

October 10, 2024

Geoffrey Spain  
Environmental Engineer  
IDNR – Land Quality Bureau  
6200 Park Avenue, Suite 200  
Des Moines, Iowa 50321



**RE: SEMI-ANNUAL INSPECTION REPORT – FALL, 2024  
NEWTON SLF - PERMIT NO. 50-SDP-1-75P  
1945 SLF – CLOSED  
1975 SLF – CLOSED  
AREA A – CLOSED  
AREAS B, C, AND D - ACTIVE  
HLW PN 6002-23A.750**

Dear Mr. Spain:

A semi-annual inspection of the Newton Sanitary Landfill was personally conducted the morning of September 27, 2024. Mike Ward, Public Works Operations Superintendent, City of Newton, accompanied me on the inspection. Weather conditions during the inspection were overcast with light winds and temperatures in the 60's.

**Office/Scale House & Recycling Complex**

The 24 hour yard waste area continues to be well received by customers. The area was very neat with no litter noted. Surveillance cameras are present to control illegal dumping. Mr. Ward reported that illegal dumping of waste into the recycling bin that was previously located in this area had occurred on more than one occasion that led to entire loads of recyclables needing to be landfilled. As a result, staff has moved the recycling bin to within the gated/fenced perimeter of the landfill (west of the tire cage) so customer access is limited to hours when the landfill is open to the public.

The small load drop off is continuing to improve conditions at the site by reducing traffic and congestion at the working face. The size of the area was increased in 2023 to allow four roll offs to be used instead of the two that were utilized previously. The approach to the new roll offs was paved this year.

The Newton SLF has an agreement with the Regional Collection Center (RCC) in Bondurant for a satellite building for the collection and storage of HHM on site. The satellite building is located directly south of the scale house. HHM material is accepted at the landfill from April 1 to October 31. Mr. Ward and I viewed the interior of the building and it was neat and orderly. Materials collected are periodically picked up and processed by RCC personnel. The City of Newton currently has 8 staff members who have completed the 25 hour HAZWOPER course to handle HHM. Note that due to personnel sharing with other City departments all HAZWOPER trained personnel are not on site daily.

Due to the sustained dry conditions, a small amount of dust was noted from vehicular traffic on the main access road during the inspection. The landfill formerly used ground shingles on site access roads to control dust with good success; however, this material is no longer available.

A cage is provided for tires on a concrete pad in the recycling area.

A building used for storage of supplies and materials is located south of the scale house. Lead acid batteries and fluorescent tube bulbs received at the site are stored in this building. These materials are stored on a secondary containment pallet.

The City has sponsored an off-site collection event for electronics, scrap metal, and appliances annually since 2017. The 2024 event was held on September 7 – Mr. Ward reported an increase in both the numbers of customers and material received in comparison to the 2023 event.

Yard waste is delivered to two areas southwest of the scale house. Residential customers drop off yard waste in the recycling/yard waste drop off area outside of the main gate. Yard waste collected by contractors is delivered to the old farmstead area. Both areas are outside of the waste boundary of the 1945 SLF. Yard waste from the two areas is combined and windrowed in the old farmstead area, typically turned twice per month, allowed to break down, and used on site as a soil amendment. The yard waste areas were well controlled and free of debris and litter. Wood chips are also stockpiled in the old farmstead area. The wood chips are typically used on site at the active area during wet weather to improve customer access. The wood chips are also available to residents free of charge.

Ground tree and brush debris from the August 10, 2020 derecho is stockpiled southeast of the scale house. The material is being mixed with soil and utilized as Alternative Daily Cover as per Special Provision X.16 of the SDP Permit. It is also available to residents free of charge. Mr. Ward reported that staff has been making a concentrated effort to utilize this material and the size of the stockpile has decreased considerably since the Spring, 2024 inspection. It is anticipated that the stockpile will be removed by the Spring, 2025 inspection.

Clean soil accepted from customers is stockpiled south of the scale house. Soil from City street projects is also stockpiled in this area. This material is mixed with the yard waste from the windrows and used for repairs and maintenance activities on site. Use of the yard waste mixed with clean soil as a soil amendment aids in the establishment of vegetation. Past use of the material has led to improvements in the success of vegetation, and leads to an improved overall site appearance.

Accumulated concrete and rubble were crushed during the first quarter of 2017. The crushing operation resulted in several different aggregate products that were stockpiled and used on site or sold for off site use. Clean concrete and rubble are being stockpiled as received for future crushing/reuse. Mr. Ward reported that crushing this material is currently scheduled for Fiscal Year 26.

Some tree and brush waste material was being burned in the designated area during the inspection.

The continued improvements to the recycling and small load drop off areas have improved customer and employee convenience and safety as well as aided landfill operations at the working face.

### **1945 SLF - CLOSED**

This area was closed with a minimum 2' soil cap prior to October 25, 1989 in accordance with the rules in effect at the time of closure. Depth confirmation activities were completed in 2013 and fill was added to areas of the cap as necessary to maintain the required 2' cap over the 1945 SLF. A Final Cover Certification Report documenting the work on the cap was submitted to IDNR on November 4, 2013 (Doc #78505) and approved in Special Provision X.17.e of the SDP Permit.

The 1945 SLF was mowed several times in 2024 and vegetation is in excellent condition over the majority of the area. No seeps were noted during the inspection and vegetation is established on areas of past seep repairs.

A portion of the northeast corner of the area was disturbed during the replacement of the 72" CMP under the access road. This area had straw wattles installed and was seeded at the completion of the project and vegetation is emerging.

No leachate seeps or ponded water were observed in the 1945 SLF during the inspection.

A Request to End Regulation under Chapter 113 for the 1945 SLF was submitted to IDNR on April 14, 2023 (Doc #106380). An IDNR response was received on October 5, 2023. A Trend Analysis for MW-44 was submitted to IDNR on October 17, 2023 (Doc #107965) in response to the IDNR letter. IDNR staff visited the site on October 18, 2023 to view site conditions to determine eligibility of the 1945 SLF for an Environmental Covenant (EC). The results of this site visit were documented in the Fall, 2023 Semi-Annual Engineer's Inspection Report dated October 24, 2023 (Doc #108033). The five items identified during the IDNR site visit are discussed below:

- *Remove derecho waste stockpile from the cap over the waste boundary of the 1945 SLF.* The stockpile is being removed incrementally as it is used for alternative daily cover as approved in the SDP Permit. The majority of the stockpile has been removed, Mr. Ward expects the entire stockpile to be removed by the Spring, 2025 semi-annual inspection. Upon removal the area will be restored with soil added as needed and seeded.
- *Stake the waste boundary of the 1945 SLF.* Mr. Ward indicated that this work will be done after the derecho stockpile is removed.
- *Remove or fill the remaining structures on the perimeter of the 1945 SLF from the previous leachate forcemain, two manhole structures associated with the pump station and an air relief valve manhole.* One (of three) of the structures has been removed and backfilled.
- *Remove the rubble that protrudes through the cap.* This material has been removed and fill added to restore the cap. The area needs to be seeded.

- *Repair the rill developing associated with a surface water diversion berm that runs in an approximate east-west direction in the middle of the east slope. This work has not been completed.*

### **1975 SLF - CLOSED**

This area was closed with a minimum 2' soil cap prior to October 25, 1989 in accordance with the rules in effect at the time of closure. Depth confirmation activities were completed in 2013 and fill was added to areas of the cap as necessary to maintain the required 2' cap over the 1975 SLF. A Final Cover Certification Report documenting the work on the cap was submitted to IDNR on November 4, 2013 (Doc #78505) and approved in Special Provision X.17.e of the SDP Permit.

The 1975 SLF was mowed several times in 2024 and vegetation is in excellent condition over the majority of the area. A few saplings were noted on the terrace.

There were several areas in the 1975 SLF where vegetation was noted as sparse during the Spring, 2022 inspection, most likely caused by landfill gas. Staff repaired these areas in 2022 by removing some of the soil and replacing with clean rock underlain by a geotextile filter fabric to allow the gas to vent. These areas appear to be functioning well and vegetation adjacent to the repair areas is in excellent condition.

A leachate collection project was substantially completed in December, 2009. The leachate collection project consisted of installing 12 leachate laterals into the waste mass to relieve leachate pressure and eliminate persistent leachate seepage, primarily on the west slope of the 1975 SLF. No leachate seeps were observed in the 1975 SLF during the inspection.

### **Area A – CLOSED**

This area has been closed as per the approved Closure/Post Closure Plan with a 4 foot soil cap. A Construction Certification documenting the closure was submitted to IDNR on September 30, 1999 (Doc #30742) and is approved in Special Provision X.17.a of the SDP Permit. The cap was mowed several times in 2024. The vegetation on the majority of the area is well established and in excellent condition with no trees noted on the cap. Soil is placed in settled and eroded areas as needed to improve site drainage and reduce leachate generation.

No leachate seeps or ponded water were observed in Area A during the inspection.

### **Areas B-1, B-2, C-1, C-2, C-3, D-1, and D-2 (Subtitle D Composite Liners) –ACTIVE**

Areas B-1, B-2, C-1, C-2, C-3, D-1, and D-2 constitute the active area at the Newton SLF. The working face was well confined and located in the upper lifts of Area B/C. The landfill compactor was at the working face. Mr. Ward and I discussed moving the active area to Cell D-1/D-2 during the winter to improve customer access during inclement weather and reduce blowing litter.

Approval of the use of a tarp ADC system is included in Special Provision X.9 of the SDP Permit. Mr. Ward reported that the tarp is typically used for daily cover. Soil cover or the ground wood waste/soil mixture ADC, when used, is removed prior to landfilling to preserve airspace, with the material being reused for cover if possible. Use of the tarp and removal of soil cover has increased the solid waste capacity of the permitted landfilling area.

Daily and intermediate cover appears adequate. There are some trees growing on the perimeter of Cell D-1/D-2 that should be removed.

The Cell D-1 and D-2 Expansion project was completed in September, 2013. Waste disposal over the portion of the Cell D-1 and D-2 Expansion area that had the 12" (minimum) of drainage layer sand installed was authorized in Permit Amendment #7 dated October 2, 2013. Documentation of the installation of additional drainage layer sand in the Cell D-1 and D-2 Expansion area is submitted to IDNR as applicable. The following certifications of additional drainage layer sand have been submitted and approved to date:

- Certification #1, October 4, 2013 (Doc #78211), approved by IDNR in Permit Amendment #8 dated October 14, 2013
- Certification #2, September 29, 2015 (Doc #84362), approved by IDNR in Permit Amendment #13 dated October 27, 2015.
- Certification #3, December 14, 2023 (Doc #108445), approved by IDNR in the December 20, 2023 Permit Revision.

Mr. Ward and I discussed the need for additional drainage layer sand certification(s) prior to placing additional waste on the east slope of Cell D-1 and/or Cell D-2.

One leachate seep was noted at the toe of the slope near the northwest corner of Area B (east of GP-1). The seep was not actively flowing. Wildlife have damaged the area around the seep. NOTE: Mr. Ward provided pictures documenting the repair of the seep on October 10, 2024. The area should have topsoil added and be seeded when possible.

Some windblown litter was noted away from the working face during the inspection; however, no litter was noted off site. The majority of litter was caught in on site vegetation and litter fencing. Eight portable litter fences were located adjacent to the working face to aid in litter control. The landfill has one part-time employee to assist with litter control. A litter collection vacuum is also used when conditions allow. The litter log is maintained in the scale house and was reviewed during the inspection.

The landfill has a wind policy to aid in litter control. The policy is to close the site at 1 PM when the National Weather Service issues a wind advisory.

Permanent access roads and service roads are in good condition, and turnaround space is adequate. Mr. Ward and I discussed constructing a maintenance road on the northern perimeter of Area B/C for leachate cleanout access.

Borrow is currently being obtained from the planned development cells in the northeast corner of future expansion Area E.

The signage on the edges of Cells D-1 and D-2 to mark the cell boundaries is still present. Staff can also use the GPS to locate waste boundaries if needed.

**Leachate Storage/Pump Stations**

There was no water noted in the lagoon during the inspection. Landfill staff cleaned the lagoon in 2023 and 2024.

Two of the manholes constructed during the Cell D-1/D-2 project were constructed with sumps to retain sediment/debris which may be transported in the leachate. The manholes west of Cell D-1, Cell D-2, and future Cell D-3 are regularly cleaned to reduce the amount of sediment getting to the pump station. This practice has contributed to a longer pump life in the pump station.

Pumping Stations No. 1 and No. 2 were both operational during the inspection. Mr. Ward and I discussed valve replacement in Pumping Stations No. 2 and the control manhole to provide more flexibility for staff in leachate management.

Mr. Ward reported that landfill staff typically check Pumping Station No. 2 daily Monday-Friday and Pumping Station No. 1 twice per week. Personnel from the City of Newton POTW typically check the pumps at Leachate Pumping Stations No. 1 and No. 2 once or twice a week as well.

**Sanitary Disposal Project Permit**

The SDP Permit for the City of Newton SLF was renewed on March 4, 2022. The facility has received the following revisions to the Permit to date:

- Permit Revision, December 20, 2023, approved Certification #3 of Additional Drainage Layer for the Cell D-1/D-2 Expansion dated December 14, 2023 (Doc #108445).

**Annual Water Quality Report**

The 2023 Annual Water Quality Report (AWQR) for the 1945 SLF was submitted to IDNR on November 28, 2023 (Doc #108282). IDNR comments on the 2023 AWQR for the 1945 SLF were received on February 5, 2024. No response was required.

A Passive Engineered Conveyance Structure (PECS) was installed at SW-101R in 2020. The construction of the PECS added a new sampling point, PECS 1, to the HMSP for the 1945 SLF. The sampling results from PECS 1 provided in the 2023 AWQR for the 1945 SLF documented no VOC detected in PECS 1 during the semi-annual sampling events in 2023. Sampling results from PECS 1 for 2024 will be included in the 2024 AWQR.

The 2023 AWQR for Areas A, B, C, and D was submitted to IDNR on January 30, 2024 (Doc #109008). IDNR comments on the 2023 AWQR for Areas A, B, C, and D were received on April 30, 2024. No response was required.

The 2024 Spring Water Quality Notification Letter was submitted to IDNR on March 22, 2024 (Doc #109563).

### **Stormwater Pollution Prevention Plan**

The facility currently operates under NPDES General Permit No. 1 (expires March 10, 2026).

The annual stormwater samples required by the General Permit for 2023 were collected on July 12, 2023. Annual stormwater samples for 2024 have not been collected to date. Containers for sample collection are on site.

Landfill staff installed an RCP pipe section and an apron on the inlet of the culvert under the Area B/C access road to improve the operation of the culvert.

Landfill staff replaced the 72" CMP under the main access road earlier this year. Upon completion staff placed straw wattles and seeded areas disturbed during pipe installation. The vegetation is starting to emerge.

The ditch checks west of Cell D-1/D-2 are retaining water due to siltation. NOTE: Mr. Ward provided pictures documenting the removal and replacement of the ditch checks on October 10, 2024.

There are two sediment basins on site, one constructed in 1995 and the other constructed in 2018. Both basins are operating as intended. Landfill staff removed accumulated sediment from the 1995 basin in 2020. Sediment removed is typically stockpiled to dry and mixed with borrow soil to use for cover. Vegetation is well established around the 2018 basin and on the dike and staff has placed rock on top of the dike for an access road. Some tree growth was noted around both standpipes that should be removed so flow to the standpipes is not impacted.

Updated Stormwater Pollution Prevention Plan (SPPP) mapping adding the 2018 basin and other improvements was provided to landfill staff on May 17, 2019.

Landfill borrow operations are located in the northeast corner of future development Area E. Straw wattles and soil berms were placed on the perimeter of the borrow area prior to excavation starting to control sediment movement and erosion. Note that drainage from the borrow area goes through the 2018 sediment basin prior to leaving the site.

The landfill joined two other City departments in the purchase of a hydroseeder. The hydroseeder is typically kept at the landfill. Use of the hydroseeder reduces damage to existing vegetative cover when making vegetative repairs and allows staff to make prompt repairs of small areas.

A separate "Stormwater Industrial Routine Facility Inspection Report" was completed during this inspection to satisfy the annual inspection requirement in accordance with the SPPP. The stormwater inspection report is attached to this inspection report and should be filed in the SPPP.

### **Spill Prevention, Control, and Countermeasures Plan**

The Newton Sanitary Landfill operates under the guidance of a spill prevention, control, and countermeasures (SPCC) plan for the storage of petroleum products.

Oil dry is available adjacent to the maintenance fluids in the east maintenance building to control spillage as needed.

The exterior of the tanks and secondary containment systems were visually observed during this inspection and no significant problems or concerns were noted. Forms documenting the visual inspections were completed and will be provided to City staff for inclusion in the SPCC.

### **Financial Assurance**

Financial Assurance documentation for 2024 was submitted to IDNR on April 1, 2024 (Doc #109703) and approved by IDNR on April 5, 2024.

### **Monitoring Well Maintenance Performance Reevaluation Plan**

The most recent Monitoring Well Maintenance Performance Reevaluation Plan (MWMPRP) was submitted to IDNR on May 10, 2021 (Doc #100448). The report recommended abandonment and replacement of MW-45. MW-45 was abandoned and replaced with MW-45R in May, 2021. As per IDNR Regulations, the MWMPRP is required every 5 years. Note that due to the variance granted January 25, 2012, the MWMPRP requirement is limited to the monitoring wells associated with the 1945 SLF.

### **Additional Comments**

The City currently has 9 certified landfill operators on staff. Note that due to personnel sharing with other City departments all certified operators are not on site daily.

The City of Newton utilizes an online portal to document staff training including annual review of the ERRAP and SWPPP.

We viewed conditions in the east maintenance building - the interior of the building was very neat and orderly.

Random load inspections were provided for review.

City staff distributes a quarterly newsletter to 28E members as an aid to improve communications and distribute information to customers.

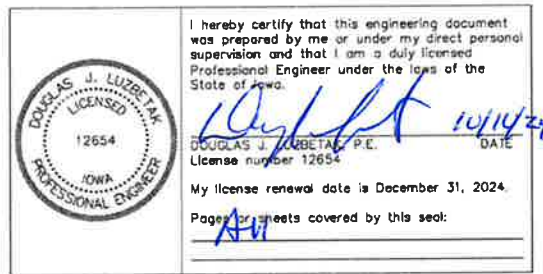
Vegetated areas at the landfill are mowed regularly. Mowing improves site aesthetics and aids in the establishment of desirable vegetation by controlling weeds and trees. Mowing also makes potential problem areas, such as leachate seeps and erosion rills, easier to spot. Staff typically mark rills and other problem areas during mowing, which has led to increased erosion repair.



The overall appearance of the landfill is excellent, and landfill staff should be commended.

**Summary of Recommendations**

1. Seed leachate seep repair at toe of slope in Area B.
2. Complete the recommendations for the 1945 SLF to allow commencement of the Environmental Covenant process.
3. Remove trees from around the sediment basin standpipes, from terraces in closed areas, and from the perimeter of Cell D-1/D-2.
4. Continue to retrieve windblown litter.
5. Continue to repair erosion noted during mowing and seed repair areas.
6. Continue to monitor closed landfill areas for signs of leachate seepage.
7. Continue to monitor vegetation and erosion rills and repair as necessary.
8. Continue to monitor settlement areas in the 1945 SLF and 1975 SLF and regrade as necessary.



cc: Joe Grife, Public Works Director, City of Newton (electronic copy)  
Mike Ward, Public Works Operations Superintendent, City of Newton (electronic copy)



**Areas of Industrial Materials or Activities exposed to stormwater**

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
1	Material loading/unloading and storage areas	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
2	Equipment operations and maintenance areas	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
3	Fueling areas	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
4	Outdoor vehicle and equipment washing areas	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	
5	Waste handling and disposal areas	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Retrieve windblown litter as applicable
6	Erodible areas/construction	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
7	Non-stormwater/ illicit connections	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	
8	Dust generation and vehicle tracking	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Due to dry conditions some dust was noted from the main access road during the inspection.
9	Leachate Lagoon	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	No leachate was in the lagoon during the inspection.

**Non-Compliance**

Describe any incidents of non-compliance observed and not described above:  
 NA

**Additional Control Measures**

Describe any additional control measures needed to comply with the permit requirements:  
 NA

Notes

Use this space for any additional notes or observations from the inspection:

Annual stormwater samples for 2023 required by NPDES General Permit #1 were taken 07/12/23. Mr. Ward reported that the annual samples for 2024 have not been collected to date. Containers are on site.

All on site roads were in very good condition for all weather use.

Ditch checks west of Cells D-1/D-2 were retaining water due to siltation. Staff removed the silt and rock from the ditch checks and replaced them with clean rock.

An RCP pipe section and an apron were installed on the inlet of the culvert under the Area B/C access road to improve the operation of the culvert.

Landfill staff replaced the 72" CMP under the main access road earlier this year. Upon completion staff placed straw wattles and seeded areas disturbed during pipe installation. The vegetation is starting to emerge.

SWPPP mapping was updated in 2019.

NPDES General Permit #1 expires March 10, 2026.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Print name and title: Douglas J. Luzbetak, P.E.

Signature:  Date: 10/10/24