

Air Title V Operating Permit (AOP) - Renewal

version 2.5

(Submission #: HQ8-MJY9-V30MD, version 1)

Digitally signed by:
CERIS-ND
Date: 2024.12.04 13:28:04 -06:00
Reason: Submission Data
Location: State of North Dakota

Details

Submission ID HQ8-MJY9-V30MD

Form Input

Form Instructions

In accordance with 33.1-15-14-04.c. of the North Dakota Air Pollution Control Rules, a Title V permit renewal application must be submitted to the Department at least six months, but no more than eighteen months, prior to the expiration date. Permit renewal applications are incomplete unless all information requested in SFN 52824 is supplied. The current Title V permit will be the baseline reference for a renewal. The requirements (40 CFR 70.5(c) & NDAC 33.1-15-14-06.4.c) to include a citation and description of all applicable requirements and a description of or reference to any applicable test method for determining compliance with each applicable requirement may be met by accomplishing either or both of the following: 1) provide an annotated (red-lined) copy of the current permit indicating all changes needed to reflect the current facility configuration, applicable requirements and test methods; 2) provide a narrative that conveys all changes needed to the current permit to reflect the current facility configuration, all applicable requirements and test methods.

FOR ACID RAIN UNITS ONLY ♦ Submit with the Title V permit renewal application all Acid Rain renewal applications (the Acid Rain Permit Application, the Phase II NOx Compliance Plan, and if applicable, the Phase II NOx Averaging Plan).

When completing the online application, if uploaded files are provided in each section (when indicated), do not include those same files in the General Document Upload/File Upload section. If uploading the application files in the General Document Upload/File Upload section, only fill out the required (asterisked) sections of the online application.

Section A - Permit Information

Permit Number

AOP-28380

Permit Version

1

Issue Date

06/12/2020

Expiration Date

06/12/2025

Permittee

Company Name

City of Mandan

Address

411 Sixth Avenue SW

Mandan, ND 58554

United States

Responsible Official**Prefix***NONE PROVIDED***First Name**

Brian

Last Name*Dirk***Title***Street/Landfill Superintendent***Phone Type**

Business

Number

7016673240

Extension**Email**

brian.dirk@cityofmandan.com

Address

411 Sixth Avenue SW

Mandan, ND 58554

United States

Contact Person for Air Pollution Matters**Prefix***NONE PROVIDED***First Name**

Brian

Last Name*Dirk***Title***Street/Landfill Superintendent***Phone Type**

Business

Number

7016673240

Extension**Email**

brian.dirk@cityofmandan.com

Address

411 Sixth Avenue SW

Mandan, ND 58554

United States

Section B (Part 1) - Facility Information**Facility Name**

City of Mandan - Landfill Air Curtain Destructor

Have you added, removed, or made any modifications to equipment since your last operating permit issuance?

No

Is this source subject to Title IV Acid Rain regulations?

No

Is this a portable source?

No

Facility Location

4103 County Road 82

Mandan, ND 58554

United States

County

Morton

Facility Location:
46.86041899999999,-100.87701900000000

4103 County Road 82, Mandan, ND

Section B (Part 2) - Additional Location Information

Legal Description of Facility Site				
Qtr	Qtr	Section	Township	Range
NONE PROVIDED	NE	35	139N	82W

Land area at facility site (indicate whether measurement is in acres or sq. ft.)
NONE PROVIDED

MSL elevation at facility
NONE PROVIDED

Section C - Nature of Business

General Nature of Business			
Describe Nature of Business	NAICS Code	SIC Code	
Landfill and ACI	562213	4953	

Actual Start of Construction Date
NONE PROVIDED

Actual End of Construction Date
NONE PROVIDED

Facility Startup Date
NONE PROVIDED

Section D - Process Equipment Information (1 of 1)

Emission Unit -

Emission Unit ID
NONE PROVIDED

Emission Unit Description
NONE PROVIDED

Emission Point ID
NONE PROVIDED

Emission Point Description
NONE PROVIDED

Emission Process Description
NONE PROVIDED

Emission Unit Status
NONE PROVIDED

Applicable PTCs
PTC Number

Applicable Federal Air Programs

Program Code

Applicable State Regulations

Regulation

Emission Unit form

Download the emission unit form linked here, complete it, and upload it to this application using the attachment control below.

When completing the online application, if uploaded files are provided in each section (when indicated), do not include those same files in the General Document Upload/File Upload section. If uploading the application files in the General Document Upload/File Upload section, only fill out the required (asterisked) sections of the online application.

[EMISSION UNIT FOR TITLE V PERMIT TO OPERATE \(SFN61006\)](#)

Attach Emission Unit Form

NONE PROVIDED
Comment
NONE PROVIDED

Section F - Facility-Wide Applicable Regulations and Potential to Emit (PTE)

Applicable Federal Air Programs

Program Code

Applicable State Regulations

Regulation

Potential to Emit (PTE)

Pollutant	Tons Per Year Without Fugitives	Tons Per Year With Fugitives
NOx	NONE PROVIDED	NONE PROVIDED
CO	NONE PROVIDED	NONE PROVIDED
VOCs	NONE PROVIDED	NONE PROVIDED
SO2	NONE PROVIDED	NONE PROVIDED
PM	NONE PROVIDED	NONE PROVIDED
PM10	NONE PROVIDED	NONE PROVIDED
PM2.5	NONE PROVIDED	NONE PROVIDED
Total HAPs	NONE PROVIDED	NONE PROVIDED

Emission Calculations Document Upload

Using the attachment control below, upload emission calculations documents.

When completing the online application, if uploaded files are provided in each section (when indicated), do not include those same files in the General Document Upload/File Upload section. If uploading the application files in the General Document Upload/File Upload section, only fill out the required (asterisked) sections of the online application.

Attach Emission Calculations Documents

NONE PROVIDED
Comment
NONE PROVIDED

Section G - Compliance Schedule

Will your facility be in compliance with all applicable requirements effective at the time of permit issuance?

Yes

Will your facility be in compliance with all applicable requirements effective after the time of permit issuance?

Yes

Section H - Flexible Permits

Are you requesting a flexible permit?

No

Section I - Compliance Assurance Monitoring (CAM)

To determine if your facility is subject to CAM, review the information provided at the following link.

[Compliance Assurance Monitoring \(CAM\) Guidance](#)

Is the facility identified in this application in compliance with applicable monitoring and compliance certification requirements?

Compliance Assurance Monitoring (CAM) not applicable.

Section K - Redline Permit Upload

Use the attachment control below to upload a redline version of your existing permit document, showing any changes.

When completing the online application, if uploaded files are provided in each section (when indicated), do not include those same files in the General Document Upload/File Upload section. If uploading the application files in the General Document Upload/File Upload section, only fill out the required (asterisked) sections of the online application.

Attach redline version of permit here

[20241204MandanLandfillRenewal.pdf - 12/04/2024 01:24 PM](#)

Comment

NONE PROVIDED

Section L - General Document Upload

File Upload

Use the attachment control below to upload any other information necessary for application review, such as plot plans, process diagrams, maps, etc.

When completing the online application, if uploaded files are provided in each section (when indicated), do not include those same files in the General Document Upload/File Upload section. If uploading the application files in the General Document Upload/File Upload section, only fill out the required (asterisked) sections of the online application.

Attachments

[20241204MandanLandfillRenewal2.pdf - 12/04/2024 01:24 PM](#)

Comment

NONE PROVIDED

Additional Forms

NONE PROVIDED

Agreements and Signature(s)

SUBMISSION AGREEMENTS

- ☐ I am the owner of the account used to perform the electronic submission and signature.
- ☐ I have the authority to submit the data on behalf of the facility I am representing.
- ☐ I agree that providing the account credentials to sign the submission document constitutes an electronic signature equivalent to my written signature.
- ☐ I have reviewed the electronic form being submitted in its entirety, and agree to the validity and accuracy of the information contained within it to the best of my knowledge.

I certify under penalty of law that the enclosed documents and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate 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 also certify that the source(s) identified in this application is/are in compliance with all applicable requirements except those requirements for which a compliance schedule has been submitted in the Compliance Schedule Form or Compliance Schedule Section of the application. I understand that failure to comply with any term of a compliance schedule is considered to be a violation of regulation NDAC 33.1-15-14-06.1.e. The source will continue to comply with the current applicable requirements with which it is in compliance. The source will meet, on a timely basis, any applicable requirement, which becomes effective during the permit term. The source is properly implementing any required risk management plan in accordance with section 112(r) of the federal clean air act, if appropriate.

I certify, as the Responsible Official, that I have read and understood the above requirements and conditions applicable to my source/facility and that the information and attachments provided in this application are true, accurate, and complete to the best of my knowledge." Further, I agree to comply with the provisions of Chapter 23.1-06 of the North Dakota Century Code and all rules and regulations of the Department, or revisions thereof. I also understand a permit is nontransferable and, if granted a permit, I will promptly notify the Department upon sale or legal transfer of this permitted establishment.

Note: This certification must be signed by a "responsible official" as defined in NDAC 33.1-15-14-06.1.

Signing was skipped by Thorsteinson, Kari M. on 12/04/2024

Thorsteinson, Kari M.

From: Ron Manchester <Ron@tomanengineering.com>
Sent: Wednesday, December 4, 2024 8:37 AM
To: Thorsteinson, Kari M.
Cc: Carlie Roeder
Subject: FW: NDDEQ Title V Permit to Operate Renewal Application
Attachments: NDDEQ Title V Permit to Operate - Renewal Application_Nov 2024_SIGNED.pdf

***** **CAUTION:** This email originated from an outside source. Do not click links or open attachments unless you know they are safe. *****

Kari,

The attached Renewal Application was mailed to you and EPA. Let me know if you have any questions.

Ron Manchester

From: Carlie Roeder <Carlie@tomanengineering.com>
Sent: Wednesday, December 4, 2024 8:07 AM
To: Ron Manchester <Ron@tomanengineering.com>
Subject: NDDEQ Title V Permit to Operate Renewal Application

Ron,

Attached is the electronic copy of the Title V Permit Renewal Application that was mailed to NDDEQ and the Air Program.

The mailed forms should be post-marked for Monday 12/2/24.

Thank You,

Carlie Roeder
Account Manager



501 1st Street NW | Mandan, ND 58554
Ph (701) 663-6483 | Fax (701) 663-0923
E-mail | Carlie@TomanEngineering.com
www.TomanEngineering.com
[Check us out on Facebook!](#) 

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TITLE V PERMIT TO OPERATE - RENEWAL APPLICATION
NORTH DAKOTA DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF AIR QUALITY
SFN 52824 (9-2021)

In accordance with 33.1-15-14-04.c. of the North Dakota Air Pollution Control Rules, a Title V permit renewal application must be submitted to the Department at least six months, but no more than eighteen months, prior to the expiration date. Permit renewal applications are incomplete unless all information requested herein is supplied. The current Title V permit will be the baseline reference for this renewal. The requirements (40 CFR 70.5(c) & NDAC 33.1-15-14-06.4.c) to include a citation and description of all applicable requirements and a description of or reference to any applicable test method for determining compliance with each applicable requirement may be met by accomplishing either or both of the following: 1) enclose an annotated (red-lined) copy of the current permit indicating all changes needed to reflect the current facility configuration, applicable requirements and test methods; 2) enclose a narrative that conveys all changes needed to the current permit to reflect the current facility configuration, all applicable requirements and test methods.

FOR ACID RAIN UNITS ONLY – Submit with the Title V permit renewal application all Acid Rain renewal applications (the Acid Rain Permit Application, the Phase II NO_x Compliance Plan, and if applicable, the Phase II NO_x Averaging Plan).

PART 1. GENERAL APPLICATION INFORMATION

Owner's Name	City of Mandan, North Dakota		
Facility Name	City of Mandan Landfill Air Curtain Destructor		
Name of Person Completing Application	Ronald W. Manchester	Phone	(701) 663-6483
Title	Consultant	Email	ron@tomanengineering.com
Current Operating Permit Number	AOP-28380v1.0		
Expiration Date of Current Operating Permit	06 / 12 / 2025		

PART 2. COMPLIANCE CERTIFICATION

A. Schedule for Submission of Compliance Certifications During the Term of the Permit

Frequency of Submittal Annual	Date Beginning (month/day/year) 01/01/2026
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B. Statement of Compliance with Compliance Assurance Monitoring (CAM) and Compliance Certification Requirements

The facility identified in this application is in compliance with applicable monitoring and compliance certification requirements.	
<input checked="" type="checkbox"/>	Yes
<input type="checkbox"/>	No - Describe below which requirements are not being met:
<input type="checkbox"/>	CAM not applicable

C. Certification of Compliance with all Applicable Requirements

This certification must be signed by a "responsible official" as defined in NDAC 33.1-15-14-06.1. Forms without a signed certification will be returned as incomplete.

Except for requirements identified in Compliance Schedule and Plan (Section G) of Title V Permit to Operate application forms for which compliance is not achieved, I hereby certify that, based on information and belief formed after reasonable inquiry, the air contaminant source identified in this form is in compliance with all applicable requirements.

Signed



Date

11-25-24

Typed Name Brian Dirk, Landfill Superintendent

PART 3. STATUS OF SOURCE

Has there been any change to the source since the most recent initial or renewal permit application, minor permit modification, significant modification or administrative permit amendment?

☒ No ☐ Yes

If yes, complete and submit appropriate sections of Title V Permit to Operate application forms.


PART 4. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS

Note: This certification must be signed by a "responsible official" as defined in NDAC 33.1-15-14-06.1. Applications without a signed certification will be returned as incomplete.

I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate and complete.

Name (typed) Brian Dirk, Landfill Superintendent

(Signed)



Date

11 / 25 / 24

Telephone Number

701-887-3240


Send original renewal application to:


North Dakota Department of Environmental Quality
Division of Air Quality
4201 Normandy Street, 2nd Floor
Bismarck, ND 58503-1324
(701)328-5188

Send copy of renewal application to:

Air Program (8P-AR)
Office of Partnerships & Regulatory
Assistance
US EPA Region 8
1595 Wynkoop Street
Denver, CO 80202-1129

MEMO TO : File
City of Mandan – New Landfill Air Curtain Destructor (AirBurners)

FROM : Elizabeth Trythall 
Environmental Scientist
Division of Air Quality and

David Stroh – Permit Manager
Environmental Engineer 
Division of Air Quality

RE : Air Curtain Incinerator (ACI) Unit Replacement
4103 County Road 82
Mandan, ND 58554

DATE : February 18, 2025

January 6, 2025

The Department received information from Ron Manchester, with Toman Engineering, that the City of Mandan had purchased a new ACI unit to replace the existing unit on site. Information on the unit was provided and then supplemented on January 16, 2025. Based on the information that was provided, emission calculations were completed (see Table 3), and it was determined the replacement ACI unit would not require a Permit to Construct (PTC) application to be submitted and a memo allowing the new ACI unit to operate would be issued.

This memo allows the new ACI unit to be operated until it is incorporated into the facility's Title V Permit to Operate during the renewal process (permit expires on June 12, 2025). Upon replacement of the existing ACI unit with the new ACI unit, the City of Mandan shall remove or implement a lockout/tagout of the existing ACI unit.

The new ACI unit to be installed is as follows:

Table 1:

Emission Unit Description	Emission Unit (EU)	Emission Point (EP)	Air Pollution Control Equipment
Air Curtain Incinerator (ACI) rated up to 7 tons/hr (NSPS CCCC)	1 ^A	1	None
ACI Diesel-Fired Engine, Make: HATZ, Model 4H50TIC rated at 75 bhp (NSPS IIII) (MACT ZZZZ)	2 ^{A, B}	2	Diesel Oxidation Catalyst

^A ACI is a combined unit that includes a diesel-fired engine.

^B Certified Tier 4 Engine, per 40 CFR 60, Subpart IIII.

The new ACI unit is subject to the same New Source Performance Standards (NSPS – Subparts CCCC (EU 1) and IIII (EU 2)) and Maximum Achievable Control Technology standards (MACT – ZZZZ (EU 2)) as listed in Permit to Operate (PTO) No. AOP-28380 v1.0 for the old ACI unit and must comply with the subparts in the same manner as listed in the PTO. The new ACI unit (EU 1) and engine (EU 2) are restricted to combusting the same material and fuel as listed in AOP-28380 v1.0, as follows:

1. EU 1 may only burn 100% wood waste, 100% clean lumber and/or yard waste (including compost free of plastic). Burning preservative treated wood, rubber (tires), asphalt shingles, and other materials that generate hazardous air pollutants is strictly prohibited.
2. EU 2 is restricted to combusting only distillate oil containing no more than 0.0015 percent sulfur by weight.

The new ACI unit is subject to the same emission unit limits as listed in AOP-28380 v1.0 Condition 3.

The City of Mandan shall provide the Department a notification of the actual date of initial startup of the new ACI unit within 15 days after the date of initial startup. The new ACI unit will need to conduct initial testing within 180 days after initial startup. The testing shall be conducted at the emission units listed in Table 2 using an independent testing firm, to determine the compliance status of the facility with respect to the above referenced emission limits. Emissions testing shall be conducted for the pollutant(s) listed in Table 2 in accordance with EPA Reference Methods listed in 40 CFR 60, Appendix A. Test methods other than those listed in Table 2 may be used upon approval by the Department. Initial testing will require a minimum of three runs, one hour each, unless otherwise specified in a federal subpart.

Table 2:

Description (EU)	EP	Pollutant/Parameter	Method
ACI	1	Opacity	EPA Reference Method 9

The City of Mandan shall notify the Department using the form in the Emission Testing Guideline¹, or its equivalent, at least 30 calendar days in advance of any tests of emissions of air contaminants required by the Department. If the City of Mandan is unable to conduct the performance test on the scheduled date, the Department shall be notified at least five days prior to the scheduled test date and coordinate a new test date with the Department.

A signed copy of the test results shall be furnished to the Department within 60 days of the test date. The basis for this condition is NDAC 33.1-15-01-12 which is hereby incorporated into this memo by reference. To facilitate preparing for and conducting such tests, and to facilitate reporting the test results to the Department, the City of Mandan shall follow the procedures and formats in the Department's Emission Testing Guideline.

¹ See February 7, 2020, North Dakota Department of Environmental Quality Division of Air Quality Emissions Testing Guidelines. Available at: https://www.deq.nd.gov/publications/AQ/policy/PC/Emission_Testing_Guide.pdf

The City of Mandan shall operate the new ACI unit in the same manner and with the same location restrictions as stated in AOP-28380 v1.0. The City of Mandan is permitted to replace an existing engine/ACI unit with a like-kind unit. Replacement is subject to the same conditions as stated in AOP-28380 v1.0.

The City of Mandan's new ACI unit will be required to comply with the same monitoring, recordkeeping, reporting, facility wide operating conditions, general conditions and state enforceable only condition requirements as listed in AOP-28380 v1.0.

Table 3 provides the potential emissions from the new ACI unit:

Table 3:

Emission Unit Description	EU	EP	CO	NO_x	SO₂	VOCs	All PM	Total HAPs
ACI Unit	1	1	79.7	30.7	3.1	--	33.7	--
ACI Diesel-Fired Engine	2	2	2.7	2.5	0.7	--	0.02	--
Total (tons/year):			82.4	33.2	3.8	0.0	33.7	0.00

^A Abbreviations:

All PM: filterable and condensable particulate matter

SO₂: sulfur dioxide

NO_x: oxides of nitrogen

CO: carbon monoxide

VOCs: volatile organic compounds

HAPs: hazardous air pollutants as defined in Section 112(b) of the Clean Air Act

As shown in Table 3, if the facility was to operate 8,760 hours per year, the greatest criteria pollutant would be CO at approximately 82 tons per year (tpy) with all other criteria pollutants below 35 tpy. Total combined HAP emissions were not calculated but are expected to be negligible based on Department experience with similar units.

Based on the information provided to the Department and the calculations done, it is recommended that the City of Mandan be granted approval to install and operate the new ACI unit.