

INTRADEPARTMENTAL MEMORANDUM

FILE: Harvey City Landfill - Inert Site (0093)

TO: Charles R. Hyatt, Director
Division of Waste Management

THROUGH: Diana A. Trussell, Manager
Solid Waste Program
Division of Waste Management

FROM: Rebecca D. Blue, Environmental Scientist
Solid Waste Program
Division of Waste Management

SUBJECT: Permit Application Review

DATE: October 1, 2026

CRH

DA-T

RB

Introduction

The North Dakota Department of Environmental Quality (Department) received a permit application for a renewal for the Harvey City Landfill – Inert Site’s inert waste landfill.

The City of Harvey currently owns and operates an inert waste landfill, regulated under Permit 0093, on approximately 55.0 acres located in Section 28, Township 150 North, Range 72 West in Wells County, ND. The City of Harvey is proposing to renew their permit. The facility was first permitted in 1995.

Design

The site lies northeast of the City of Harvey along 32nd Ave. NE and east of the previously filled areas associated with the old Special Use Landfill site. The landfill is accessed via a gravel road that turns east off 32nd Ave. NE. Access to the inert landfill site is controlled by a lockable gate and one building is located on the property for equipment storage.

The Sheyenne River is located approximately 0.2 miles north of the landfill, and the City of Harvey’s lagoons are located directly south of the site. FEMA mapping indicates that the majority of the landfill is located within an area of minimal flood hazard, while limited areas along the landfill boundary are located within the 0.2% annual chance flood hazard area. The flood prone areas adjacent to the site coincide with adjacent wetland areas and are outside the primary operational portions of the landfill. The soils located at the landfill consist primarily of native glacial and alluvial soils with the majority being Heimdal-Esmond-Sisseton loams. The local soil types feature moderate permeability and making groundwater monitoring especially crucial in the surrounding areas.

The onsite soils would be used primarily for facility closure activities and other routine site maintenance activities requiring soil or cover material. The closure plan calls for the removal of the existing concrete and asphalt rubble piles, as well as the compost, metal, and wood piles from the site. Following removal of these materials, the former waste storage areas will require placement of final cover and grading to complete closure. The total area of the existing waste storage and disposal piles is approximately 3.63 acres. Assuming an average final cover thickness of approximately 1.5 feet, approximately 8,785 cubic yards of soil will be required to provide final cover over the entire area. Soil may also be used periodically for routine site maintenance, including grading, filling minor areas of settlement or erosion, maintaining drainage features, and other activities necessary to maintain stable site conditions. These activities are expected to require substantially less soil than the volume anticipated for final closure.

A soil borrow area is located in the northeast portion of the property. The proposed borrow area encompasses approximately 6 acres and is located within an existing area of slightly elevated terrain. The city intends to obtain the soil needed for final closure from this area by stripping and stockpiling the existing topsoil and excavating suitable underlying soils. Assuming an average excavation depth of approximately 2 feet, the borrow area could provide more than 19,000 cubic yards of soil, which exceeds the approximately 8,785 cubic yards estimated to be required for final cover of the existing waste storage areas. The city will use city equipment to transport the soil from the borrow area to the areas being closed and place and grade the material to achieve the required final cover and stable drainage slopes. Based on these estimates, sufficient soil is anticipated to be available onsite to complete final closure without importing soil for the primary cover material.

Following excavation of the borrow area, the stockpiled topsoil will be replaced over the disturbed area, and the borrow area will be appropriately graded, seeded, and stabilized. The closed waste areas will also be appropriately graded to promote positive drainage and minimize erosion and ponding. The city may ultimately need to import approximately 2,000 cubic yards of suitable topsoil to provide an additional approximately 0.5 feet of topsoil over the closed areas to support vegetation establishment and final stabilization. However, imported topsoil is not anticipated to be necessary for the primary final cover because sufficient suitable soil is expected to be available from the onsite borrow area. As the facility approaches closure, the city will evaluate the quantity and quality of available onsite topsoil and, if necessary, acquire and stockpile any supplemental topsoil needed for final revegetation.

There are two municipal wells and one livestock well within one mile of the landfill boundary. The livestock well is located on the opposing side of the Sheyenne River from the landfill, and no domestic wells are located within one mile of the site. According to the application, and based on regional geologic information for the Harvey, ND area, the uppermost aquifer is estimated to occur approximately 20 to 40 feet below ground surface and mainly consists of glacial outwash and alluvial deposits. Groundwater flow at the site flows northwest towards the Sheyenne River.

Operation

The facility accepts concrete, grass, leaves and compostable materials, construction lumber, trees and bushes, asphalt, scrap metal, dirt/cover material, and appliances that have been drained of freon. Residents of the City of Harvey dispose of acceptable inert waste at a designated city-owned building, where city staff will inspect the waste before being transported to the landfill and sorted into the appropriate disposal pile or pit. Public access is not allowed,

except during operating hours under operator supervision. The only inert waste the public is allowed to dispose of onsite is concrete and scrap metal. Batteries, animal carcasses, waste grain, unrinsed pesticide containers, manure/sludges, paints, solvents and chemicals, fluorescent light bulbs, household garbage (MSW), couches and any cloth covered furniture, carpet, mattresses, asbestos, used oil, hazardous wastes, electronic waste, and mercury-containing devices are prohibited for disposal at the facility.

Landfill operations consist of waste pile management through a variety of measures to keep standing waste at the facility to a minimum. This includes reuse and recycling of scrap metal, concrete, and asphalt, and burning clean wood. Additionally, yard waste is reused as composting material and cover material. Asphalt and concrete that is dirty is sorted into the demo area for crushing. Once the material is crushed, it is stockpiled for future projects. Scrap metal is stockpiled for future recycling. Yard waste including grass clippings and leaves are placed in the composting area, which is actively managed through monthly turning and aerating; adding dry leaves, straw or wood chips to maintain nutrient balance; and adding water during dry periods. Yard waste is not burned but instead used for cover operations at the facility. The burn pile is comprised of only trees and branches. The pile is burned once it has gotten large enough. Prior to burning the pile, a burn variance is submitted for approval to the Department. Typically, the facility requests a burn variance twice a year.

Heavy equipment is available onsite at all times for compacting and covering activities. Fire suppression, dust control, health and safety, and stormwater management were covered under the facility's contingency plan.

Fire extinguishers for small fires are placed in each piece of heavy equipment as well as in the cold storage shed. The City of Harvey Fire Department will respond to the site if small fires cannot be contained. Dust is controlled by applying water to active areas and haul roads during dry and windy conditions. Gravel is available for use in high-traffic areas and for limiting vehicle speeds within the site. The health and safety plan addresses contact information during emergencies, personal protective equipment (PPE), and training employees on the landfill's daily operations.

Currently, stormwater at the landfill flows overland to the southeast towards an existing ditch and wetland basin. The City of Harvey is planning to improve stormwater management onsite by constructing a perimeter berm around the active landfill area to help contain surface runoff and direct stormwater away from waste piles. In addition, small stormwater ponds or trenches will be created along the interior of the berm to temporarily hold collected runoff. Any accumulated stormwater in these newly created areas will be pumped on an as needed basis into the city's lagoon system for treatment.

To satisfy reporting requirements, the facility is required to submit an annual report to the Department by March 1st each year. The report details the volume of each inert waste type collected in a calendar year. The operator conducts routine inspections of the facility and these inspections along with other records such as the facility's permit, training, certifications, plan of operations, annual reports are kept in the operating record which is available for review upon request.

Closure

When the landfill reaches the end of its operational life, all remaining inert waste materials will be transported to appropriate facilities for recycling, reuse, or disposal. Any ash resulting from

permitted burns, as well as any soils that may be found to be contaminated upon final inspections will be excavated, removed from the site, and disposed of in an approved disposal site to prevent potential environmental impacts. Following the removal of all loose waste at the facility, the final cover construction process will ensue.

The closed landfill areas will be graded to stable final slopes of approximately 15%. The final closure cover is anticipated to consist of approximately 18 inches of compacted clay will be added along with 6 inches of suitable plant growth material (SPGM) topsoil on top. Based on current operations, approximately 5 acres will require final cover to be added at closure with the largest area likely to be the concrete and crushed asphalt stockpile area. The exact size of this area will depend on future operational conditions and material accumulation over the active life of the landfill.

The City of Harvey estimates the landfill to have a future operational life of 30 to 50 years. Due to ongoing recycling, salvaging, burning, and reuse activities, the city intends to minimize long-term waste accumulation and maintain waste quantities at manageable levels. The City of Harvey anticipates implementing closure or sequential partial closure activities as areas become inactive or reach operational capacity during the life of the landfill. Partial closure activities may include grading, placement of cover material, stormwater stabilization, and establishment of vegetation to minimize erosion and maintain site stability. The city has access to the equipment and resources necessary to complete landfill closure activities, including payloaders, bobcats, dump trucks, graders, and excavators.

Compliance History

The following items of noncompliance have been noted since 2021:

1. September 9, 2021 inspection
 - a.) Burn pile contained prohibited items
 - b.) Windblown debris was noted throughout the facility
 - c.) No sign at entrance of the facility. Sign observed on the ground
 - d.) Prohibited materials in the scrap metal pile – loose appliance insulation and a loose flour mill bag
 - e.) Prohibited waste materials in the mixed materials pile for construction debris – municipal solid waste (MSW) is prohibited
2. September 27, 2022 inspection
 - a.) Windblown debris was noted throughout the site
 - b.) Nonburnable prohibited items in the burn piles
 - c.) Metal pile contained a stereo and speakers that should be removed
3. 2022 Annual Report
 - a.) Not submitted by March 1st
 - b.) The annual report did not address issues of noncompliance
 - i. The facility received a LOAN letter during the September 2021 inspection for several deficiencies
4. 2023 Annual Report
 - a.) Not submitted by March 1st
 - b.) The annual report did not address issues of noncompliance

- i. The facility received a LOAN letter during the September 2021 inspection for several deficiencies

5. July 2, 2024

- a.) Scrap metal observed in the burn pile – this item is prohibited in burn piles.
- b.) Burning was observed without a proper attendant on site as specified by the burn variance regulations
- c.) Windblown debris

The above items of noncompliance have been appropriately addressed by the facility, and no formal notices of violations have been issued to the facility.

Solid Waste Management Rules (NDAC Article 33.1-20)

NDAC Section 33.1-20-02.1-05. Record of notice.

The City of Harvey submitted a notarized affidavit to the county records office on September 1, 2015. A copy was provided in the permit renewal application.

NDAC Section 33.1-20-02.1-06. Property rights.

The City of Harvey owns the property and included a copy of the deed and the surveyed land description.

NDAC Section 33.1-20-03.1-01. Preapplication procedures.

A preapplication is not required for an inert waste landfill.

NDAC Section 33.1-20-03.1-02. Permit application procedures.

NDAC Subsections 33.1-20-03.1-02(1) – (3)

An electronic copy and hard copy of the permit application and supporting documents was prepared by Jeff Madejczyk of Moore Engineering, Inc. and submitted to the Department. The permit application form SFN 19269 was also completed and included in the permit renewal application. The form was signed by Mayor Dean Klier, Public Works Director Jamey Weinmann, and Professional Engineer Joshua Feil (PE-28801).

NDAC Subsection 33.1-20-03.1-02(4)

A public notice by the facility is not required for a permit renewal and no major modifications are being proposed.

NDAC Subsection 33.1-20-03.1-02(5)

Notification to the North Dakota Public Service Commission is not required as the facility is not proposing to dispose of coal processing wastes in a mining permit area.

NDAC Subsection 33.1-20-03.1-02(6)

Applications for a solid waste management unit or facility permit must include the following information where applicable:

a. A completed application form, subsection 1;

An electronic copy of the permit application and supporting documents was prepared by Jeff Madejczyk of Moore Engineering, Inc. and submitted to the Department. The permit application form SFN 19269 was also completed and included in the permit renewal application. The form was signed by Mayor Dean Klier, Public Works Director Jamey Weinmann, and Professional Engineer Joshua Feil (PE-28801).

b. A description of the anticipated physical and chemical characteristics, estimated amounts, and sources of solid waste to be accepted, including the demonstration required by North Dakota Century Code section 23.1-08-14;

The facility accepts inert waste types including concrete, grass, leaves and compostable materials, construction lumber, trees and bushes, asphalt, scrap metal, dirt/cover materials, and appliances that are free of refrigerant. Landfill operations consist of waste pile management through a variety of measures to keep standing waste at the facility to a minimum. This includes reuse and recycling of scrap metal, concrete, and asphalt, and burning clean wood. Additionally, yard waste is reused as composting material and cover material. Asphalt and concrete that is dirty is sorted into the demo area for crushing. Once the material is crushed, it is stockpiled for future projects. Scrap metal is stockpiled for future recycling. Yard waste including grass clippings and leaves are placed in the composting area, which is actively managed through monthly turning and aerating; adding dry leaves, straw or wood chips to maintain nutrient balance; and adding water during dry periods. Yard waste is not burned but instead composted and then used for cover operations at the facility. The burn pile is comprised of only trees and branches. The pile is burned once it has gotten large enough. Prior to burning the pile, a burn variance is submitted for approval to the Department. Typically, the facility requests a burn variance twice a year. The inert landfill serves the City of Harvey, and the public is only allowed to dispose of concrete and scrap metal at the facility. All other inert waste is brought to drop off sites.

Based on the 2025 annual report included in the application the facility accepted 355 tons of inert waste in 2025. The breakdown of that amount is as follows:

- 37 tons of asphalt and concrete
- 175 tons of yard waste and compostable materials
- 86 tons of scrap metal and white goods
- 143 tons of wood waste (burned or given away)

c. The site characterization of section 33.1-20-13-01 and a demonstration that the site fulfills the location standards of section 33.1-20-04.1-01;

The Sheyenne River is located approximately 0.2 miles north of the landfill, and the City of Harvey's lagoons are located directly south of the site. FEMA mapping indicates that the majority of the landfill is located within an area of minimal flood hazard, while limited areas along the landfill boundary are located within the 0.2% annual chance flood hazard area. The flood prone areas adjacent to the site coincide with adjacent wetland areas and are outside the primary operational portions of the landfill. The soils located at the landfill consist primarily of native glacial and alluvial soils with the majority being Heimdal-Esmond-Sisseton loams. The local soil types feature moderate permeability making it crucial stormwater is handled effectively.

There are two municipal wells and one livestock well within one mile of the landfill boundary. The livestock well is located on the opposing side of the Sheyenne River from the landfill, and no domestic wells are located within one mile of the site. According to the application, based on regional geologic information for the Harvey, ND area, the uppermost aquifer is estimated to occur approximately 20 to 40 feet below ground surface and mainly consists of glacial outwash and alluvial deposits. The hydraulic characteristics of the uppermost aquifer, including porosity, hydraulic conductivity, and groundwater storage, are consistent with unconsolidated glacial sediments common to the region. The presence of highly permeable glacial outwash in the area highlights the importance of stormwater management to ensure no groundwater contamination occurs. Groundwater flow at the site flows northwest towards the Sheyenne River.

d. Soil survey and segregation of suitable plant growth material;

A soil survey was performed by the City of Harvey via the USDA Natural Resources Conservation Service website and is included in the application. The survey states that the soils located at the landfill consist primarily of native glacial and alluvial soils. The onsite soils would be used primarily for facility closure activities and other routine site maintenance activities requiring soil or cover material. The closure plan calls for the removal of the existing concrete and asphalt rubble piles, as well as the compost, metal, and wood piles from the site. Following removal of these materials, the former waste storage areas will require placement of final cover and grading to complete closure. The total area of the existing waste storage and disposal piles is approximately 3.63 acres. Assuming an average final cover thickness of approximately 1.5 feet, approximately 8,785 cubic yards of soil will be required to provide final cover over the entire area. Soil may also be used periodically for routine site maintenance, including grading, filling minor areas of settlement or erosion, maintaining drainage features, and other activities necessary to maintain stable site conditions. These activities are expected to require substantially less soil than the volume anticipated for final closure.

A soil borrow area is located in the northeast portion of the property. The proposed borrow area encompasses approximately 6 acres and is located within an existing area of slightly elevated terrain. The city intends to obtain the soil needed for final closure from this area by stripping and

stockpiling the existing topsoil and excavating suitable underlying soils. Assuming an average excavation depth of approximately 2 feet, the borrow area could provide more than 19,000 cubic yards of soil, which exceeds the approximately 8,785 cubic yards estimated to be required for final cover of the existing waste storage areas. The city will use city equipment to transport the soil from the borrow area to the areas being closed and place and grade the material to achieve the required final cover and stable drainage slopes. Based on these estimates, sufficient soil is anticipated to be available onsite to complete final closure without importing soil for the primary cover material.

Following excavation of the borrow area, the stockpiled topsoil will be replaced over the disturbed area, and the borrow area will be appropriately graded, seeded, and stabilized. The closed waste areas will also be appropriately graded to promote positive drainage and minimize erosion and ponding. The city may ultimately need to import approximately 2,000 cubic yards of suitable topsoil to provide an additional approximately 0.5 feet of topsoil over the closed areas to support vegetation establishment and final stabilization. However, imported topsoil is not anticipated to be necessary for the primary final cover because sufficient suitable soil is expected to be available from the onsite borrow area. As the facility approaches closure, the city will evaluate the quantity and quality of available onsite topsoil and, if necessary, acquire and stockpile any supplemental topsoil needed for final revegetation.

e. Demonstrations of capability to fulfill the general facility standards of section 33.1-20-04.1-02;

The operator conducts routine inspections of the facility and these inspection logs along with records such as the facility's permit, training, certifications, plan of operations, annual reports are kept in the operating record which is available for review upon request. The application states that the facility currently has three certified operators on staff. To ensure proper oversight and compliance with the accepted wastes of the facility, public access has been restricted. Public drop-offs are limited to concrete and scrap metal only, and these materials can only be brought onto the site under direct supervision of a landfill operator. All other acceptable waste is collected by city personnel from designated locations within the community and hauled to the landfill using city vehicles.

The facility has a sign posted at the entrance to the landfill that states the name of the facility's owner and contact information, permit number, acceptable wastes, days and hours of operation, and restrictions on scavenging, vandalism, and theft. The application states that burning of the designated burn pile only occurs once a burn variance has been obtained by the Department and the pile is inspected by a certified operator of the facility.

Anyone actively employed at the landfill is provided with appropriate PPE to ensure their health and safety in case of an accident. All employees are properly trained in the typical operations of the facility and provided with appropriate contact information for emergencies. All windblown rubbish, trash, or garbage is returned to the appropriate disposal unit as soon as

practical. The application states that the facility may not violate the ambient air quality standard as set in North Dakota Administrative Code (NDAC) Article 33.1-15.

Stormwater at the landfill currently flows overland to the southeast towards an existing ditch and wetland basin. There are not any current issues at the facility of waste being discharged into the surface or groundwater of the area. The facility has plans in place if storm water runoff or pollution become an issue including constructing trenches along the interior of the landfill berm to temporarily hold collected runoff. The collected runoff could then be pumped into the nearby city lagoon where it could be properly treated. The application stated that the landfill will not discharge pollutants into waters of the state unless the discharge is compliant with the North Dakota Pollutants Discharge Elimination System (NDPDES) permit pursuant to NDAC Chapter 33.1-16-01.

f. Facility engineering specifications are adequate to demonstrate the capability to fulfill performance, design, and construction criteria provided by this article and enumerated in this subdivision;

1) Transfer stations and drop box facilities, section 33.1-20-04.1-06

The requirements of this section are not applicable as the facility is not proposing a transfer station or a drop box facility.

2) Waste piles, section 33.1-20-04.1-07.

Waste pile management at the facility includes concrete and demolition materials, scrap metal and appliances, wood waste, and yard waste/compostable materials.

Yard waste including grass clippings and leaves is placed in the composting area, which is actively managed by monthly turning and aerating; adding dry leaves, straw or wood chips to maintain nutrient balance; and adding water during dry periods. Yard waste is not burned but instead used for cover operations at the facility.

Surface water and stormwater at the existing facility currently drain overland toward a swale located along the southern and eastern edges of the property. Runoff from the composting and waste storage areas is directed toward these site drainage areas, where it flows toward the southeast corner of the property and is temporarily contained before leaving the site. The existing swale has become poorly defined in some areas due to vegetation growth and sediment accumulation; therefore, the city will improve the existing drainage system by completing limited excavation to establish a more defined flow pathway and constructing a low berm along the outside of the swale to help contain and direct runoff within the drainage feature. The city will also make

improvements to the existing low area in the southeast corner of the property to create a small stormwater basin for temporary storage of runoff.

Following these improvements, runoff from the site will continue to be directed toward the eastern and southern property boundaries, where it will be captured by the improved swale and conveyed to the stormwater basin. These measures will provide established drainage and stormwater controls to direct water away from active waste and composting areas, reduce the potential for runoff to come into contact with stored materials, and control the release of stormwater from the site. The proposed improvements will also reduce uncontrolled overland flow, minimize erosion and off-site discharge, and limit potential impacts to aquatic resources located east of the property.

3) Resource recovery, section 33.1-20-04.1-08.

The requirements of this section are not applicable as the facility is not proposing any resource recovery activities.

4) Land treatment, section 33.1-20-04.1-09 and chapter 33.1-20-09.

The requirements of this section are not applicable as the facility is not proposing a land treatment facility.

5) Non-CCR surface impoundments, section 33.1-20-04.1-09 and chapter 33.1-20-08.1.

The requirements of this section are not applicable as the facility is not proposing any surface impoundments.

6) Any disposal, section 33.1-20-04.1-09.

Disposal activities do not occur at the inert waste landfill, but the facility has the potential to open up a disposal cell. Due to this, they have addressed the standards related to this subsection.

Heavy equipment is always available onsite for road improvements, compacting, and covering activities. Recycling and scrap metal is kept in separate area to avoid injury and interference with daily landfill operations. All vehicles, farm equipment, metal appliances are only kept temporarily in a specific area of the landfill.

The total area of the existing waste storage and disposal piles is approximately 3.63 acres. Assuming an average final cover thickness of approximately 1.5 feet, approximately 8,785 cubic yards of soil will be required to provide final cover over the entire area. Soil may also be used periodically for routine site

maintenance, including grading, filling minor areas of settlement or erosion, maintaining drainage features, and other activities necessary to maintain stable site conditions. These activities are expected to require substantially less soil than the volume anticipated for final closure.

The city actively manages the disposal footprint in a manner that keeps the active disposal areas as small as practicable. According to the application, as areas become inactive or reach capacity, they may be graded and stabilized in a timely manner to minimize erosion, reduce stormwater contact with waste materials, and maintain orderly site conditions. Vector control measures at the landfill include routine site inspections, restricted waste acceptance, and the application of cover material, when necessary, to reduce the attraction of pests or scavenging animals.

The City of Harvey included a description of their final cover design for when the time comes to implement closure activities. The final closure cover is anticipated to consist of approximately two feet of suitable soil or earthen material placed over closed landfill areas. Approximately 1.5 feet of compacted clay will be added along with the 0.5 feet topsoil on top. Based on current operations approximately 5 acres will require final cover to be added at closure. The closed landfill will then be graded to achieve stable final slopes of approximately 15%. These slopes will promote positive drainage, minimize erosion potential, and reduce the likelihood of standing water or infiltration into the closed landfill areas. All final closure activities include placement of suitable soil cover material, grading for drainage and stability, and establishment of vegetation, as necessary, to stabilize the final surface and minimize erosion.

During the first year of postclosure, the city will inspect the landfill on a monthly basis looking for any areas of potential erosion, failing slopes, and areas with insufficient vegetative cover. If these conditions are observed, the city will implement appropriate maintenance actions including stabilizing slopes, adding erosion control measures, or re-planting areas with insufficient vegetation. After the first year of postclosure the city will start bimonthly inspections, taking corrective maintenance actions whenever needed.

7) Inert waste landfill, chapter 33.1-20-05.1.

The application provided a detailed plan of operations outlining a waste acceptance plan, waste handling procedures, contingency plans for fires and stormwater management, dust control, health and safety plan, record keeping and reporting operations, and a closure/post-closure plan. Additional information can be found in the **Design** and **Operations** sections of this memo.

8) Municipal waste landfill, chapter 33.1-20-06.1.

The requirements of this section are not applicable as the facility is not proposing a municipal waste landfill.

9) Industrial waste landfill, chapters 33.1-20-07.1 or 33.1-20-10.

The requirements of this section are not applicable as the facility is not proposing an industrial waste landfill.

10) TENORM waste landfill, chapters 33.1-20-07.1 or 33.1-20-10 and 33.1-20-11

The requirements of this section are not applicable as the facility is not proposing a TENORM waste landfill.

11) Special waste landfill, chapter 33.1-20-07.1;

The requirements of this section are not applicable as the facility is not proposing a special waste landfill.

12) CCR unit, chapter 33.1-20-08;

The requirements of this section are not applicable as the facility is not proposing a CCR unit.

13) Municipal solid waste ash landfills, chapter 33.1-20-10;

The requirements of this section are not applicable as the facility is not proposing a municipal solid waste ash landfill.

14) Regulated infectious waste unit, chapter 33.1-20-12;

The requirements of this section are not applicable as the facility is not proposing a regulated infectious waste unit.

g. The plan of operation of section 33.1-20-04.1-03;

The facility accepts concrete, grass, leaves and compostable materials, construction lumber, trees and bushes, asphalt, scrap metal, dirt/cover material, and appliances that have been drained of freon. Residents of the City of Harvey dispose of acceptable inert waste at a designated city-owned building, where city staff will inspect the waste before being transported to the landfill and sorted into the appropriate disposal pile or pit. Public access is not allowed, except during operating hours under operator supervision. The only inert waste the public is allowed to dispose of onsite is concrete and scrap metal. Batteries, animal carcasses, waste grain, unrinsed pesticide containers, manure/sludges, paints, solvents and chemicals, fluorescent light bulbs, household garbage (MSW), couches and any cloth covered furniture,

carpet, mattresses, asbestos, used oil, hazardous wastes, electronic waste, and mercury- containing devices are prohibited for disposal at the facility.

Landfill operations consist of waste pile management through a variety of measures to keep standing waste at the facility to a minimum. This includes reuse and recycling of scrap metal, concrete, and asphalt, and burning clean wood. Additionally, yard waste is reused as composting material and cover material. Asphalt and concrete that is dirty is sorted into the demo area for crushing. Once the material is crushed, it is stockpiled for future projects. Scrap metal is stockpiled for future recycling. Yard waste including grass clippings and leaves are placed in the composting area, which is actively managed by monthly turning and aerating; adding dry leaves, straw or wood chips to maintain nutrient balance; and adding water during dry periods. Yard waste is not burned but instead used for cover operations at the facility. The burn pile is comprised of only trees and branches. The pile is burned once it has gotten large enough. Prior to burning the pile, a burn variance is submitted for approval to the Department. Typically, the facility requests a burn variance twice a year.

Fire suppression, dust control, health and safety, and stormwater management were covered under the facility's contingency plan. Fire extinguishers for small fires are placed in each piece of heavy equipment as well as in the cold storage shed. The City of Harvey Fire Department will respond to the site if small fires cannot be contained.

Dust is controlled by applying water to active areas and haul roads during dry and windy conditions. Gravel is available for use in high-traffic areas and for limiting vehicle speeds within the site. The health and safety plan addressed contact information during emergencies, PPE, and training employees on the landfill's daily operations. The facility's health and safety plan also addressed that all windblown debris/litter will be returned to their disposal units as soon as practical.

Currently, stormwater at the landfill flows overland to the southeast towards an existing ditch and wetland basin. The City of Harvey is planning to improve stormwater management onsite by constructing a perimeter berm around the active landfill area to help contain surface runoff and direct stormwater away from waste piles. In addition, small stormwater ponds or trenches will be created along the interior of the berm to temporarily hold collected runoff. Any accumulated stormwater in these newly created areas will be pumped on an as needed basis into the city's lagoon system for treatment.

To satisfy reporting requirements, the facility is required to submit an annual report to the Department by March 1st each year. The report details the volume of each inert waste type collected in a calendar year. The operator conducts routine inspections of the facility and these inspections along with other records such as the facility's permit, training, certifications, and plan of operation. The application included an example inspection log that is filled out on a monthly basis by the certified operator onsite.

h. Demonstration of the treatment technology of section 33.1-20-01.1-12;

The requirements of this section are not applicable as the facility is not proposing to treat waste.

i. The place where the operating record is or will be kept, section 33.1-20-04.1-04;

The operating record is kept at Harvey City Hall; 120 8th St. E., Harvey, ND 58341

j. Demonstration of capability to fulfill the groundwater monitoring, sections 33.1-20-08-06 or 33.1-20-13-02;

The requirements of this section are not applicable as the facility is an inert waste landfill, and groundwater monitoring is not required.

k. Construction quality assurance and quality control;

The application includes the Department's Guideline 5 which addresses quality assurance during construction at solid waste facilities and states that the city will adhere to the document for construction and closure of the landfill, surface impoundment liners, caps, and leachate collections systems for all construction.

The city also included a detailed closure plan within their application. This plan discussed the proposed final cover, the process of revegetation, and the maintenance that will be required to ensure the health of the site in the future.

l. Demonstrations of capability to fulfill the closure standards, section 33.1-20.1-04.1-05 and otherwise provided by this article;

As the facility nears the end of its operational lifespan, the City of Harvey will initiate a comprehensive closure plan to ensure the site is properly decommissioned and restored to a stable, environmentally safe condition.

The closure plan submitted states that all remaining inert waste materials will be transported to appropriate facilities for recycling, reuse, or disposal. Any ash resulting from permitted burns, as well as any soils that may be found to be contaminated upon final inspections will be excavated, removed from the site, and disposed of in an approved disposal site to prevent potential environmental impacts. Following the removal of all loose waste at the facility, the final cover construction process will ensue.

The closed landfill areas will be graded to stable final slopes of approximately 15%. The final closure cover is anticipated to consist of approximately 18 inches of compacted clay will be added along with 6 inches on suitable plant growth material (SPGM) topsoil on top. Based on current operations, approximately 5 acres will require final cover to be added at closure with the largest area likely to be the concrete and crushed asphalt stockpile area. The

exact size of this area will depend on future operational conditions and material accumulation over the active life of the landfill.

The City of Harvey estimates the landfill to have a future operational life of 30 to 50 years. Due to ongoing recycling, salvaging, burning, and reuse activities, the city intends to minimize long-term waste accumulation and maintain waste quantities at manageable levels. The City of Harvey anticipates implementing closure or sequential partial closure activities as areas become inactive or reach operational capacity during the life of the landfill. Partial closure activities may include grading, placement of cover material, stormwater stabilization, and establishment of vegetation to minimize erosion and maintain site stability. The city has access to the equipment and resources necessary to complete landfill closure activities, including payloaders, bobcats, dump trucks, graders, and excavators.

m. Demonstrations of capability to fulfill the postclosure standards, section 33.1-20-04.1-09 and otherwise provided by this article; and

The City of Harvey included a brief but adequate post closure plan in their application. The plan states that after final closure is achieved, the landfill site will close off public access. For the first year of post closure, the city will inspect the facility monthly to look for areas of possible erosion, failing slopes, or areas with insufficient vegetative cover. If any of those conditions are observed the city has the necessary equipment to take corrective actions including stabilizing slopes, adding erosion control measures, or re-planting areas with insufficient vegetation. After the first year of monthly inspections, the city will continue to inspect the closed landfill bi-monthly, and this will be for a minimum of five years.

n. A disclosure statement as required by North Dakota Century Code section 23.1-08-17.

A disclosure statement that meets the requirements of this section was submitted to the Department.

Conclusion

Based on the submitted application and items discussed above, the City of Harvey has shown that the proposed renewal meets the requirements of the North Dakota Solid Waste Management Rules. It is proposed that the Department grant the City of Harvey a permit with the conditions listed in Permit 0093. The proposed permit length is for a period of 10 years because the facility has a good compliance record.

CRH:DAT:RB