in conformance with Iowa Code Chapter 455B, Division IV "Solid Waste Disposal", Part 1 "Solid Waste," the rules pursuant thereto existing at the time of issuance, and any subsequent new rules which may be duly adopted, and any conditions contained within this permit.

2) The issuance of this closure permit in no way relieves the permit holder of the responsibility for complying with all other local, state, and federal statutes, ordinances, and rules or other requirements applicable to the closure and ongoing maintenance of the project location.

3) No legal or financial responsibility arising from the closure of the project location shall attach to the State of Iowa or the Iowa Department of Natural Resources (DNR) due to the issuance of this closure permit.

4) This closure permit applies to the Solid Waste program and does not constitute an authorization by all DNR program areas. Any additional approvals shall be obtained from the appropriate programs within the DNR prior to undertaking further excavation and/or grading activities.

5) No provision in this closure permit or the approved Site Closure Design Plan, Site Closure Plan Narrative, Monofill Characterization Report, Wetland Delineation Report, Hydrogeologic Monitoring System Plan or Solid By-Product Management Plan, constitutes a waiver or variance from Iowa Administrative Code or the Code of Iowa. Any conflict between a provision of this closure permit or referenced documents and Iowa rules or statutes shall be resolved in favor of the duly adopted rules and statutes.

6) The term of subsequent renewal of this closure permit, if the post-closure period is extended, will be determined on a site-specific basis. A closure permit shall be required until the DNR determines that post-closure maintenance and post-closure monitoring are no longer necessary. The DNR may request that additional information be submitted in order to make a renewal decision. The DNR may renew the closure permit if, after a review and inspection of the project location and its compliance history, the DNR finds that the permit holder is in compliance with the conditions of this permit.

7) The placement, dumping or other use of spent foundry sand at the project location in a manner inconsistent with this closure permit and the approved plans may be considered illegal disposal, and the permit holder may be subject to enforcement action by the DNR as appropriate and as allowed by Iowa law. The permit holder is not authorized to place any spent foundry sand at the project location after the Site Closure Completion deadline of August 1, 2020.

8) Failure to comply with Iowa Code Chapter 455B, or any rule of order promulgated pursuant thereto, or any or all provisions of this closure permit may result in: 1) a civil penalty of up to $5,000 for each day of violation, pursuant to Iowa Code section 455B.307, or 2) the suspension or revocation of this closure permit, pursuant to Iowa Code section 455B.305.

IX. Special Conditions

1) The permit holder shall ensure that closure of the above-referenced project location does not (1) cause a discharge of pollutants into waters of the United States, including wetlands, that violates any requirements of the Clean Water Act, including, but not limited to, the National Pollutant Discharge Elimination System (NPDES) requirements, pursuant to Section 402 of the Clean Water Act, and (2) cause the discharge of a nonpoint source of pollution into waters of the United States, including wetlands, that violates any requirement of an areawide or statewide water quality management plan that has been approved under Section 208 or 319 of the Clean Water Act.

2) The permit holder shall close the above-referenced project location by leaving the spent foundry sand in place and regrading the site in accordance with the approved Site Closure Design Plan (Doc #95135), Site Closure Plan Narrative (Doc #95134), Monofill Characterization Report (Doc #92998) and Wetland Delineation Report (Doc #92592), as submitted by True Line Design Solutions, LLC. The existing foundry sand disposal site shall be closed in a manner that will:

    a. Control, minimize or eliminate, to the maximum extent feasible, post-closure infiltration of liquids into the waste and releases of spent foundry sand, leachate, or contaminated run-off to the ground or surface waters or to the atmosphere;

    b. Preclude the probability of future impoundment of water or sediment. All diversion and drainage structures shall be designed to meet a 25-year, 24-hour rainfall event, and must be maintained to prevent run-on and runoff erosion or other damage to the final cover;

    c. Include measures that provide for slope stability to prevent the sloughing or movement of the final cover system during the closure and post-closure care period;

    d. Minimize the need for further maintenance of the closed disposal site; and

    e. Be completed in the shortest amount of time consistent with recognized and generally accepted good engineering practices.

3) At no time shall spent foundry sand from Faircast, Inc. exhibit free liquids, toxic or hazardous properties, nor shall any hazardous waste, as defined by Iowa Code section 455B.411, be accepted at this project location for site closure. As long as spent foundry sand is being used to complete site closure, it **shall be analyzed quarterly** by the permit holder for the following:

    a. Toxicity Characteristics Leaching Procedure (TCLP - EPA Method 1311): Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver.

    b. Synthetic Precipitation Leaching Procedure (SPLP - EPA Method 1312): Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Copper, Fluoride, Lead, Mercury, Selenium and Thallium.

c. Resource Conservation and Recovery Act (RCRA) Total Metals (EPA Methods 6010, 6020, 7470, 7471): Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Chromium (Note: If Total Chromium ≥ 210 mg/kg, further analysis shall be conducted to determine hexavalent and trivalent results), Cobalt, Copper, Fluoride, Lead, Lithium, Manganese, Mercury, Molybdenum, Nickel, Selenium, Silver, Thallium, Vanadium and Zinc.

Please note that Iowa law (i.e., 567 IAC 83, Iowa Code section 455B.113) requires laboratories reporting environmental data to the DNR be certified for the methods and parameters being measured. This certification process is in cooperation with the State Hygienic Laboratory (SHL) at the University of Iowa. Please also note that pursuant to 567 IAC 137.5(10), the toxicity values, absorption factors for dermal exposure to soils, and promulgated standards that are a basis for statewide standards are subject to periodic revision.

4) At no time shall spent foundry sand from Faircast, Inc. exceed the TCLP and SPLP regulatory levels in 567 IAC 108; nor shall any authorized by-product(s) have any RCRA Total Metals contaminant level above the Statewide Standards for Contaminants in Soil as defined in 567 IAC 137.

   a. Any analytical exceedance shall be reported to the DNR in writing within ten (10) business days of receiving the results from the laboratory. Upon the permit holder's receipt of a laboratory report that denotes a regulatory exceedance, closure activities utilizing Faircast, Inc.'s recent spent foundry sand shall immediately cease until retesting of a representative sample confirms it is within applicable regulatory standards.

   b. Any spent foundry sand that fails to comply with the regulatory limits expressed above shall be refused for site closure, and alternative management options (e.g., storage until retesting, direct disposal at a sanitary landfill) shall be immediately implemented.

   c. The use of spent foundry sand for site closure, which fails to comply with a regulatory limit expressed above, will result in a Notice of Violation (NOV) issued to the permit holder. If additional information regarding a cited violation is discovered, or if further violations occur, the DNR may reconsider its position and take subsequent enforcement action as appropriate and as allowed by Iowa law.

   d. Prior to resuming the use of spent foundry sand for site closure, which failed to comply with a regulatory limit expressed above, the permit holder shall notify the DNR in writing of a return to regulatory compliance. This written notification shall include the applicable certified laboratory report(s) and associated Analytical Testing Report(s), and contain a narrative discussion regarding the circumstances surrounding the documented exceedance (e.g., conclusion as to why the exceedance occurred, steps being taken to minimize the probability of any future exceedance, how the spent foundry sand was managed in the interim). Upon review and concurrence that the submitted information documents a return to regulatory compliance, the DNR will promptly notify the permit holder that use of recent spent foundry sand for site closure may resume.

   e. The DNR reserves the right, at its sole discretion, to increase the frequency of testing, pursuant to Special Condition #3, if the spent foundry sand fails to comply with applicable regulatory limits.

5) The permit holder shall submit to the DNR copies of any quarterly certified laboratory reports, and a summary of each report's results using DNR Form 542-0652 titled, "Solid By-Product Management Plan - Analytical Testing Report." The reports will be due July 1st, October 1st, January 1st and April 1st as needed.

6) The permit holder shall develop and implement a Groundwater Monitoring Program to determine the impact, if any, that the deposited spent foundry sand is having on groundwater. The permit holder must conduct groundwater monitoring and, if necessary, corrective action throughout the duration of the closure permit, and any subsequent post-closure care period required by the DNR as a result of a documented release. The following conditions shall apply:

   a. The Groundwater Monitoring Program shall include consistent sampling and analysis procedures that are protective of human health and safety and the environment, and that are designed to ensure monitoring results provide an accurate representation of groundwater quality at the background and downgradient wells. A minimum of one upgradient and three downgradient monitoring wells shall be installed by a certified well contractor pursuant to 567 IAC 82. The permit holder shall adhere to the revised Hydrologic Monitoring System Plan (HMSP) approved by the DNR on May 13, 2020 (Doc #97733). The purpose of the revised HMSP was to obtain data to determine potential routes of contaminant migration via groundwater, thereby identifying appropriate locations and depths for monitoring well placement.

   b. During the first year of operation of the Groundwater Monitoring Program, a sample shall be collected quarterly from each groundwater monitoring well. The purpose of this sample is to determine baseline (i.e., background) water quality information and enable initial estimation of water quality variability. Each sample shall be analyzed for the parameters listed in Appendix B. After the first year, each monitoring well shall be sampled semi-annually for the same list of parameters, and any additional parameters deemed appropriate by the DNR.

   c. The permit holder must establish a groundwater protection standard for each parameter detected in the groundwater. The groundwater protection standard shall be:

      1. For constituents for which a maximum contaminant level (MCL) has been promulgated under Section 1412 of the Safe Drinking Water Act (codified) under 40 CFR Part 141, the MCL for that constituent;

      2. For constituents for which MCLs have not been promulgated, the background concentration for the constituent established from wells in accordance with Special Condition #10(a);

      3. For constituents for which the background concentration is higher than the MCL, or health-based concentration that complies with the statewide standards for groundwater established pursuant to 567 IAC 137 (for when no MCL has been established), the background concentration.

d. In addition to conducting background and routine semi-annual groundwater sampling and analysis, the permit holder shall perform statistical tests for the approved monitoring points for those parameters identified in Appendix B. The permit holder must select one of the statistical methods specified in paragraph 113.10(4)"g" to be used in evaluating groundwater monitoring data for each specified parameter. The statistical test chosen shall be conducted separately for each parameter in each monitoring well.

e. Groundwater samples shall be field analyzed for temperature, specific conductance, and pH whenever a sample is withdrawn from a monitoring well. Furthermore, groundwater samples shall not be field-filtered prior to analysis by a laboratory certified by the DNR.

f. The permit holder must determine, utilizing the statistical method required by Special Condition #6(d), whether or not any of the parameters have been detected at Statistically Significant Levels (SSL) above the groundwater protection standard. If an SSL release has been confirmed, the permit holder must immediately take all necessary measures (e.g., analyze the effectiveness of potential corrective measures) to control the source(s) of release so as to reduce or eliminate, to the maximum extent practicable, further releases of contaminants into the environment that may pose a threat to human health or the environment. If there has been a verified release of contaminants, the DNR reserves the right to place specific conditions upon the permit holder, including, but not limited to, the establishment of an environmental covenant pursuant to Iowa Code Chapter 455I.

g. The permit holder may demonstrate that a source other than the above-referenced project location caused the contamination or that the SSL resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. A report documenting this demonstration must be certified by a qualified groundwater scientist and approved by the DNR. If resampling is a part of the demonstration, resampling procedures shall be specified prior to initial sampling. If a successful demonstration to the DNR is made, and upon written notification by the DNR, the permit holder may resume detection monitoring.

h. The permit holder shall submit an Annual Water Quality Report (AWQR) to the DNR, certified by a qualified groundwater scientist, detailing the status of the Groundwater Monitoring Program for the above-referenced project location (e.g., sampling locations and results, assessments), summarizing key actions completed, describing any problems encountered, discussing actions to resolve the problems (e.g., results of corrective action remedies to address SSLs), if any, and key project activities for the upcoming year. This report shall include a site map that delineates all monitoring points where water quality samples were taken, and plume(s) of contamination, if any. The report shall contain a narrative explaining and interpreting all of the data collected during the previous year, and shall be submitted to the DNR by March 1st each year.

7) The permit holder shall submit a final closure compliance report to the DNR within sixty (60) days of completing closure of the existing foundry sand disposal site. The report shall be certified a professional engineer licensed in the State of Iowa and confirm that disposal site closure has been implemented in compliance with the approved Site Closure Design Plan, Site Closure Plan Narrative and this closure permit. The following information shall also be included within the final closure compliance report:

a. As-built drawings shall be submitted to the DNR to document any deviations made from the initial drawings during the construction process, and provide an exact rendering of the property as it appears upon completion. This submittal shall include a description of final cover system construction, including cap thickness, final slopes, diversion and drainage structures and vegetation.

b. A notation shall be filed with the county recorder showing in perpetuity, for the purposes of title abstract, the existence of a spent foundry sand disposal site, and that closure activities were performed in accordance with this permit. The permit holder shall submit a copy of the executed notation to the DNR within sixty (60) days of completion of site closure.

c. Permanent survey monuments identified by a land surveyor licensed in the State of Iowa from which the location and elevation of the final cover system can be determined (project boundaries shall be surveyed and staked to ensure minimum separation distances are maintained).

8) Upon submittal of the final closure compliance report, the permit holder shall commence annual inspections of the closed spent foundry sand disposal site. If a significant deficiency or release is identified by a qualified person during an inspection, the permit holder shall remedy the deficiency or release as soon as feasible and prepare documentation for submittal to the DNR detailing the corrective measures taken. A significant deficiency is one that jeopardizes the stability of the unit or the integrity of the final capping system, but does not include issues that can be addressed through routine maintenance (e.g., reseeding, repairs of minor rills). In those instances where a significant deficiency or release is identified, a report shall be certified by a professional engineer licensed in the State of Iowa confirming that corrective measures undertaken were in compliance with this closure permit.

9) Following closure of the existing foundry sand disposal site, post-closure care shall continue throughout the term of this permit. At a minimum, post-closure care shall consist of at least the following:

a. Maintaining the integrity and effectiveness of the final cover system to original specifications, including making repairs to the final cover as necessary to correct the effects of seeps, settlement, subsidence, erosion, ponding or other events, and preventing run-on and runoff from eroding or otherwise damaging the final cover;

b. Reseeding the vegetative cover as necessary to maintain good vegetative growth. Any invading vegetation whose root system could damage the compacted soil layer shall be removed or destroyed as soon as possible. The permit holder shall monitor the final cover and vegetation on a quarterly basis for the first year, until vegetation is well established, and annually thereafter throughout the remainder of the permit term; and

c. Maintaining the groundwater monitoring system and monitoring the groundwater in accordance with the requirements of Special Condition #6.

10) Any residual solid waste, such as garbage, refuse or rubbish as defined in Iowa Code section 455B.301, that may be commingled with the spent foundry sand, shall be removed prior to placement as material for site closure purposes.

11) All necessary measures (e.g., terraces, silt fences and geo-fabrics) shall be employed as necessary to prevent and minimize soil erosion and fugitive dust migration resulting from excavation, transport, and grading activities at the project location. Any erosion that occurs during site closure, and after completion of final cover, shall be promptly corrected by the permit holder.

12) Pursuant to Iowa Code paragraph 455B.306(7)(a) and Iowa Code subsection 455B.306(9), the permit holder shall establish and maintain financial assurance for the costs of conducting post-closure care and corrective action (if applicable) of the closed spent foundry sand disposal site. The permit holder shall adhere to the financial assurance provisions of 567 IAC 113.14(4) through 567 IAC 113.14(7) utilizing a financial assurance mechanism in 567 IAC 113.14(6), and provide continuous coverage for post-closure care until released from this requirement by the DNR. Proof of compliance shall be submitted by the permit holder within sixty (60) days of issuance of this permit, and yearly thereafter by April 1st.

13) The DNR's Central Office in Des Moines, IA, Field Office #6 in Washington, IA shall be notified in writing of impending completion of site closure activities so that project closure activities may be observed to confirm compliance with the conditions defined under this permit.

# Appendix A

(Responsible Official Certification)

I do herein swear that I am duly authorized representative of the entity below and I am authorized to execute this document. I understand that this permit supersedes and replaces any previous authorization issued by the DNR. I further certify that the operation of the above-described project, as applicable, will be in accordance with the plans, specifications, reports and conditions imposed within this closure permit.

Permitted Agency: **Faircast, Inc.**

Name: Kenneth P Ledoux

Signature: Kenneth P Ledoux

Title: President Date: 6-30-2020

Licensed Design Engineer: **True Line Design Solutions, LLC**

Name: Trevor C. Brown, PE, PLS

Signature: Trevor C Brown

Title: Project Manager Date: 6-30-2020

# Appendix B

(Constituents for Groundwater Monitoring)

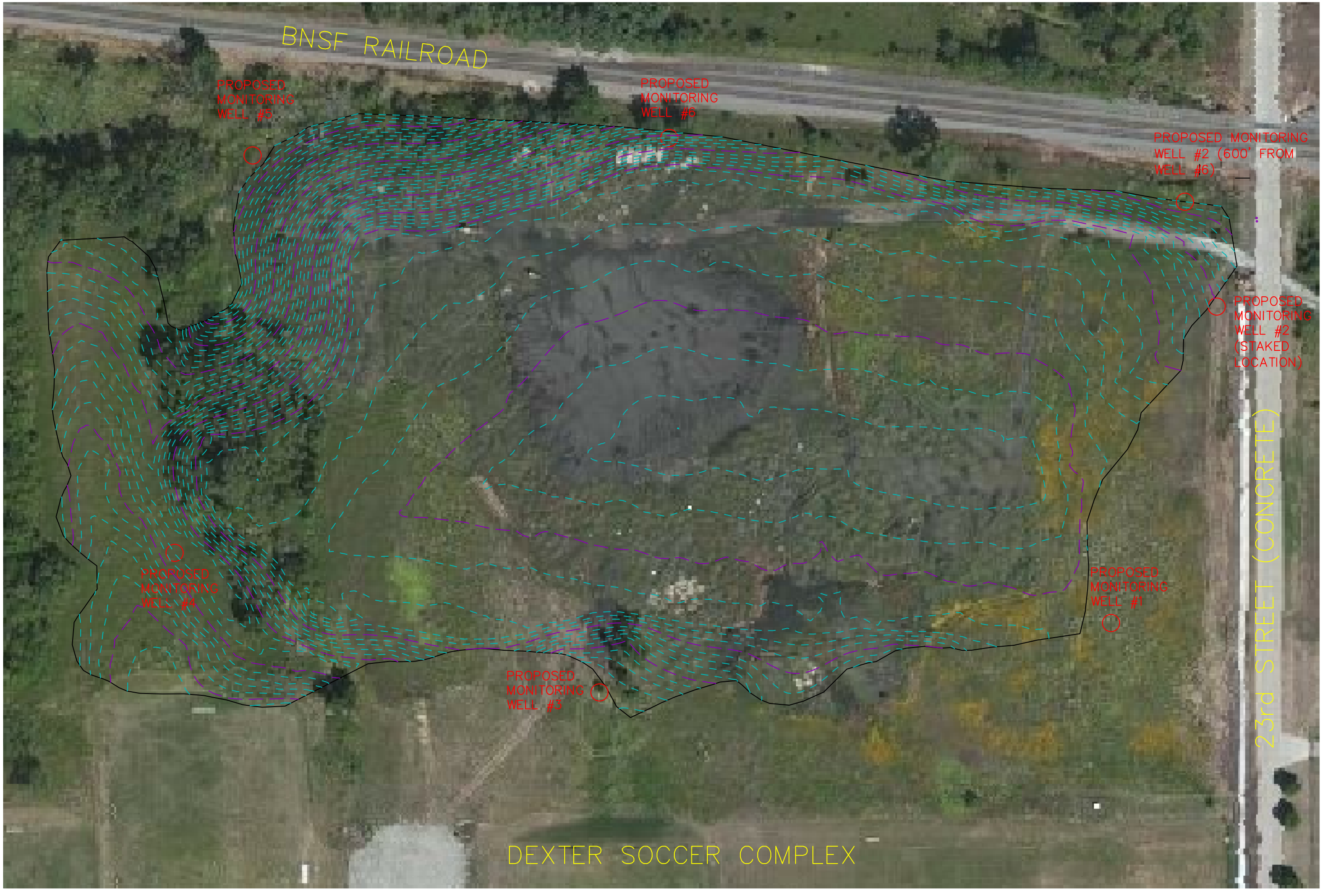
| Inorganic Constituents: | |
|---|---|
| (1) Total Aluminum | (14) Total Lead |
| (2) Total Antimony | (15) Total Magnesium |
| (3) Total Arsenic | (16) Total Manganese |
| (4) Total Barium | (17) Total Mercury |
| (5) Total Beryllium | (18) Total Molybdenum |
| (6) Total Boron | (19) Total Nickel |
| (7) Total Cadmium | (20) Total Selenium |
| (8) Total Chloride | (21) Total Silver |
| (9) Total Chromium | (22) Total Sulfate |
| (10) Total Cobalt | (23) Total Thallium |
| (11) Total Copper | (24) Total Vanadium |
| (12) Total Fluoride | (25) Total Zinc |
| (13) Total Iron | (26) Total Suspended Solids |
| Indicator Parameters: | |
| (1) Chemical Oxygen Demand (COD) | (7) |
| (2) Total organic halogen | (8) |
| (3) Phenols | (9) |
| (4) Ammonia nitrogen | (10) |
| (5) Total Suspended Solids | (11) |
| (6) Formaldehyde | (12) |
| Organic Constituents Detected in Background TCLP: | |
| (1) Methyl Ethyl Ketone (MEK) | (6) Chlorobenzene |
| (2) Benzene | (7) Chloroform |
| (3) Vinyl Chloride | (8) |
| (4) Tetrachloroethene | (9) |
| (5) 1,2-Dichloroethane | (10) |

* Groundwater samples shall be field analyzed for temperature, specific conductance, and pH whenever a sample is withdrawn from a monitoring well.

# Appendix C

(Closure Permit Requirements/Deliverables)

| Special Condition | Description | Due | Submitted By |
|---|---|---|---|
| #7 | Submit Final Closure Compliance Report | Within 60 days of project completion | Permit Holder |
| #7(b) | Submit Deed Notation | Within 60 days of project completion | Permit Holder |
| #7(a) | Submit As-Built Drawings | Within 60 days of project completion | Permit Holder |
| #8 | Commence Annual Site Inspections | Upon Final Closure Compliance Report Submittal (Annually) | Permit Holder |
| #8 | Significant Deficiency Report | As Identified | Permit Holder |
| #12 | Submit Financial Assurance | Within 60 days of permit issuance and by April 1st (Annually) | Permit Holder |
| #3 & #5 | Submit Quarterly Certified Laboratory Reports & Associated DNR Form 542-0652 | July 1st | Permit Holder |
| | | October 1st | Permit Holder |
| | | January 1st | Permit Holder |
| | | April 1st | Permit Holder |
| #4(a) | Report Analytical Exceedance | Within 10 days of receiving the results from the laboratory | Permit Holder |
| #4(d) | Submit Solid By-Product Resampling Notification | Prior to resuming foundry sand reuse | Permit Holder |
| #6(b) | Baseline Groundwater Sampling | Quarterly for the first year | Permit Holder |
| #6(d) | Groundwater Sampling & Analysis | Semi-Annually | Permit Holder |
| #6(h) | Submit Annual Water Quality Report (AWQR) | March 1st (Annually) | Permit Holder |
| **Site Closure Completion** | | **August 1, 2020** | |


BNSF RAILROAD
PROPOSED MONITORING WELL #5
PROPOSED MONITORING WELL #6
PROPOSED MONITORING WELL #2 (600' FROM WELL #6)
PROPOSED MONITORING WELL #2 (STAKED LOCATION)
23rd STREET (CONCRETE)
PROPOSED MONITORING WELL #4
PROPOSED MONITORING WELL #3
PROPOSED MONITORING WELL #1
DEXTER SOCCER COMPLEX