



GRETCHEN WHITMER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES, AND ENERGY  
GRAND RAPIDS DISTRICT OFFICE



LIESL EICHLER CLARK  
DIRECTOR

December 17, 2020

VIA EMAIL AND  
CERTIFIED MAIL - 7017 2620 0000 2474 6725  
RETURN RECEIPT REQUESTED

Mr. Michael Berg  
Boulder Creek Development Company LLC  
1730 3 Mile Road, NE  
Grand Rapids, Michigan 49505

Dear Mr. Berg:

SUBJECT: Violation Notice and Section 20114(1)(h) Demand Regarding the Releases at  
Northeast Gravel Company Site (formerly known as 4300 Cannonsburg Road),  
3769 Cannonsburg Road, NE, Kent County, Michigan;  
Facility ID No.: 41000048

The Boulder Creek Development Company LLC (BCDC) was informed by the Michigan Department of Environment, Great Lakes, and Energy (EGLE) in letters dated June 19, 2018, July 24, 2019, and October 1, 2020, (enclosed as Attachment A) of its liability regarding the environmental contamination present on the property located at 3769 Cannonsburg Road, NE (Property), for which BCDC is liable under Michigan's environmental cleanup law, Part 201, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Part 201).

In its June 19, 2018, and July 24, 2019, letters, EGLE outlined its basis for asserting BCDC is a liable party under Part 201; explained Part 201 obligations for liable parties and owners and operators of contaminated properties; and requested BCDC perform certain response activities at the Facility.

On July 24, 2019, EGLE issued a demand which mandated BCDC provide a response activity plan for evaluating the extent of per- and polyfluoroalkyl substances (PFAS) contamination, and conduct immediate sampling of drinking water wells vulnerable to PFAS contamination, and provide an appropriate alternative water supply or filters as necessary. In response, BCDC provided EGLE with a response activity plan on August 29, 2019, which included residential well sampling and provision of point-of-use filters to select homes in-lieu of sampling.

On August 3, 2020, state drinking water standards (which are also commonly referred to as maximum contaminant levels or MCLs) for seven PFAS compounds became effective. Because EGLE had previously developed generic cleanup criteria for groundwater used as drinking water for perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS), under Part 201, the state drinking water standards became the new PFOA and PFOS generic cleanup criteria for groundwater used as drinking water. Therefore, the state drinking water standards of 8 parts per trillion (ppt) and 16 ppt, respectively for PFOA and PFOS, replaced the previously established residential and nonresidential drinking water criteria of 70 ppt for PFOA and PFOS combined. Subsequent to the MCLs becoming effective (and thus lowering the Part 201 drinking water cleanup criteria for PFOA and PFOS), EGLE sent BCDC a letter on October 1,

2020, requesting provision of a permanent alternate water supply to impacted drinking water wells and a plan for continued residential well sampling. In a November 18, 2020, letter response, BCDC indicated it will not be undertaking the necessary response activities outlined in EGLE's October 1, 2020, letter.

#### Request for Response Activities

BCDC has known since June 19, 2018, of its responsibility for an affirmative obligation to comply with Section 20114 of Part 201, which lists the steps required of a liable party to address environmental contamination. Since BCDC has not voluntarily complied with the provisions of Part 201, EGLE is issuing this Violation Notice and is again asserting its authority under Section 20114(1)(h) of Part 201, and BCDC must:

1. Within 45 days of receipt this letter, submit to EGLE for review and approval, a response activity plan and implementation schedule to provide a permanent alternate water supply capable of providing water of sufficient quality for drinking at each of the properties identified in EGLE's October 1, 2020, letter. EGLE notes that existing water mains are located either in front of, adjacent to, or no more than 300 yards from the properties identified.
2. Within 45 days of receipt of this letter, submit to EGLE for review and approval, a response activity plan and implementation schedule for residential well sampling that identifies which drinking water wells will be sampled by BCDC on a specific sampling frequency. This response activity plan must include sampling of drinking water wells located near a sampling point which historically exceeded Part 201 criteria or drinking water wells that are at risk of exceeding the groundwater standards in the future (refer to the October 1, 2020, letter).
3. Within 60 days of receipt of this letter, provide Notices of Migration to all property owners impacted by PFAS associated with the Property or BCDC's previous irrigation activities north of 7 Mile Road per the requirements of Section 324.20114(1)(b)(ii). The addresses at a minimum that should be notified are the properties identified for provision of a permanent alternate water supply in the October 1, 2020 letter.
4. Within 75 days of receipt of this letter, submit to EGLE for review and approval, a response activity plan and implementation schedule to define the nature and extent of PFAS groundwater contamination associated with the Property, and BCDC's former irrigation activities north of 7 Mile Road.
5. Within 180 days of receipt of this letter, submit to EGLE for review and approval, a response activity plan and implementation schedule containing a remedial action plan that, when implemented, will achieve the cleanup criteria established under Part 201. Include in this response activity plan at a minimum, proposed response activities to control the ongoing release of PFAS from the Property to area groundwater and nearby surface water bodies.

BCDC must submit the plans, including any subsequent documents, required pursuant to the Section 20114(1)(h) demand above to the following address:

Karen Vorce, Project Manager  
Grand Rapids District Office  
Remediation and Redevelopment Division  
Michigan Department of Environment, Great Lakes, and Energy  
350 Ottawa Avenue, NW, Unit 10  
Grand Rapids, Michigan 49503-2341  
Telephone: 616-439-8008  
Email: VorceK@michigan.gov

As previously stated in the July 24, 2019, Violation Notice, because this is a demand issued under Section 20114(1)(h) of Part 201, BCDC no longer has the option to self-implement a cleanup, and BCDC is required to perform response activities in accordance with EGLE-approved response activity plans and schedules. Response activity plans submitted to EGLE pursuant to Section 20114(1)(h) of Part 201 should NOT include a response activity plan review request form.

Please be advised that civil fines of up to \$1,000 per day may be sought for failure to comply with this demand for response activities under Section 20114(1)(h) of Part 201.

Reimbursement of EGLE Response Activity Costs

EGLE has the authority to expend public funds to conduct response activities at facilities and recover those costs from the parties liable for the Facility. EGLE has incurred, and may continue to incur, costs for performing response activities at the Facility. EGLE is requesting reimbursement for its response activity costs incurred to date. Please refer to the Cost Recovery Summary Report in Attachment B for the full amount owed to EGLE. According to Section 20126a(3) of Part 201, interest on these response activity costs will accrue from the date payment is demanded in writing. This letter serves as EGLE's demand for payment. To avoid any interest that will accrue on these costs, BCDC may remit payment by April 1, 2021, by certified check payable to the "State of Michigan - Environmental Response Fund" and send it by first class mail to:

Michigan Department of Environment, Great Lakes, and Energy  
Cashier's Office for EGLE  
P.O. Box 30657  
Lansing, Michigan 48909-8157

or via courier to:

MDOT Accounting Services Division  
Cashier's Office for EGLE  
Van Wagoner Building, 1st Floor West  
425 West Ottawa Street  
Lansing, MI 48933-2125

To ensure proper credit, this payment must reference the Facility and the location code 6255. A copy of the transmittal letter and the certified check must be provided simultaneously to the project manager referenced above.

EGLE has authority to place a lien on property where EGLE has performed response activities under Section 20138 of Part 201. BCDC's failure to reimburse EGLE as provided above may result in the placement of a lien against BCDC's property.

The explanations of Part 201 in this letter should not be considered a complete listing of BCDC's legal obligations. The Part 201 statute and rules can be found in its entirety at the EGLE website: [www.michigan.gov/egle/](http://www.michigan.gov/egle/), by clicking on 'Land,' 'Remediation,' then 'Site Investigation and Remediation.'

Please be advised that issuance of this Violation Notice and Demand does not preclude or limit EGLE's ability to initiate any other enforcement action under state or federal law as appropriate. If BCDC does not comply with the requirements of Part 201 and this letter, EGLE may do any or all of the following, perform additional response activities at the Facility and seek reimbursement plus interest; take an enforcement action to compel compliance with Part 201; and seek civil fines pursuant to Part 201.

The information used to prepare this letter is located at EGLE's Grand Rapids District Office, 350 Ottawa Avenue, NW, Unit 10, Grand Rapids, Michigan 49503-2341. If BCDC wishes to review this information or if you have questions regarding this letter, please contact the Project Manager, Karen Vorce, at 616-439-8008 or via email at [VorceK@michigan.gov](mailto:VorceK@michigan.gov); or you may contact me at the telephone number listed below.

Sincerely,



Abigail Hendershott  
District Supervisor  
Grand Rapids District Office  
Remediation and Redevelopment Division  
616-888-0528  
[HendershottA@michigan.gov](mailto:HendershottA@michigan.gov)

Enclosures

cc: Mr. Gary Schenk, Schenk Boncher & Rypma  
Mr. Cameron Van Wyngarden, Plainfield Charter Township  
Ms. Polly Synk, Department of Attorney General  
Ms. Beth Vens, EGLE  
Mr. Dan Rockafellow, EGLE  
Mr. Darren Bowling, EGLE  
Ms. Vicki Katko, EGLE  
Ms. Nancy Johnson, EGLE  
Ms. Karen Vorce, EGLE







RICK SNYDER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
GRAND RAPIDS DISTRICT OFFICE



C. HEIDI GREETHER  
DIRECTOR

June 19, 2018

CERTIFIED MAIL – 7017 2680 0000 0951 5652  
RETURN RECEIPT REQUESTED

Mr. Michael Berg  
Boulder Creek Development  
1703 3 Mile Road, NE  
Grand Rapids, Michigan 49505

Dear Mr. Berg:

SUBJECT: Compliance Communication Regarding the Release at Northeast Gravel Company Site, (formerly known as 4300 Cannonsburg Road), 3769 Cannonsburg Road, NE, Kent County, Michigan; Facility ID No. 41000048

Thank you for meeting with the Department of Environmental Quality (DEQ) on April 5, 2018. As discussed in the meeting, the DEQ has information indicating contamination is present on the property at 3769 Cannonsburg Road, NE, former address 4300 Cannonsburg Road (Property). Please refer to the enclosed meeting synopsis for additional details regarding what was discussed during the meeting. Subject to Michigan's environmental cleanup law, Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Part 201), the DEQ considers Boulder Creek Development Company (BCDC) responsible for the contamination.

As part of the DEQ's Northern Kent County Per- and Polyfluoroalkyl Substances (PFAS) investigation, to date, the DEQ has sampled two irrigation wells, three monitoring wells, and four residential wells on Cannonsburg Road located southwest, south, and southeast of the Property. Based on the results obtained during the DEQ's initial investigation activities, data indicates that concentrations of perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) above the Part 201 Drinking Water Criteria and the United States Environmental Protection Agency (USEPA) Health Advisory Level of 70 parts-per-trillion (ppt) were identified in two monitoring wells (MW-4 at 141.9 ppt and MW-5 at 115.8 ppt) located at 4300 Cannonsburg Road.

The former licensed landfill that operated at the Property has been documented to accept wastes from industries known to have used PFAS in their processes. As described above, PFOA and PFOS have been identified at concentrations above the Part 201 Drinking Water Criteria, and the extent of this contamination has not been defined. An area where hazardous substances exceed the criteria for unrestricted residential use is known as a Facility as defined in Part 201, which triggers obligations under the law. The concentration of PFOA and PFOS found at the Property makes it a Facility regulated by Part 201, and steps are required to clean up the contamination.

Persons who are liable for a facility pursuant to Section 20126 of Part 201 include persons that become an owner or operator of a facility after June 5, 1995, unless the owner or operator conducts and submits a Baseline Environmental Assessment (BEA). Property records indicate that Northeast Gravel Company sold the property to BCDC and that this transaction was

recorded on September 29, 1997. According to DEQ records, BCDC did not conduct or submit a BEA. This information indicates that BCDC is liable under Section 20126(1)(c)(i) of Part 201.

As a person liable under Section 20126 of Part 201, BCDC has responsibility for an affirmative obligation to comply with Section 20114 of Part 201, which lists the requirements of a liable party to address environmental contamination. These steps include, as applicable:

- Immediately taking measures to contain or remove the contamination source;
- Immediately identifying and eliminating any threat of fire or explosion or direct contact hazards;
- Notifying the DEQ and affected neighbors if contamination has migrated off the Property;
- Delineating the extent of the contamination; and
- Undertaking the cleanup of the contamination.

Additional requirements under Section 20114 of Part 201 may apply to this situation.

While the DEQ understands that parties may self-implement response activities as provided in Section 20114a of Part 201, it appears that BCDC has not voluntarily complied with the provisions of Part 201.

The DEQ requests BCDC to perform remedial investigations to define the horizontal and vertical extent of hazardous substances and to address all unacceptable exposures to public health and impacts to the environment above Part 201 Generic Cleanup Criteria.

The DEQ is requesting BCDC to submit a Remedial Investigation Work Plan within 30 days of receipt of this letter to the following address:

John Pawloski, Project Manager  
Grand Rapids District Office  
Department of Environmental Quality  
Remediation and Redevelopment Division  
350 Ottawa Avenue, NW, Unit 10  
Grand Rapids, Michigan 49503-2341  
616-356-0418  
PawloskiJ1@michigan.gov

The DEQ is also requesting BCDC provide temporary alternate water to all area residences and businesses whose wells may have been impacted by releases from the Facility. Following completion of the investigation and full characterization and definition of the extent of hazardous substances, BCDC shall provide long term alternate water to the residences and businesses whose wells were found to be contaminated or may become contaminated by releases of hazardous substances from the Facility.

Since environmental contamination is present on the Facility, BCDC also has a responsibility as the owner or operator of the Property to take certain measures, commonly called due care, to ensure that existing contamination on the Property does not cause unacceptable risks and is not exacerbated. The due care provisions are found in Section 20107a of Part 201, and include:

- Preventing exacerbation of the existing contamination;

- Preventing unacceptable human exposure and mitigating fire and explosion hazards to allow for the intended use of the Northeast Gravel Facility in a manner that protects the public health and safety; and
- Taking reasonable precautions against the reasonably foreseeable acts or omissions of a third party.

Additional guidance on complying with due care is found in Part 10 (Compliance with Section 20107a of Act) of the Part 201 Administrative Rules.

The DEQ requests that BCDC take all necessary steps to comply with Part 201. BCDC may want to confer with an environmental consultant to assist in complying with the provisions of Part 201.

The explanations of Part 201 in this letter should not be considered a complete listing of BCDC's legal obligations. The Part 201 statute and rules can be found in its entirety at the DEQ Web site: [www.michigan.gov/deq](http://www.michigan.gov/deq), by clicking on 'Land,' 'Land Remediation & Redevelopment,' then 'Site Investigation and Remediation.'

The information used to prepare this letter is located in the DEQ, Grand Rapids District Office located at 350 Ottawa Avenue, NW, Unit 10, Grand Rapids, Michigan 49503-2341. If BCDC wishes to review this information or if you have questions regarding this letter, please contact Mr. John Pawloski, Project Manager, at the contact information noted above. The DEQ looks forward to your cooperation in addressing the contamination at the Facility.

Sincerely,



Abigail Hendershott  
District Supervisor  
Grand Rapids District Office  
Remediation and Redevelopment Division  
616-888-0528  
[HendershottA@michigan.gov](mailto:HendershottA@michigan.gov)

Enclosure

cc: Mr. Gary Schenk, Schenk Boncher & Rypma  
Ms. Sara Simmonds, Kent County Health Department  
Mr. William Farrell, Department of Health and Human Services  
Ms. Carol Isaacs, Governor's Office  
Mr. Scott Hiipakka, Governor's Office  
Mr. C. Heidi Grether, Director, DEQ  
Mr. Aaron B. Keatley, Chief Deputy Director, DEQ  
Mr. Nate Zimmer, Chief of Staff, DEQ  
Mr. Steve Sliver, PFAS Executive Lead, DEQ  
Ms. Kathleen Shirey, DEQ  
Ms. Amy Peterson, DEQ  
Mr. Kevin Schrems, DEQ  
Mr. John Pawloski, DEQ  
Ms. Nancy Johnson, DEQ

## **April 5, 2018 - Northeast Gravel Meeting Minutes**

### **Attendees:**

Mark Worrall – DEQ- RRD  
Jim Dykema – Dykema Excavating  
Tyler Osburn – Schenk Boucher  
Gary Schenk – Schenk Boucher  
Mike Berg – Dykema Excavating  
John Pawloski – DEQ – RRD  
Karen Vorce – DEQ- RRD  
Abigail Hendershott – DEQ- RRD

### **Discussion Points:**

The following points were discussed at the meeting on April 5, 2018:

1. The Department of Environmental Quality (DEQ) sent a February 21, 2018, letter requesting a work plan for per- and polyfluoroalkyl substance (PFAS) investigation within 30 days.
2. Northeast Gravel / Boulder Creek Development Company, LLC (BCDC) did not understand why the DEQ thought work needed to be conducted per the March 1, 2018, response letter from BCDC.
3. The Voluntary Agreement for a Limited Residential Based Remedy (Agreement) executed on September 4, 1998, between the DEQ and Northeast Gravel Company (current property owner BCDC) to address environmental contamination. The agreement provides for the implementation of response activities contained in the Remedial Action Plan (RAP) submitted by Fishbeck, Thompson, Carr & Huber on November 30, 1995, and amended by its letter submitted on April 2, 1996. At the time the RAP was implemented, PFAS was an unknown contaminant of concern.
4. As part of the 1998 voluntary Agreement, Northeast Gravel/BCDC will be extending the municipal water line up to the corner of the church property located at 4435 Cannonsburg Road. The extension would not include hook up for the church building to municipal water.
5. Discussion of the state-wide efforts by the Michigan PFAS Response Team (MPART) to address PFAS where public health might be at risk due to levels of PFOA/PFOS exceeding 70 parts per trillion (ppt).
6. The investigations at House Street, Rockford Tannery and North Kent County of properties impacted with PFAS from Wolverine Worldwide's- Rockford Tannery.

The investigation has included approximately 20 square miles of northern Kent County.

7. The need for additional remedial investigation to define the source of the PFAS and the extent of the vertical and horizontal impacts from the PFAS emanating from the Facility north of Cannonsburg Road. During our meeting BCDC did not agree to do any investigation as requested by the DEQ in the February 21, 2018, letter. BCDC did agree to allow the DEQ to sample two additional on-site irrigation wells that were located in an apparent down-gradient location to the former Wolverine tannery sludge cell and the electroplating waste cell.
8. The DEQ PFAS sampling results from the residential drinking water wells and irrigation wells located along Cannonsburg Road near and/or at the Facility. Concentrations of perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) above the Part 201 Drinking Water Criteria and United States Environmental Protection Agency (USEPA) Health Advisory Level of 70 ppt were identified in two monitoring wells (MW-4 at 141.9 ppt and MW-5 at 115.8 ppt) located at 4300 Cannonsburg Road. These monitoring wells are located downgradient of the former licensed landfill at the Facility which has been documented to accept wastes from industries known to have used PFAS in their processes.
9. Potential PFAS impacts to onsite surface water ponds as well as to the Grand River which is approximately 4000 feet downgradient. BCDC did agree to allow the DEQ to sample surface water ponds that are in an apparent down-gradient location to the former Wolverine tannery sludge cell and the electroplating waste cell.
10. Based on the DEQ's PFAS sampling results, this previously unknown hazardous substance present in groundwater at the Facility may pose a threat to public health, safety or welfare, or the environment. PFOA and PFOS have been identified at concentrations above the Part 201 Drinking Water Criteria, and the extent of this contamination has not been defined.



GRETCHEN WHITMER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES, AND ENERGY  
GRAND RAPIDS DISTRICT OFFICE



LIESL EICHLER CLARK  
DIRECTOR

July 24, 2019

VIA EMAIL AND  
CERTIFIED MAIL – 7017 2620 0000 2474 4653  
RETURN RECEIPT REQUESTED

Mr. Michael Berg  
Boulder Creek Development Company LLC  
1703 3 Mile Road, NE  
Grand Rapids, Michigan 49505

Dear Mr. Berg:

SUBJECT: Violation Notice and Demand Regarding the Releases at Northeast Gravel  
Company Site (formerly known as 4300 Cannonsburg Road),  
3769 Cannonsburg Road, NE, Kent County, Michigan;  
Facility ID No.: 41000048

As previously communicated to Boulder Creek Development Company (BCDC) in a letter dated June 19, 2018, the Department of Environment, Great Lakes, and Energy (EGLE) demands BCDC's compliance regarding the environmental contamination present at the property at 3769 Cannonsburg Road, NE (Property) for which BCDC is liable under Michigan's environmental cleanup law, Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Part 201).

Environmental Problem and Compliance History

BCDC was informed of the requirements under Part 201 for the environmental contamination at and emanating from the Property in the letter dated June 19, 2018. The former licensed landfill that operated at the Property accepted wastes from industries known to have used Per- and Polyfluoroalkyl Substances (PFAS) in their processes. A sample of the tannery waste (TWSS-03) collected on January 17, 2019, was shown to have 42,370,000 parts per trillion (ppt) perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) combined. PFOA and PFOS have been detected in monitoring wells and irrigation wells at levels which exceed the Part 201 Cleanup Criteria for groundwater used as drinking water and the United States Environmental Protection Agency (USEPA) lifetime Health Advisory Level, both of which are established at 70 ppt. The PFAS waste has contaminated the groundwater which has then contaminated three onsite surface water ponds above the Groundwater-Surface Water Interface (GSI) Cleanup Criterion of 12 ppt for PFOS. PFOS concentrations as high as 2902.9 ppt have been detected in surface water, which has been impacted by contaminated groundwater at the Property.

PFOA and PFOS are hazardous substances under Part 201. The concentration of PFOA and PFOS measured on the Property exceed the Part 201 groundwater criteria for unrestricted residential use, and, therefore, the Property is a Facility as defined in Part 201.



Part 201 Liability

Persons who are liable for a facility pursuant to Section 20126 of Part 201 include persons who become an owner or operator of a facility after June 5, 1995, unless the owner or operator conducts and submits a Baseline Environmental Assessment (BEA). Property records indicate that Northeast Gravel Company sold the Property to BCDC and that this transaction was recorded on September 29, 1997. According to EGLE records, BCDC is the owner and operator of the Northeast Gravel Facility (Facility) and did not conduct or submit a BEA. Therefore, BCDC is liable under Section 20126(1)(c)(i).

The hazardous substances present at the Facility are waste materials contained in a waste cell dedicated to Wolverine tannery waste, according to information in the Northeast Gravel file located in EGLE's Grand Rapids District office. This cell is beneath a permeable vegetated cover system which was installed as a physical barrier. Data provided as part of the *Northeast Gravel Project Update PFAS Investigation* dated May 21, 2019, indicates that a sample of the tannery waste (TWSS-03) collected on January 17, 2019, was shown to have 42,370,000 ppt of PFOA and PFOS combined. The permeable vegetated cover system does not effectively prevent the leaching of PFAS compounds from the tannery waste cell. PFAS contaminated groundwater is leaching and migrating from this cell in the direction of the three surface water bodies/ponds and the Grand River. A smaller landfill cell containing hazardous substances originating from plating operations is covered with a clay barrier. A January 17, 2019, sample collected from the plating waste cell was shown to have 1,002,000 ppt PFOS and PFOA combined.

EGLE has identified three surface water bodies and two irrigation wells located within the PFAS contamination plume on the Facility, located south of the landfilled areas. The irrigation wells located on parcels 5607 Sheba Drive, NE and 4022 Preserve Drive, NE were sampled by EGLE and are contaminated with PFAS at levels which exceed the Part 201 Cleanup Criteria for groundwater used as drinking water. In addition, three surface water samples were collected by EGLE from three unnamed ponds located at the Property. All three surface water bodies were found to contain high levels of Total PFAS, specifically PFOS as high as 2902.9 ppt, which confirms that these surface waters have been impacted by PFAS contaminated groundwater on the Property.

BCDC was provided with the EGLE sampling results of the irrigation wells and surface water samples via email on June 28, 2018. According to information verbally provided to EGLE by BCDC during a July 24, 2018, meeting, BCDC uses this contaminated groundwater, accessed through the two irrigation wells identified above, to irrigate the landscaping and open spaces on the Property south of the landfill areas. Additionally, BCDC told EGLE that they used the surface water from the southern pond to irrigate the remaining golf course greens (south of 7 Mile). BCDC is, therefore, an owner and operator of the Facility and is responsible for an activity causing a release of hazardous substances onto the soil in these areas.

However, during our June 10, 2019, meeting, EGLE became aware that BCDC irrigates the golf course greens north of 7 Mile Road with water from the southern pond on the Property. PFOS concentrations in the southern pond have been identified at levels as high as 969.73 ppt. BCDC has been aware of the elevated PFAS concentrations in the southern pond (which has been impacted by the contaminated PFAS groundwater plume emanating from the historical landfill disposal cells) since July 2018 and has continued to use this water to irrigate in upgradient locations that were not previously impacted by PFAS. BCDC is, therefore, an owner



and operator of a Facility responsible for an activity causing a release or threat of release of hazardous substances into the environment.

As a liable party under Part 201, BCDC is responsible for: (1) addressing the contamination at the Facility as provided in Section 20114 of Part 201; (2) all costs lawfully incurred by EGLE for addressing the contamination or undertaking response activity; (3) any other costs for response activity reasonably incurred by any other person; and (4) damages for the value of injury to, destruction of, or loss of natural resources.

#### Request for Response Activities

BCDC has had knowledge since June 2018 of its responsibility for an affirmative obligation to comply with Section 20114 of Part 201, which lists the steps required of a liable party to address environmental contamination. EGLE acknowledges that remedial investigation activities have been conducted, but disagrees with the position set forth in a report dated May 21, 2019, submitted on behalf of "Northeast Gravel" (Northeast Gravel – Project Update PFAS Investigation), in which a description of response activities at the Property states that "the extent and fate of PFAS contamination is effectively defined." BCDC as owner and operator of the facility has had knowledge about the elevated concentrations of PFAS in the groundwater and in the southern pond and has elected to continue irrigation practices to the north and upgradient of the landfill area thereby causing a release of hazardous substances. EGLE has been provided data for nearby private drinking water wells and community public drinking water wells which have low to moderate detections of PFOA and PFOS, at levels up to 22.9 PFOA and PFOS combined. EGLE has also installed a shallow and deep monitoring well (MW-8S and MW-8D) in the neighborhood just north of 7 Mile Road, west of the golf course, which also identified detections of PFOA and PFOS in the groundwater. These detections indicate a release of PFAS to the environment north of 7 Mile Road.

Since BCDC has not complied with the provisions of Part 201, EGLE is issuing this Violation Notice and asserting its authority under Section 20114(1)(h) of Part 201, and BCDC shall:

1. Immediately stop or prevent an ongoing release at the source. In this case, the ongoing release is the act of pumping and releasing contaminated irrigation water.
2. By August 30, 2019, provide for EGLE approval, a Response Activity Plan for evaluating the extent of PFAS contamination including the area north of 7 Mile Road. The Response Activity Plan must include an implementation schedule, a schematic for the irrigation system, a description of the irrigation practices including all areas of the golf course, open areas and associated properties that are subject to irrigation, irrigation schedule and approximate volumes of irrigated water.
3. Take any other response activity determined by EGLE to be technically sound and necessary to protect the public health, safety, welfare, or the environment. **Response activities must include immediate sampling of drinking water wells vulnerable to PFAS contamination and providing an appropriate alternative water supply or filters as necessary.**
4. If BCDC as owner or operator has reason to believe that one (1) or more hazardous substances are emanating from or have emanated from and are present beyond the boundary of BCDC property at a concentration in excess of cleanup criteria for unrestricted residential use, BCDC must notify EGLE and the owners of property where

the hazardous substances are present within thirty (30) days after obtaining knowledge that the release has migrated.

The plans, including any subsequent documents, required pursuant to the Section 20114(1)(h) request above, shall be submitted to the following address:

Karen Vorce, Project Manager  
Department of Environment, Great Lakes, and Energy  
Remediation and Redevelopment Division  
Grand Rapids District Office  
350 Ottawa Avenue, NW  
Unit 10  
Grand Rapids, Michigan 49503-2341  
Telephone: 616-439-8008  
Email: VorceK@michigan.gov  
Fax: 616-356-0202

Because this is a demand issued under Section 20114(1)(h) of Part 201, BCDC no longer has the option to self-implement the above requested items, and BCDC is required to perform response activities in accordance with EGLE-approved response activity plans and schedules. Response activity plans submitted to EGLE pursuant to Section 20114(1)(h) of Part 201 should NOT include a response activity plan review request form.

Please be advised that civil fines of up to \$1,000 per day may be sought for failure to comply with this request for response activities under Section 20114(1)(h) of Part 201.

#### Meeting Request

EGLE is expecting BCDC's full compliance with Part 201. Therefore, EGLE is requesting a meeting for BCDC and EGLE to discuss this Violation Notice and immediate remedies.

If BCDC wishes to submit any factual information regarding BCDC's liability under Part 201, or information that BCDC believes will demonstrate BCDC's compliance with Part 201, please send it at least ten (10) days prior to the meeting to the address provided above for consideration. If BCDC wishes to review the detailed documentation supporting EGLE's response activity costs or any other information used to prepare this letter, it is located at the Grand Rapids District Office.

The explanations of Part 201 in this letter should not be considered a complete listing of BCDC's legal obligations. The Part 201 statute and rules can be found in its entirety at the EGLE Web site: [www.michigan.gov/egle](http://www.michigan.gov/egle), by clicking on 'Land', 'Remediation', then 'Site Investigation and Remediation'.

Please be advised that issuance of this Violation Notice and Demand does not preclude or limit EGLE's ability to initiate any other enforcement action under state or federal law as appropriate. If BCDC does not comply with the requirements of Part 201 and this letter, EGLE may do any or all of the following: perform additional response activities at the Facility and seek reimbursement plus interest; take an enforcement action to compel compliance with Part 201; and seek civil fines pursuant to Part 201.

The information used to prepare this letter is located at the EGLE Grand Rapids District Office at the address listed above. If BCDC wishes to review this information or if you have questions regarding this letter, please contact Karen Vorce, Project Manager, at 1-616-439-8008 or via email at [VorceK@michigan.gov](mailto:VorceK@michigan.gov); or you may contact me at the telephone number listed below. EGLE looks forward to your cooperation in resolving this matter.

Sincerely,



Abigail Hendershott  
District Supervisor  
Grand Rapids District Office  
Remediation and Redevelopment Division  
616-888-0528

cc: Mr. Gary Schenk, Schenk Boncher & Rypma  
Mr. Cameron Van Wyngarden, Plainfield Charter Township  
Ms. Polly Synk, Department of Attorney General  
Mr. Steve Sliver, MPART Executive Director, EGLE  
Mr. Dan Rockafellow, EGLE  
Mr. David O'Donnell, EGLE  
Ms. Karen Vorce, EGLE  
Ms. Vicki Katko, EGLE





GRETCHEN WHITMER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES, AND ENERGY  
GRAND RAPIDS DISTRICT OFFICE



LIESL EICHLER CLARK  
DIRECTOR

October 1, 2020

VIA EMAIL AND  
CERTIFIED MAIL – 7018 2290 0001 5106 1519  
RETURN RECEIPT REQUESTED

Mr. Michael Berg  
Boulder Creek Development Company, LLC  
1730 3 Mile Road, NE  
Grand Rapids, Michigan 49505

Dear Mr. Berg:

SUBJECT: Response Activity to Provide Permanent Alternate Water Supply  
& Continued Residential Well Sampling  
Northeast Gravel Company Site, (formerly known as 4300 Cannonsburg  
Road), 3769 Cannonsburg Road, NE, Kent County, Michigan;  
Facility ID No.: 41000048

As previously communicated to Boulder Creek Development Company, LLC (BCDC) in letters dated June 19, 2018, and July 24, 2019, the Northeast Gravel Company Site at 3769 Cannonsburg Road, NE (Property) is considered a "facility" under Michigan's environmental cleanup law, Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Part 201).

The former licensed landfill that operated at the Property accepted wastes from industries known to have used Per- and Polyfluoroalkyl Substances (PFAS) in their processes. A sample of the tannery waste cell collected on January 17, 2019, was shown to have 42,370,000 parts per trillion (ppt) perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) combined. A smaller landfill cell containing hazardous substances from plating operations was also sampled on January 17, 2019, which was shown to have 1,002,000 ppt PFOA and PFOS combined. PFOA and PFOS have been detected in monitoring wells and irrigation wells at levels which exceed the Part 201 Cleanup Criteria for groundwater used as drinking water. The PFAS waste has contaminated the groundwater which has then contaminated three onsite surface water ponds above the Groundwater-Surface Water Interface (GSI) Cleanup Criterion of 12 ppt for PFOS. PFOS concentrations as high as 2902.9 ppt have been detected in surface water which has been impacted by contaminated groundwater at the Property.

Until 2019, BCDC irrigated the golf course greens (including the greens north of 7 Mile Road) with water from the southern pond on the Property. PFOS concentrations in the southern pond were identified at levels as high as 969.73 ppt. BCDC has worked over

the last year to switch the golf course irrigation source to a new location that provides water that meets regulatory standards.

The Michigan Department of Environment, Great Lakes, and Energy (EGLE) promulgated state drinking water standards for seven PFAS compounds which became effective August 3, 2020. State drinking water standards are also commonly referenced as maximum contaminant levels and developed under section 5 of the State Drinking Water Act, 1976 PA 299 [MCL 325.1005].

Because EGLE had previously developed generic cleanup criteria for groundwater used as drinking water for PFOA and PFOS, under Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended [MCL 324.20120a(5)], the state drinking water standards became the PFOA and PFOS generic cleanup criteria for groundwater used as drinking water. Therefore, the state drinking water standards of 8 ppt and 16 ppt, respectively for PFOA and PFOS, replace the previously established residential and nonresidential drinking water criteria of 70 ppt for the combined concentrations of PFOA and PFOS.

#### Request for Permanent Alternate Water Supply

As you are aware, many properties surrounding the Northeast Gravel Company Property currently rely on drinking water wells as their potable water source. Nearby drinking water wells have been sampled by BCDC, by EGLE's subcontractor, and by individual property owners over the past three years. Based on review of this sampling data, several properties have had detections of PFOA which exceed the current Part 201 groundwater standard or were expected to exceed the groundwater standard where BCDC offered to install point-of-use filters in lieu of sampling. Below is a summary of these properties:

##### **Cannonsburg Road Area:**

- 4435 Cannonsburg Road, NE
- 4505/4507 Cannonsburg Road, NE

##### **Northland Drive Area:**

- 6460 & 6448 Northland Drive, NE (Spring Valley Mobile Home Park)

##### **Bittersweet Area:**

- Parcels which utilize drinking water wells screened in the PFAS groundwater contamination in the Bittersweet Drive/ Butternut Drive/ Brewer Avenue area as outlined on the attached figure where BCDC offered point-of-use filters in lieu of sampling.

As described by EGLE in communication letters dated June 19, 2018, and July 24, 2019, BCDC is liable for the contamination at these properties. Liable parties under Section 20126 of Part 201 have an affirmative obligation to comply with Section 20114 of Part 201 which lists the requirements of a liable party to address environmental contamination.

A liable party is required under Section 20114(1)(h)(iv) to "take any other response activity determined by the department to be technically sound and necessary to protect the public health, safety, welfare or the environment." EGLE has determined that in order to protect the public health, safety, and welfare, it is necessary for BCDC to provide a permanent alternate water supply capable of providing water of sufficient quality for drinking for each of the properties identified above in this letter. EGLE notes that existing water mains are located either in front of, adjacent to, or no more than 300 yards from the properties identified above. Municipal water connections to impacted properties would constitute a permanent alternate water supply that would be technically sound and feasible.

By November 16, 2020, please provide EGLE a timeline for the implementation of providing a permanent alternate water supply to the properties outlined above in this letter.

#### Request for Residential Well Sampling Plan

In addition to the municipal water connections discussed above, there will be remaining drinking water wells in the area that require PFAS testing and/or follow-up testing. This is especially important since the nature and extent of PFAS groundwater contamination has not yet been defined. By November 16, 2020, please provide for EGLE review and approval a Residential Well Sampling Plan which identifies drinking water wells which will be sampled by BCDC on a specific sampling schedule.<sup>1</sup> This plan should include drinking water wells located near a sampling point which historically exceeded Part 201 criteria or drinking water wells which are at risk of exceeding the groundwater standards in the future. At a minimum, the following properties should be included in the Residential Well Sampling Plan:

- 6430 Northland Drive, NE
- 6410 Northland Drive, NE
- 6237 Northland Drive, NE
- 6475 Thimbleweed Lane, NE
- 6486 Thimbleweed Lane, NE
- 6494 Thimbleweed Lane, NE
- 6504 Thimbleweed Lane, NE
- 6510 Thimbleweed Lane, NE
- 6516 Thimbleweed Lane, NE
- 6522 Thimbleweed Lane, NE
- 6532 Thimbleweed Lane, NE
- 4360 7 Mile Road, NE
- 4361 7 Mile Road, NE
- 4320 7 Mile Road, NE

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<sup>1</sup> To the extent that BCDC commits to extending municipal water to these properties, those properties do not need to be included in the Residential Well Sampling Plan.

- 4284 7 Mile Road, NE
- 4253 7 Mile Road, NE
- 4230 7 Mile Road, NE
- 4211 7 Mile Road, NE
- 6200 Brewer Avenue, NE
- 6207 Brewer Avenue, NE
- 3955 Butternut Drive, NE
- 4540 Cannonsburg Road, NE
- 4585 Cannonsburg Road, NE
- Any drinking water wells on Bittersweet Drive, NE which were not offered point-of-use filters by BCDC.

EGLE acknowledges and appreciates that BCDC has completed the interim response actions of residential well sampling and provision of point-of-use filters to date. However, as stated above, a permanent solution is needed. EGLE is available to virtually meet with BCBC prior to November 16, 2020, to further discuss the contents of this letter.

Sincerely,



Abigail Hendershott  
District Supervisor  
Grand Rapids District Office  
Remediation and Redevelopment Division  
616-888-0528  
HendershottA@michigan.gov

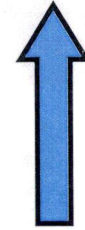
Enclosure

cc/via e-mail: Mr. Gary Schenk, Schenk Boncher & Rypma  
Mr. Cameron Van Wyngarden, Plainfield Charter Township  
Mr. William Farrell, Department of Health and Human Services  
Mr. Brendan Earl, Kent County Health Department  
Ms. Polly Synk, Department of Attorney General  
Ms. Vicki Katko, EGLE  
Ms. Karen Vorce, EGLE





Figure 1: Bittersweet Area Parcels  
Plainfield Township, Michigan



North

Bittersweet Drive / Butternut Drive / Brewer Avenue Area

Updated: 9/29/2020 (EGLE-RRD)





**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
REMEDATION AND REDEVELOPMENT DIVISION**

Date: 12/08/2020

Source: ERNIE

**Cost Recovery Summary Report**

Page: 1 of 1

Site Name: Northeast Gravel Co

County: Kent

Site ID: 41000048

Package: 452736-00

Northeast Gravel Co LOC 6255: Update 1

Total for Employee Salaries and Wages

Period Covered: 04/08/2018 - 11/28/2020

\$34,401.85

Indirect Dollars

\$4,599.97

Sub-Total

\$39,001.82

Total for Employee Travel Expenses

Period Covered:

\$0.00

Contractual Expenses

Period Covered:

\$0.00

Contract Sub-Total

\$0.00

Total for Miscellaneous Expenses

Period Covered:

\$0.00

MDNR/MDEQ Lab

Period Covered:

\$0.00

Total for MDPH/Community Health Expenses

Alternate Water Supply

Period Covered:

\$0.00

Bottled Water

Period Covered:

\$0.00

MDPH/MDCH Lab

Period Covered:

\$0.00

Sub-Total

\$0.00

Attorney General Expenses

Period Covered: 09/01/2020 - 09/30/2020

\$343.75

Other Expenses

Period Covered:

\$0.00

Sub-Total

\$39,345.57

Interest Calculated from through

\$0.00

Total Combined Expenses for Site and Interest

**\$39,345.57**

Run Date 12/08/2020

**MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKE, AND ENERGY**  
**REMEDIATION AND REDEVELOPMENT DIVISION**  
**Cost Recovery Summary Detail of Salaries, Fringes, Insurances, FICA, and Retirement**

Site Name	Northeast Gravel Co	Site ID or Facility ID	41000048	Location Code	6255	SubLocation Code	NA	Package	1					
Employee	Correction	Pay Cycle Expiration Date*	Pay Period Ending	FY	Pay Rate	Regular Hours	Regular Pay	OT Hours	OT Pay	Fringes and Insurances	FICA and Retirement	Sub Total	Indirect	Total
Activity A100 Administration														
VORCE, KAREN J		06/13/2020	06/13/2020	2020	\$37.30	3.0	\$111.90			\$29.83	\$72.85	\$214.58	\$26.33	\$240.91
VORCE, KAREN J		09/19/2020	09/19/2020	2020	\$37.30	3.9	\$144.39			\$24.64	\$77.40	\$246.43	\$30.24	\$276.67
VORCE, KAREN J		10/03/2020	09/19/2020	2021	\$38.05					\$6.15		\$6.15	\$0.90	\$7.05
VORCE, KAREN J		10/03/2020	10/03/2020	2020	\$37.30	8.0	\$298.40				\$172.98	\$471.38	\$69.01	\$540.39
VORCE, KAREN J		10/03/2020	10/03/2020	2021	\$38.05	2.0	\$76.10			\$79.76	\$44.10	\$199.96	\$29.27	\$229.23
VORCE, KAREN J		10/17/2020	10/17/2020	2021	\$38.05	7.9	\$300.40			\$62.93	\$174.14	\$537.47	\$78.69	\$616.16
VORCE, KAREN J		10/31/2020	10/31/2020	2021	\$38.05	2.0	\$76.10			\$15.93	\$44.11	\$136.14	\$19.93	\$156.07
												\$1,812.11	\$254.37	\$2,066.48

Rounding disclaimer: Due to rounding, numbers presented may not add up precisely to the totals provided.

Site Name	Northeast Gravel Co			Site ID or Facility ID	41000048		Location Code			6255		SubLocation Code NA		Package 1	
Employee	Correction	Pay Cycle Expiration Date*	Pay Period Ending	FY	Pay Rate	Regular Hours	Regular Pay	OT Hours	OT Pay	Fringes and Insurances	FICA and Retirement	Sub Total	Indirect	Total	
Activity C200 Compliance															
KATKO, VICKI L		04/21/2018	04/21/2018	2018	\$35.85	3.1	\$112.05			\$29.58	\$60.10	\$201.73	\$27.33	\$229.06	
KATKO, VICKI L		05/05/2018	05/05/2018	2018	\$35.85	18.9	\$677.91			\$179.02	\$363.57	\$1,220.50	\$165.38	\$1,385.88	
KATKO, VICKI L		05/19/2018	05/19/2018	2018	\$35.85	26.5	\$949.13			\$250.65	\$509.02	\$1,708.80	\$231.54	\$1,940.34	
KATKO, VICKI L		06/02/2018	06/02/2018	2018	\$35.85	14.9	\$533.58			\$153.45	\$286.10	\$973.13	\$131.86	\$1,104.99	
PAWLOSki, JOHN P		06/16/2018	06/16/2018	2018	\$35.85	1.5	\$53.12			\$11.25	\$28.70	\$93.07	\$12.61	\$105.68	
PAWLOSki, JOHN P		09/22/2018	09/22/2018	2018	\$35.85	5.8	\$207.84			\$22.04	\$112.32	\$342.20	\$46.37	\$388.57	
PAWLOSki, JOHN P		10/06/2018	09/22/2018	2019	\$36.57					\$21.98		\$21.98	\$2.98	\$24.96	
PAWLOSki, JOHN P		01/12/2019	01/12/2019	2019	\$36.57	1.3	\$47.19			\$9.81	\$25.11	\$82.11	\$11.13	\$93.24	
PAWLOSki, JOHN P		02/23/2019	02/23/2019	2019	\$36.57	1.2	\$42.40			\$8.82	\$22.57	\$73.79	\$10.00	\$83.79	
YORDANICH, DANNY		06/15/2019	06/15/2019	2019	\$39.96	2.1	\$85.82			\$14.66	\$45.65	\$146.13	\$19.80	\$165.93	
KATKO, VICKI L		06/29/2019	06/29/2019	2019	\$36.57	12.0	\$438.84			\$123.91	\$231.93	\$794.68	\$107.68	\$902.36	
KATKO, VICKI L		07/13/2019	07/13/2019	2019	\$36.57	39.2	\$1,432.98			\$404.64	\$757.33	\$2,594.95	\$351.62	\$2,946.57	
KATKO, VICKI L		07/27/2019	07/27/2019	2019	\$36.57	35.0	\$1,279.95			\$361.41	\$676.43	\$2,317.79	\$314.06	\$2,631.85	
KATKO, VICKI L		08/10/2019	08/10/2019	2019	\$36.57	19.9	\$726.35			\$205.09	\$383.86	\$1,315.30	\$178.22	\$1,493.52	
KATKO, VICKI L		08/24/2019	08/24/2019	2019	\$36.57	24.0	\$877.68			\$247.82	\$463.85	\$1,589.35	\$215.36	\$1,804.71	
KATKO, VICKI L		09/07/2019	09/07/2019	2019	\$36.57	7.6	\$276.43			\$78.04	\$146.09	\$500.56	\$67.83	\$568.39	
KATKO, VICKI L		09/21/2019	09/21/2019	2019	\$36.57	14.7	\$536.98			\$90.98	\$283.77	\$911.73	\$123.54	\$1,035.27	
KATKO, VICKI L		10/05/2019	09/21/2019	2020	\$37.30					\$60.65		\$60.65	\$7.44	\$68.09	
KATKO, VICKI L		10/05/2019	10/05/2019	2020	\$37.30	2.2	\$83.00			\$23.56	\$42.78	\$149.34	\$18.32	\$167.66	
VORCE, KAREN J		04/04/2020	04/04/2020	2020	\$37.30	2.1	\$78.69			\$17.43	\$43.83	\$139.95	\$17.17	\$157.12	
VORCE, KAREN J		05/02/2020	05/02/2020	2020	\$37.30	5.6	\$207.22			\$44.20	\$111.08	\$362.50	\$44.48	\$406.98	
VORCE, KAREN J		07/11/2020	07/11/2020	2020	\$37.30	1.2	\$44.21			\$11.80	\$28.78	\$84.79	\$10.40	\$95.19	
VORCE, KAREN J		07/25/2020	07/25/2020	2020	\$37.30	2.0	\$74.62			\$19.91	\$48.57	\$143.10	\$17.56	\$160.66	
KATKO, VICKI L		09/19/2020	09/19/2020	2020	\$37.30	4.2	\$155.69			\$34.97	\$80.27	\$270.93	\$33.24	\$304.17	
KATKO, VICKI L		10/03/2020	09/19/2020	2021	\$38.05					\$8.75		\$8.75	\$1.28	\$10.03	
KATKO, VICKI L		10/17/2020	10/17/2020	2021	\$38.05	3.2	\$120.17			\$26.32	\$65.12	\$211.61	\$30.98	\$242.59	
KATKO, VICKI L		11/28/2020	11/28/2020	2021	\$38.05	3.1	\$119.38			\$32.92	\$64.54	\$216.84	\$31.75	\$248.59	
												\$16,536.26	\$2,229.92	\$18,766.18	
Activity E150 Enforcement															
YORDANICH, DANNY		06/29/2019	06/29/2019	2019	\$39.96	1.6	\$63.52			\$10.85	\$33.78	\$108.15	\$14.65	\$122.80	
												\$108.15	\$14.65	\$122.80	

Rounding disclaimer: Due to rounding, numbers presented may not add up precisely to the totals provided.

Site Name	Northeast Gravel Co	Site ID or Facility ID	41000048	Location Code	6255	SubLocation Code	NA	Package	1					
Employee	Correction	Pay Cycle Expiration Date*	Pay Period Ending	FY	Pay Rate	Regular Hours	Regular Pay	OT Hours	OT Pay	Fringes and Insurances	FICA and Retirement	Sub Total	Indirect	Total
Activity P120 PFAS														
PAWLOSKI, JOHN P		05/05/2018	05/05/2018	2018	\$35.85	1.1	\$40.99			\$8.10	\$22.14	\$71.23	\$9.65	\$80.88
PAWLOSKI, JOHN P		07/14/2018	07/14/2018	2018	\$35.85	3.0	\$107.03			\$22.65	\$57.83	\$187.51	\$25.41	\$212.92
PAWLOSKI, JOHN P		07/28/2018	07/28/2018	2018	\$35.85	6.8	\$242.38			\$51.29	\$130.96	\$424.63	\$57.54	\$482.17
PAWLOSKI, JOHN P		08/11/2018	08/11/2018	2018	\$35.85	3.0	\$107.55			\$22.76	\$58.10	\$188.41	\$25.53	\$213.94
PAWLOSKI, JOHN P		10/06/2018	10/06/2018	2019	\$36.57					\$7.52		\$7.52	\$1.02	\$8.54
PAWLOSKI, JOHN P		10/06/2018	10/06/2018	2018	\$35.85	1.0	\$35.85				\$19.08	\$54.93	\$7.44	\$62.37
PAWLOSKI, JOHN P		10/20/2018	10/20/2018	2019	\$36.57	2.0	\$73.14			\$11.99	\$38.97	\$124.10	\$16.82	\$140.92
PAWLOSKI, JOHN P		12/01/2018	12/01/2018	2019	\$36.57	1.3	\$47.97			\$9.99	\$25.54	\$83.50	\$11.31	\$94.81
PAWLOSKI, JOHN P		01/26/2019	01/26/2019	2019	\$36.57	3.9	\$144.22			\$29.99	\$76.78	\$250.99	\$34.01	\$285.00
PAWLOSKI, JOHN P		06/15/2019	06/15/2019	2019	\$36.57	4.9	\$180.03			\$37.44	\$95.82	\$313.29	\$42.45	\$355.74
PAWLOSKI, JOHN P		06/29/2019	06/29/2019	2019	\$36.57	3.4	\$123.62			\$25.71	\$65.80	\$215.13	\$29.15	\$244.28
VORCE, KAREN J		06/29/2019	06/29/2019	2019	\$33.64	4.5	\$151.38			\$26.50	\$87.03	\$264.91	\$35.90	\$300.81
HENDERSHOTT, ABIGAIL S		07/27/2019	07/27/2019	2019	\$43.16	4.0	\$172.64			\$43.26	\$101.87	\$317.77	\$43.06	\$360.83
VORCE, KAREN J		07/27/2019	07/27/2019	2019	\$33.64	8.9	\$299.02			\$67.02	\$171.63	\$537.67	\$72.85	\$610.52
HENDERSHOTT, ABIGAIL S		08/24/2019	08/24/2019	2019	\$43.16	12.0	\$517.92			\$123.63	\$286.54	\$928.09	\$125.76	\$1,053.85
PAWLOSKI, JOHN P		08/24/2019	08/24/2019	2019	\$36.57	5.3	\$195.04			\$40.54	\$103.82	\$339.40	\$45.99	\$385.39
VORCE, KAREN J		08/24/2019	08/24/2019	2019	\$33.64	6.4	\$215.29			\$48.26	\$123.59	\$387.14	\$52.46	\$439.60
HENDERSHOTT, ABIGAIL S		09/07/2019	09/07/2019	2019	\$43.16	9.4	\$406.30			\$97.91	\$230.56	\$734.77	\$99.56	\$834.33
PAWLOSKI, JOHN P		09/07/2019	09/07/2019	2019	\$36.57	1.5	\$54.18			\$11.27	\$28.83	\$94.28	\$12.77	\$107.05
VORCE, KAREN J		09/07/2019	09/07/2019	2019	\$33.64	3.5	\$117.47			\$29.67	\$75.98	\$223.12	\$30.23	\$253.35
VORCE, KAREN J		09/21/2019	09/21/2019	2019	\$33.64	4.0	\$134.56			\$14.52	\$77.36	\$226.44	\$30.68	\$257.12
HENDERSHOTT, ABIGAIL S		10/05/2019	10/05/2019	2019	\$43.16	1.0	\$43.16				\$22.21	\$65.37	\$8.02	\$73.39
HENDERSHOTT, ABIGAIL S		10/05/2019	10/05/2019	2020	\$44.02	0.1	\$2.91			\$11.02	\$1.51	\$15.44	\$1.89	\$17.33
PAWLOSKI, JOHN P		10/05/2019	10/05/2019	2019	\$36.57	3.3	\$121.81				\$63.16	\$184.97	\$22.70	\$207.67
PAWLOSKI, JOHN P		10/05/2019	10/05/2019	2020	\$37.30					\$26.33		\$26.33	\$3.23	\$29.56
VORCE, KAREN J		10/05/2019	09/21/2019	2020	\$34.31					\$9.70		\$9.70	\$1.19	\$10.89
VORCE, KAREN J		10/05/2019	10/05/2019	2019	\$33.64	5.0	\$168.20				\$90.11	\$258.31	\$31.69	\$290.00
VORCE, KAREN J		10/05/2019	10/05/2019	2020	\$34.31	4.0	\$137.24			\$71.09	\$73.49	\$281.82	\$34.58	\$316.40
PAWLOSKI, JOHN P		10/19/2019	10/19/2019	2020	\$37.30	3.2	\$118.57			\$14.17	\$61.63	\$194.37	\$23.85	\$218.22
HENDERSHOTT, ABIGAIL S		11/02/2019	11/02/2019	2020	\$44.02	1.5	\$66.03			\$15.62	\$34.01	\$115.66	\$14.19	\$129.85
VORCE, KAREN J		11/02/2019	11/02/2019	2020	\$37.30	5.0	\$186.50			\$23.51	\$100.26	\$310.27	\$38.07	\$348.34
VORCE, KAREN J		11/16/2019	11/16/2019	2020	\$37.30	6.1	\$226.06			\$48.21	\$121.17	\$395.44	\$48.52	\$443.96
HENDERSHOTT, ABIGAIL S		12/14/2019	12/14/2019	2020	\$44.02	3.2	\$142.77			\$33.77	\$73.54	\$250.08	\$30.68	\$280.76
VORCE, KAREN J		12/14/2019	12/14/2019	2020	\$37.30	8.0	\$298.40			\$57.23	\$160.10	\$515.73	\$63.28	\$579.01
WORRALL, MARK C		12/14/2019	12/14/2019	2020	\$37.30	14.0	\$523.51			\$144.19	\$270.02	\$937.72	\$115.06	\$1,052.78
VORCE, KAREN J		12/28/2019	12/28/2019	2020	\$37.30	8.3	\$307.95			\$74.01	\$185.99	\$567.95	\$69.69	\$637.64

Rounding disclaimer: Due to rounding, numbers presented may not add up precisely to the totals provided.

Site Name	Northeast Gravel Co	Site ID or Facility ID	41000048	Location Code	6255	SubLocation Code	NA	Package	1						
Employee	Correction	Pay Cycle Expiration Date*	Pay Period Ending	FY	Pay Rate	Regular Hours	Regular Pay	OT Hours	OT Pay	Fringes and Insurances	FICA and Retirement	Sub Total	Indirect	Total	
VORCE, KAREN J		01/11/2020	01/11/2020	2020	\$37.30	3.8	\$139.88			\$29.83	\$74.99	\$244.70	\$30.02	\$274.72	
VORCE, KAREN J		01/25/2020	01/25/2020	2020	\$37.30	6.7	\$248.67			\$53.07	\$133.28	\$435.02	\$53.38	\$488.40	
VORCE, KAREN J		02/22/2020	02/22/2020	2020	\$37.30	2.2	\$82.89			\$17.67	\$44.44	\$145.00	\$17.79	\$162.79	
VORCE, KAREN J		03/07/2020	03/07/2020	2020	\$37.30	8.0	\$298.40			\$63.66	\$159.95	\$522.01	\$64.05	\$586.06	
WORRALL, MARK C		03/07/2020	03/07/2020	2020	\$37.30	6.0	\$223.80			\$61.63	\$114.56	\$399.99	\$49.08	\$449.07	
VORCE, KAREN J		03/21/2020	03/21/2020	2020	\$37.30	5.0	\$186.50			\$39.77	\$99.98	\$326.25	\$40.03	\$366.28	
PAWLOSKI, JOHN P		04/18/2020	04/18/2020	2020	\$37.30	1.7	\$63.94			\$13.64	\$33.21	\$110.79	\$13.59	\$124.38	
VORCE, KAREN J		04/18/2020	04/18/2020	2020	\$37.30	2.5	\$93.25			\$19.90	\$49.99	\$163.14	\$20.02	\$183.16	
PAWLOSKI, JOHN P		05/02/2020	05/02/2020	2020	\$37.30	1.1	\$41.45			\$8.84	\$21.53	\$71.82	\$8.81	\$80.63	
VORCE, KAREN J		08/22/2020	08/22/2020	2020	\$37.30	2.5	\$95.03			\$22.37	\$50.95	\$168.35	\$20.66	\$189.01	
VORCE, KAREN J		09/05/2020	09/05/2020	2020	\$37.30	5.3	\$198.93			\$42.43	\$106.64	\$348.00	\$42.70	\$390.70	
WORRALL, MARK C		09/05/2020	09/05/2020	2020	\$37.30	0.5	\$19.38			\$5.34	\$9.99	\$34.71	\$4.26	\$38.97	
WORRALL, MARK C		10/17/2020	10/17/2020	2021	\$38.05	22.6	\$861.13			\$213.21	\$482.07	\$1,556.41	\$227.86	\$1,784.27	
HENDERSHOTT, ABIGAIL S		10/31/2020	10/31/2020	2021	\$44.90	1.1	\$50.25			\$11.75	\$28.06	\$90.06	\$13.18	\$103.24	
WORRALL, MARK C		10/31/2020	10/31/2020	2021	\$38.05	10.0	\$380.49			\$103.49	\$212.87	\$696.85	\$102.02	\$798.87	
VORCE, KAREN J		11/14/2020	11/14/2020	2021	\$38.05	5.0	\$190.26			\$39.85	\$110.30	\$340.41	\$49.84	\$390.25	
VORCE, KAREN J		11/28/2020	11/28/2020	2021	\$38.05	2.8	\$104.97			\$22.00	\$60.86	\$187.83	\$27.50	\$215.33	
												\$15,945.33	\$2,101.03	\$18,046.36	
Count: 88												Report Total:	\$34,401.85	\$4,599.97	\$39,001.82
Run Date: 12/8/2020															

Count: 88

Run Date: 12/8/2020

Report: Administration

\*The Pay Cycle Expiration Date is the pay period end date in which the hours worked/expenses were incurred and pay period end date is the pay period the charges were paid/distributed. If the pay cycle expiration date and the pay period end date are the the same, there were no corrections. Corrections are indicated if the pay cycle expiration date and the pay period end date are different; the corrections for insurances, fringes, FICA and retirement are in the pay period the correction was processed. Correction Key: M=Manual Correction C=System Correction.

The indirect rate reflects the costs of operational services provided to the Remediation and Redevelopment Division by the Department of Environment, Great Lakes and Energy (EGLE) and other State agencies. Each division is charged a percentage of their direct labor costs (includes salaries and fringes) to cover the indirect operational expenses of the Department and other State agencies.

These include the operations of EGLE's Executive Office (non-program costs), administrative services (non-program costs), building rent, data processing, and the costs of using the State of Michigan's State Central Services.

The indirect rates used by EGLE vary each fiscal year and prior to 10/1/97 were negotiated between the U. S. Department of the Interior, Office of Inspector General (Eastern Region) and EGLE. It is now negotiated between with the U. S. Environmental Protection Agency (EPA) and EGLE. These rates are the same as those charged for grants and contracts with the Federal Government and is applicable to the Office of Management and Budget Circular A-87.

Rounding disclaimer: Due to rounding, numbers presented may not add up precisely to the totals provided.

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**REMEDATION DIVISION****ATTORNEY GENERAL COSTS****Site Name:** NE Gravel**Location Code:** 6255**Sub Location Code****Site ID:****Package:** 1

The hourly billing rate of \$275 is in effect beginning May 1, 2020 and is based upon the median hourly billing rate for attorneys whose field of practice was transactional Environmental Law as shown in the "Economics of Law Practice in Michigan: 2017 Attorney Income and Billing Rate Summary Report" produced by the State Bar of Michigan.

The hourly billing rate of \$110 was used for those hours charged before May, 1994. The hourly billing rate of \$135 was in effect May 1, 1994 through March 31, 2010. The hourly billing rate of \$182.50 was in effect April 1, 2010 through April 30, 2020.

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Month	Attorney	Hours For Month	Total
9/30/2020	Synk, Polly A.	1.25	\$343.75
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<b>Attorney General Total:</b>		<b>1.25</b>	<b>\$343.75</b>

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