Air Quality Impacts Analysis (AQIA)
for
Agristo North Dakota LLC
Grand Forks Processing Facility

3600 27th Ave. N
Grand Forks, ND 58203

Permit No.: ACP-18316 v1.0
Draft Report Date: April 13, 2026
Final Report Date:

North Dakota Department of Environmental Quality
Division of Air Quality

Report By:

Corrianna Anderson
Environmental Engineer, NDDEQ
Division of Air Quality

Contents

1 Executive Summary 1
2 Introduction 1
3 Project Background 1
4 Model Requirements 2
5 Model Input Values 3
5.1 Model Version 3
5.2 Meteorological Data (MET) 3
5.3 Surface Inputs 4
5.4 Receptor Grid 6
5.5 Background 7
5.5.1 Nearby Sources 8
5.6 Emission Source Modeling Parameters 8
6 Model Execution and Results 11
6.1 Ambient Air Quality Standards (AAQS) 11
7 Summary & Conclusions 11
8 Plots 12

1 Executive Summary

Agristo North Dakota LLC (Agristo) conducted air dispersion modeling for the proposed Agristo Grand Forks Processing Facility, a potato processing facility which will be located in Grand Forks, Grand Forks County, North Dakota. The modeling efforts were conducted to demonstrate compliance with both state and federal Ambient Air Quality Standards (AAQS).

The Permit to Construct (PTC) application was submitted on September 18, 2025. Based on the data provided in these documents, and the Department's independent review and modeling analysis, it is expected that the proposed facility will comply with the applicable AAQS. The Department's results of the modeled impacts for the AAQS are outlined in Table 1.

Table 1- Ambient Air Quality Standards (AAQS) Results Summary[1]

Pollutant	Averaging Time	Agristo Modeled Impact (µg/m^3)	Total Modeled Impact (µg/m^3)	Background Concentrations (µg/m^3)	Total Impact (µg/m^3)	NAAQS (µg/m^3)	Passed (Y/N)
PM_{10}	24-HR	10.35	10.36	30	40.36	150	Y
$PM_{2.5}$	24-HR	7.32	7.41	13.7	21.11	35	Y
	Annual	1.15	1.36	4.75	6.11	9	Y
NO_2	1-HR	84.98	99.59	35	134.59	188	Y
	Annual	3.02	5.97	5	10.97	100	Y

2 Introduction

On September 18, 2025, the North Dakota Department of Environmental Quality, Division of Air Quality (Department) received an application for a PTC from Agristo for the proposed construction of the Agristo Grand Forks Processing Facility in Grand Forks, ND. The application included a modeling analysis to confirm compliance with the National Ambient Air Quality Standards (NAAQS). Modeling efforts were carried out for NO_2, PM_{10} and $PM_{2.5}$. This AQIA summarizes the Department's findings based on a thorough review and independent modeling analysis of the Project.

3 Project Background

Upon project completion, the proposed Agristo facility will be a new potato processing facility located in Grand Forks, ND. The facility will process raw potatoes and distribute them as various commercial products. The largest emission units are the thermal oxidizer exhaust that controls emissions from the facility fryers (EP1); the steam boiler exhaust (EPs 2 and 3); and the office water heater exhaust (EPs 6 and 7). The facility is a true minor source for PSD (Prevention of Significant Deterioration), Title V, and an area HAP (Hazardous Air Pollutants) source.

[1] See Table 15 – AAQS Results Summary for AAQS averaging times.

4 Model Requirements

The Agristo facility is considered a minor source according to the PSD rules[2,3] and thus does not fall under the purview of PSD review requirements. Per the Department Memo[4] dated October 6, 2014, sources that are not subject to the PSD rules require dispersion modeling if the potential emissions from a new facility exceed the modeling thresholds (Table 2). Because the emissions of PM_{10}, $PM_{2.5}$, and NO_2 exceed the modeling threshold for emissions venting from stacks less than 1.5 times a nearby building height, modeling is required for those pollutants.

Table 2 – Modeling Thresholds

Pollutant	Emission Limit for Emissions Venting from Stacks with Height < 1.5 Times Nearby Building Height	Total Facility Controlled Potential To Emit (TPY)	Modeling Required (Y/N)
PM_{10}	15	17.9	Y
$PM_{2.5}$	10	17.9	Y
SO_2	40	1.0	N
NO_2	40	41.9	Y

Any new source that is situated within 50 kilometers (km) of a Class I area is required to include a Class I increment analysis. Table 3 provides a list of the Class I areas in closest proximity to the Agristo facility. Because the facility will be located well beyond 50 km from any Class I area, no Class I increment analysis is required.

[2] *NDAC 33.1-15-15.* Available at: https://www.ndlegis.gov/information/acdata/pdf/33.1-15-15.pdf (Last visited March 26, 2026)
[3] *40 CFR § 52.21.* Available at: https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-52/subpart-A/section-52.21 (Last visited March 26, 2026, 2026)
[4] *Criteria Pollutant Modeling Requirements for a Permit to Construct.* Available at: https://deq.nd.gov/publications/AQ/policy/Modeling/Criteria_Modeling_Memo.pdf (Last visited March 26, 2026)

Table 3 - Class I Areas Near Source

Class I Area	Distance From Project (km) *	Modeling Required (Y/N)
Theodore Roosevelt National Park-North Unit (ND)	465	N
Theodore Roosevelt National Park-Elkhorn Ranch Unit (ND)	498	N
Theodore Roosevelt National Park-South Unit (ND)	500	N
Lostwood Wilderness Area (ND)	400	N
Voyageurs National Park (MN)	320	N

* Approximate distances using Google Earth's measuring tool.

5 Model Input Values

5.1 Model Version

The U.S. Environmental Protection Agency (EPA) has developed the *Guideline on Air Quality Models*[5] (40 CFR 51 Appendix W) wherein they list preferred models for pre-construction permitting reviews. At the time of the application submittal, Appendix W (2025) was the most current revision in use. EPA's preferred model is AERMOD, which Agristo and the Department used for the analysis and review, in accordance with Appendix W. The model versions utilized in the Department review are shown in Table 4.

Table 4 - Model Versions Used

MODEL	VERSION	MODEL	VERSION
AERMOD	24142	BPIP-PRIME	4274
AERMET	24142	AERMINUTE	15272
AERMAP	18081	AERSURFACE	20060

5.2 Meteorological Data (MET)

In the modeling process, both surface and upper-air meteorological (met) data are pre-processed through AERMET. This pre-processing generates the boundary layer parameters required by AERMOD to estimate plume dispersion. AERMET processes hourly meteorological data to determine plume transport and dispersion downwind from a source.

[5] Available at: https://www.epa.gov/system/files/documents/2024-11/appendix_w-2024.pdf (Last visited March 26, 2026)

Per Appendix W (2024) 8.4.2.e, the choice of meteorological data should be based on ensuring a sufficiently conservative and representative result, considering hourly and seasonal variations in meteorological conditions throughout the year, which directly influence plume movement due to atmospheric conditions. The options for selecting meteorological data include:

1. One year of site-specific data: This involves using data collected onsite from a monitoring station.
2. Five years of representative National Weather Service (NWS) data: This data source typically provides long-term, historical weather information.
3. At least 3 years of prognostic meteorological data: This type of data involves using predictive meteorological models to estimate future conditions.

The analysis used the second option, five years of representative NWS data. The specific MET stations used for input in AERMET for this analysis are listed in Table 5. AERMET processes hourly surface observations, including parameters such as wind speed and direction, ambient temperature, sky cover (opacity), and local air pressure (optionally). It combines these observations with the pre-processed AERSURFACE output values (Table 6) to compile the necessary surface met inputs for AERMOD.

Table 5 - MET Data Used

MET Data	Location	Station No.	Years	Distance From Source*	Source of Data
Surface Air	Grand Forks Airport	14916	2020-2024	8 km	NDDEQ
Upper Air	International Falls, MN	72747	2020-2024	280 km	NDDEQ

* Approximate distances using Google Earth's measuring tool.

5.3 Surface Inputs

AERMET relies on certain key values, including surface roughness length, albedo, and Bowen ratio when pre-processing met data for use in AERMOD.

AERSURFACE allows users to generate these values based on inputs related to seasonal variation in the vegetative landscape (e.g., landcover). Agristo generated input values for seasonal categories and surface moisture using historic (2020 – 2024) meteorological data acquired from the surface monitoring station located at Grand Forks International Airport, ND. In accordance with "EPA User's Guide for AERSURFACE Tool" [6], the continuous snow cover months were estimated by assessing the months that experienced snow cover for more than 50 percent of the days (Table 7). In addition, surface moisture conditions were estimated for each year by comparing the total annual precipitation to historic (1990 -2019) 30th and 70th percentile precipitation observations (Table 8).

[6] Available at: https://gaftp.epa.gov/Air/aqmg/SCRAM/models/related/aersurface/aersurface_ug_v20060.pdf (Last visited March 26, 2026)

Table 6 - AERSURFACE Input Values

Parameter	Value Used
Radius of study area used for surface roughness:	1.0 km
Define the surface roughness length for multiple sectors?	Yes
Number of sectors:	12
Temporal resolution of surface characteristics	Monthly
Continuous snow cover for at least one month?	Yes
Reassign the months to different seasons?	Yes
Specify months for each season:	Yes
Is this site at an airport?	Yes
Is the site in an arid region?	No
Surface moisture condition at the site:	Dry or Wet

Table 7: Snow cover 2020 – 2024

Year	Snow Cover (%)					
	October	November	December	January	February	March
2020	3%	0%	35%	100%	100%	100%
2021	0%	50%	97%	100%	82%	3%
2022	0%	67%	100%	100%	97%	71%
2023	16%	13%	48%	100%	86%	87%
2024	0%	37%	94%	84%	52%	10%

Table 8: Surface moisture 2020 -2024

YEAR	ANNUAL PRECIPITATION (in.)	DRY or WET
2020	19.35	D
2021	19.13	D
2022	23.32	W
2023	15.43	D
2024	23.84	W

* 30th Percentile - 19.70"; 70th Percentile - 22.87"

5.4 Receptor Grid

Receptors serve as the designated locations where the air quality model calculates ground-level pollutant concentrations. These receptors are strategically placed within a receptor grid, and their distribution is determined by factors such as terrain characteristics and pollutant emission rates. While the exact configuration may vary, it typically forms a rectangular pattern radiating outward from the emission source. The goal is to ensure that the receptor grid effectively captures the dispersion and distribution of pollutants in the vicinity of the facility, as this is where the predicted maximum concentrations are likely to occur.

Further specifics on the receptor grid are shown in Table 9.

Table 9 - Receptor Grid Spacing

DISTANCE OUT FROM SOURCE	DISTANCE BETWEEN RECEPTORS
Fence line	25 meters
0 to 1000 meters (0 to 1.0 km)	50 meters
1,001 to 2,000 (1 to 2 km)	100 meters
2,001 to 5,000 meters (2 to 5 km)	250 meters
5,001 to 10,000 meters (5 to 10 km)	500 meters
TOTAL NUMBER OF RECEPTORS	5206

The receptor points are placed at ground level, and their elevation is determined using the United States Geological Survey (USGS) National Elevation Dataset (NED) terrain and land-use data. The Universal Transverse Mercator (UTM) map projection with the North American Datum of 1983 (NAD83) is used for both the source input locations and the receptor grid location. To ensure accurate placement at ground level, the USGS NED 2017 data at a 1/3 arcsecond (10-meter) resolution is processed through the AERMAP pre-processor. This pre-processor adjusts the receptor points' elevations based on terrain data, aligning them with the actual topography of the area.

Receptor points located within the plant boundary are not modeled, as they do not represent ambient air.[7] Ambient air is defined as air situated outside of a boundary (e.g., a fence), which restricts general public access to a facility or source. Agristo will utilize fencing, signage, or other approved techniques around the plant boundary to preclude access to the general public. This exclusion ensures that the modeling analysis focuses on assessing the impact of emissions on the air quality in areas accessible to the public.

[7] *§40 CFR 50.1(e).* Available at: https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-50/section-50.1 (Last visited March 26, 2026)

5.5 Background

Fixed background concentrations of $PM_{2.5}$, PM_{10}, and NO_2 were utilized with modeling results to predict the total impact on AAQ. These fixed background concentrations are not included as inputs in the modeling process, and as a result, they are not included in the "Agristo Modeled Impact" or "Total Modeled Impact" columns (Table 1 and Table 15). The fixed background concentration values (Table 10) are included in the "Total Modeled Impact" column (Table 1 and Table 15) to show the cumulative concentrations of each pollutant as compared to the AAQS limits. Fixed background concentrations (Table 10) are considered reasonably representative of the entire state, and while they are conservative, they play a significant role in ensuring a comprehensive and conservative assessment of the total ambient effect on AAQS due to emissions from the facility. To demonstrate the conservative nature of the fixed background concentrations, the Department evaluated ambient concentrations from the Theodore Roosevelt National Park (TRNP) North and South units and the Lostwood National Wildlife Refuge (NWR) ambient monitors. These areas have few anthropogenic emission sources and are the closest representation of the true background atmospheric conditions in North Dakota. Ambient data was acquired from the EPA Outdoor Air Quality data[8] and averaged over the 5-year period from 2018-2022. An average of the ambient data is most representative of a background concentration. Table 11 shows that the Department's fixed ambient background concentrations are conservative in comparison to the ambient air concentrations.

Table 10 - Fixed Background Concentrations[9]

Pollutant	Averaging Time	Background (µg/m^3)
PM_{10}	24-HR	30
$PM_{2.5}$	Annual	4.75
	24-HR	13.7
NO_2	Annual	5
	1-HR	35

Table 11: Ambient Air Concentrations 2018-2022

Parameter	**PM_{10}**	**$PM_{2.5}$**		**NO_2**	
Averaging Period	24-hr	24-hr	Annual	1-hr	Annual
Fargo	12.44	7.54	5.58	33.61	4.17
Bismarck	19.45	6.99	6.46	34.56	4.71
TRNP South Unit	-	4.35	4.35	-	-
TRNP North Unit	-	-	-	9.89	1.46
Lostwood NWR	11.36	-	-	-	-
Background	**30.00**	**13.70**	**4.75**	**35.00**	**5.00**

[8] Available at: https://www.epa.gov/outdoor-air-quality-data/download-daily-data (Last visited March 26, 2026)
[9] Available at: https://deq.nd.gov/publications/AQ/policy/Modeling/ND_Air_Dispersion_Modeling_Guide.pdf (Last visited March 26, 2026)

5.5.1 Nearby Sources

The Department reviewed records pertaining to sources that could potentially share a significant concentration gradient with the proposed Agristo facility in North Dakota. Air dispersion models were conducted to analyze potentially significant sources within 20 km of the proposed facility and evaluate major sources within 50 km. Agristo submitted Radius of Impact (ROI) plots to the Department that were compared to other sources in the area. Of the sources evaluated, three were identified as potentially sharing significant concentration gradients. The facilities included in the cumulative analysis are listed in Table 12, with the modeling parameters listed in Table 14.

Table 12 – Nearby Sources Sharing Significant Concentration Gradient

Facility	Location	Source Type
Epitome Energy, LLC – Soybean Processing Facility	Grand Forks, Grand Forks County, ND	Soybean Processing
J. R. Simplot Company – J. R. Simplot Company	Grand Forks, Grand Forks County, ND	Potato Processing
North Dakota Mill and Elevator-North Dakota Mill	Grand Forks County, ND	Flour Mill

5.6 Emission Source Modeling Parameters

AERMOD requires specific source data to model air pollutant dispersion accurately. This data includes:

1. Type and location of each emission point
2. Base elevation of each stack
3. Emission height and rate
4. Gas exit velocity and temperature
5. Other stack/emission parameters depending upon source type

To ensure the accuracy of model input values, a comparison was made between the emission rates and stack parameters provided in the application and the corresponding information in the modeling files.

A conservative modeling approach was taken with this project. Emission rates represent projected worst-case ambient conditions. Annual emissions are based on worst-case annual emissions.

Table 13 - Equipment and Modeling Parameters lists the model input parameters for emission rates, stack temperature, exit velocity, height (i.e., release height), and stack exit diameter for each emission point at the Agristo facility.

Table 14 - Nearby Source Parameters and Emission Rates lists the model input parameters for location (UTM X-Y coordinates), elevation, height (i.e., release height), exit temperature, exit velocity, stack exit diameter, stack exit orientation, and emission rates at the nearby facilities identified in Table 12.

Table 13 - Equipment and Modeling Parameters

Emission Point	Emission Point Description	UTM X (m)	UTM Y (m)	Elev. (m)	Height (ft)	Temp (F)	Velocity (ft/s)	Exit Dia. (ft)	Orient. (vert/horiz)	NOx (lb/hr)	$PM_{2.5}$ (lb/hr)	PM_{10} (lb/hr)
EP1	Thermal Oxidizer Exhaust	643142.94	5312624.62	253.08	60	320	51.97	3.50	Vertical	2.13	3.03	3.03
EP2	Steam Boiler 1 Exhaust	643143.50	5312613.73	253.06	60	300	37.93	3.50	Vertical	3.24	0.49	0.49
EP3	Steam Boiler 2 Exhaust	643143.87	5312605.63	253.05	60	300	37.94	3.50	Vertical	3.24	0.49	0.49
EP6	Office Water Heater Exhaust 1	643143.97	5312591.82	253.04	50	200	21.22	1.00	Vertical	0.34	0.03	0.03
EP7	Office Water Heater Exhaust 2	643144.28	5312582.89	253.03	50	200	21.22	1.00	Vertical	0.34	0.03	0.03

Table 14 - Nearby Source Parameters and Emission Rates

Emission Point	Emission Point Description	UTM X (m)	UTM Y (m)	Elev. (m)	Height (ft)	Temp (F)	Velocity (ft/s)	Exit Dia. (ft)	Orient. (vert/horiz)	NOx (lb/hr)	$PM_{2.5}$ (lb/hr)	PM_{10} (lb/hr)
JRB1	JR Simplot – Grand Forks— Natural Gas Boiler 50.287 MMBtu/hr	643345.51	5310756.26	253.76	120.02	350	31.30	3.17	Vertical	25.96	--	--
JRB2	JR Simplot – Grand Forks – Natural/Bio Gas Boiler 75.431 MMBtu/hr	643345.51	5310756.26	253.76	120.02	350	38.45	3.51	Vertical	44.45	--	--
JRB3	JR Simplot – Grand Forks – Natural Gas Boiler 98.5 MMBtu/hr	643345.51	5310756.26	253.76	120.02	343	37.83	3.51	Vertical	39.05	--	--
JRD1	JR Simplot – Grand Forks – French Fry Process Dryer	643345.51	5310756.26	253.76	73.10	150	64.34	4.66	Vertical	21.75	--	--
JRFL1	JR Simplot – Grand Forks – Digester Gas Flare 55 MMBtu/hr	643258.42	5310754.10	253.94	55.45	1340	131.24	2.13	Vertical	22.15	--	--
JRPF1	JR Simplot – Grand Forks – Line 1 and 2 Potato Fryers	643290.00	5310455.00	252.76	75.59	123	39.67	4.17	Vertical	--	1.65	1.65
JRPF4	JR Simplot – Grand Forks – Line 4 Potato Fryer	643259.00	5310535.00	253.25	63.00	114	46.89	3.00	Vertical	--	3.02	3.02
STATEM2	State Mill – Grand Forks – PM Sources	645229.90	5311332.00	253.98	95.15	77	42.98	3.61	Vertical	--	12.41	12.41
EP118	Epitome Energy – Grand Forks – Steam Boiler A	640692.20	5317236.40	252.52	84.85	416	42.06	3.84	Vertical	6.69	--	--
EP119	Epitome Energy – Grand Forks – Steam Boiler B	640692.07	5317244.62	252.5	84.85	416	42.06	3.84	Vertical	6.69	--	--

6 Model Execution and Results

6.1 Ambient Air Quality Standards (AAQS)

State[10] and federal[11] AAQS were modeled per the parameters listed in Section 5.6. The model analysis results are shown in Table 15. Modeling utilized Tier II of the Ambient Ratio Method (ARM2). Default minimum and maximum ratios of 0.5 and 0.9 were applied to determine the predicted ground-level concentration of NO_2.

Table 15 – AAQS Results Summary

Pollutant	Averaging Time	Agristo Modeled Impact (µg/m³)	Total Modeled Impact (µg/m³)	Background Concentrations (µg/m³)	Total Impact (µg/m³)	NAAQS (µg/m³)	Passed (Y/N)
PM_{10}	24-HR[A]	10.35	10.36	30	40.36	150	Y
$PM_{2.5}$	24-HR[B]	7.32	7.41	13.7	21.11	35	Y
	Annual[C]	1.15	1.36	4.75	6.11	9	Y
NO_2	1-HR[D]	84.98	99.59	35	134.59	188	Y
	Annual[E]	3.02	5.97	5	10.97	100	Y

[A] Modeled concentration is the highest-sixth-high 24-hour average across five years of meteorological data.
[B] Modeled concentration is the 98th percentile (eighth-high) of the annual distribution of maximum 24-hour concentrations averaged across five years of meteorological data.
[C] Modeled concentration is the annual average concentration across five modeled years of meteorological data.
[D] Modeled concentration is the 98th percentile (eighth-high) of the annual distribution of daily maximum 1-hr concentrations averaged across five years of meteorological data.
[E] Modeled concentration is the highest annual average concentration across five modeled years of meteorological data.

7 Summary & Conclusions

Upon the Department's review and independent analysis of the modeling submitted by Agristo, the following is concluded:

Agristo followed all applicable State and Federal guidance in their modeling protocol.

Dispersion modeling was conducted to demonstrate that emissions from the Project are expected to comply with state and federal Ambient Air Quality Standards (AAQS). Emissions associated with operating the facility with the proposed emission units and limits are not expected to cause or contribute to a violation of the NAAQS as listed in NDAC 33.1-15-02-04. Results of the modeled impacts for the AAQS are displayed in Table 1 and Table 15.

[10] *NDAC 33.1-15-02*. Available at: https://www.ndlegis.gov/information/acdata/pdf/33.1-15-02.pdf?20150602082326 (Last visited March 26, 2026)
[11] *§40 CFR 50.* Available at: https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-50?toc=1 (Last visited March 26, 2026)

8 Plots

Model Set-Up

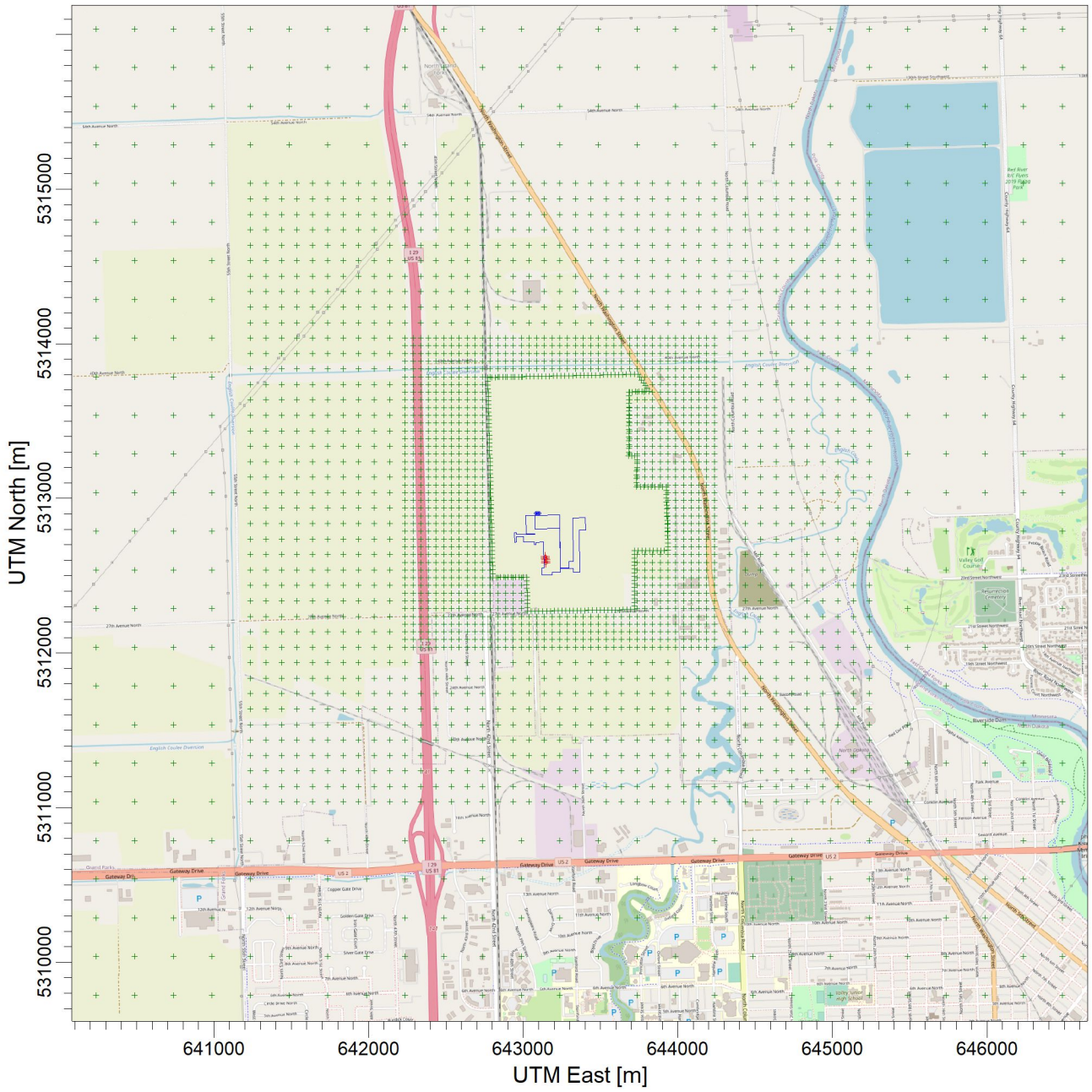
Agristo Facility Site	Plot	1
Terrain Contours	Plot	2
Windrose	Plot	3
Receptor Grid	Plot	4

AAQS Analysis

NO_2 1-HR	Plot	5
NO_2 Annual	Plot	6
$PM_{2.5}$ 24-HR	Plot	7
$PM_{2.5}$ Annual	Plot	8
PM_{10} 24-HR	Plot	9

PROJECT TITLE:

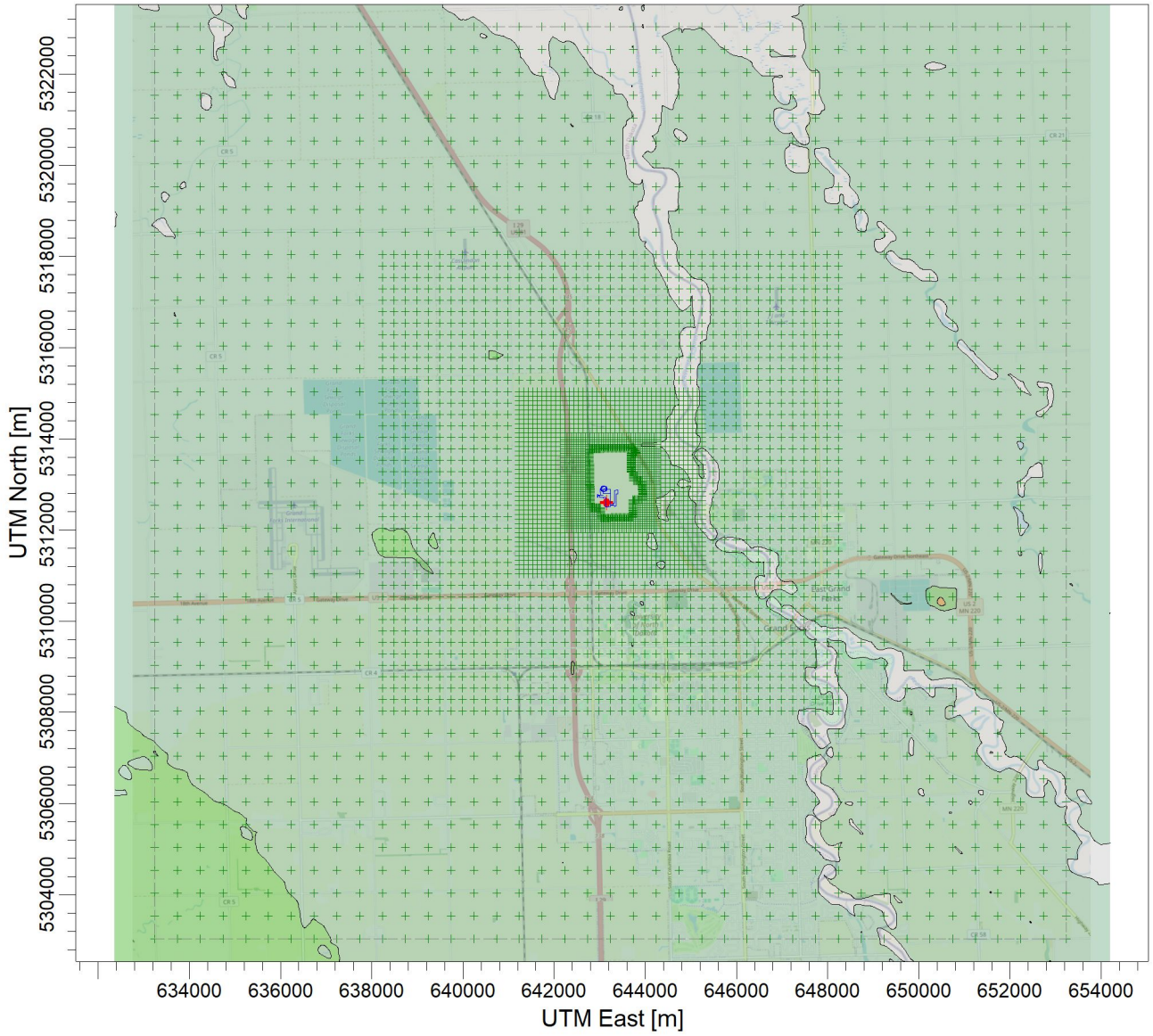
Agristo Grand Forks Processing Facility
Plot 1 - Site



COMMENTS:	SOURCES: **5**	COMPANY NAME: **North Dakota Department of Environmental Quality**	
	RECEPTORS: **5206**	MODELER: **Rhannon Thorton**	NORTH Dakota Be Legendary. | Environmental Quality
		SCALE: 1:41,332 0 1 km	
		DATE: **4/13/2026**	PROJECT NO.: **ACP-18316**

PROJECT TITLE:

Agristo Grand Forks Processing Facility
Plot 2 - Terrain Contours



Terrain Contours — meters

241.4 | 250.0 | 260.0 | 270.0 | 274.4

COMMENTS:	SOURCES: **5**	COMPANY NAME: **North Dakota Department of Environmental Quality**	
	RECEPTORS: **5206**	MODELER: **Rhannon Thorton**	NORTH Dakota Be Legendary.™ | Environmental Quality
		SCALE: 1:147,990 — 0 — 5 km	
		DATE: **4/13/2026**	PROJECT NO.: **ACP-18316**

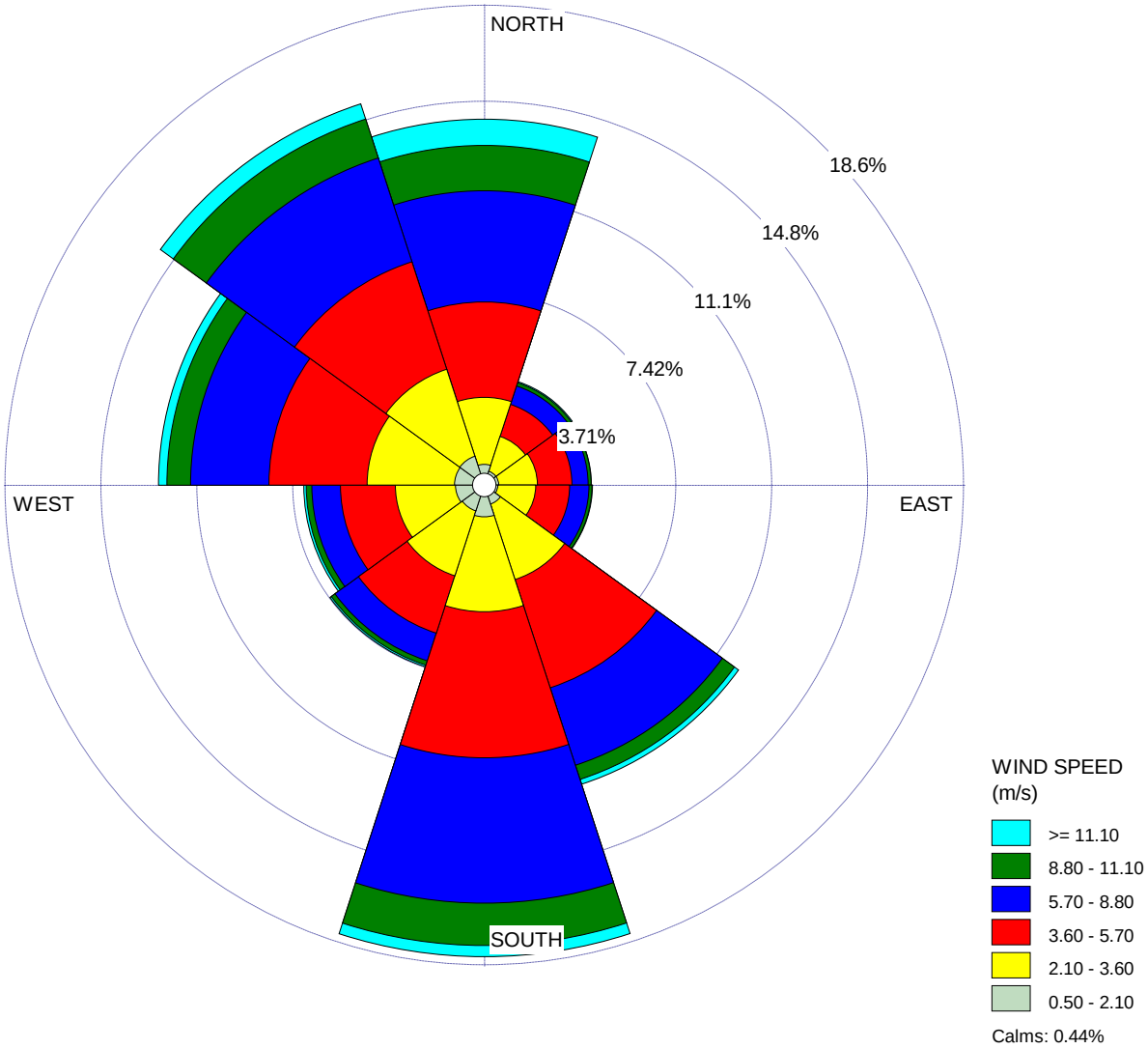
AERMOD View - Lakes Environmental Software

WIND ROSE PLOT:

Agristo Grand Forks Processing Facility
Plot 3 - Wind Rose

DISPLAY:

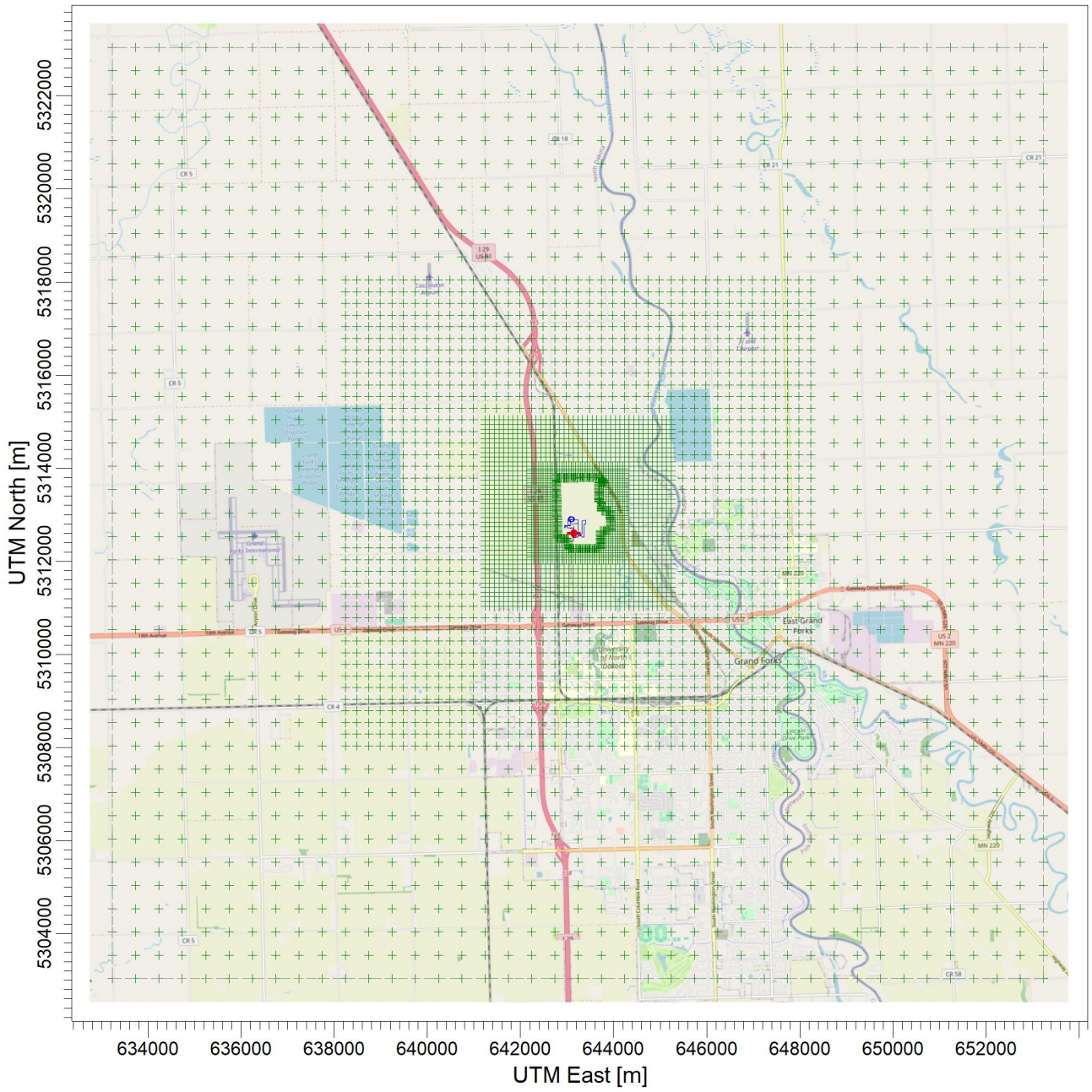
Wind Speed
Direction (blowing from)



COMMENTS: Grand Forks Airport, ND Station No. 14916 Year: 2020-2024	DATA PERIOD: **Start Date: 1/1/2020 - 00:00** **End Date: 12/31/2024 - 23:59**	COMPANY NAME: **North Dakota Department of Environmental Quality**	
		MODELER: **Rhannon Thorton**	NORTH Dakota Be Legendary.™ | Environmental Quality
	CALM WINDS: **0.44%**	TOTAL COUNT: **43765 hrs.**	
	AVG. WIND SPEED: **5.06 m/s**	DATE: **4/10/2026**	PROJECT NO.: **ACP-18316**

PROJECT TITLE:

Agristo Grand Forks Processing Facility
Plot 4 - Receptor Grid

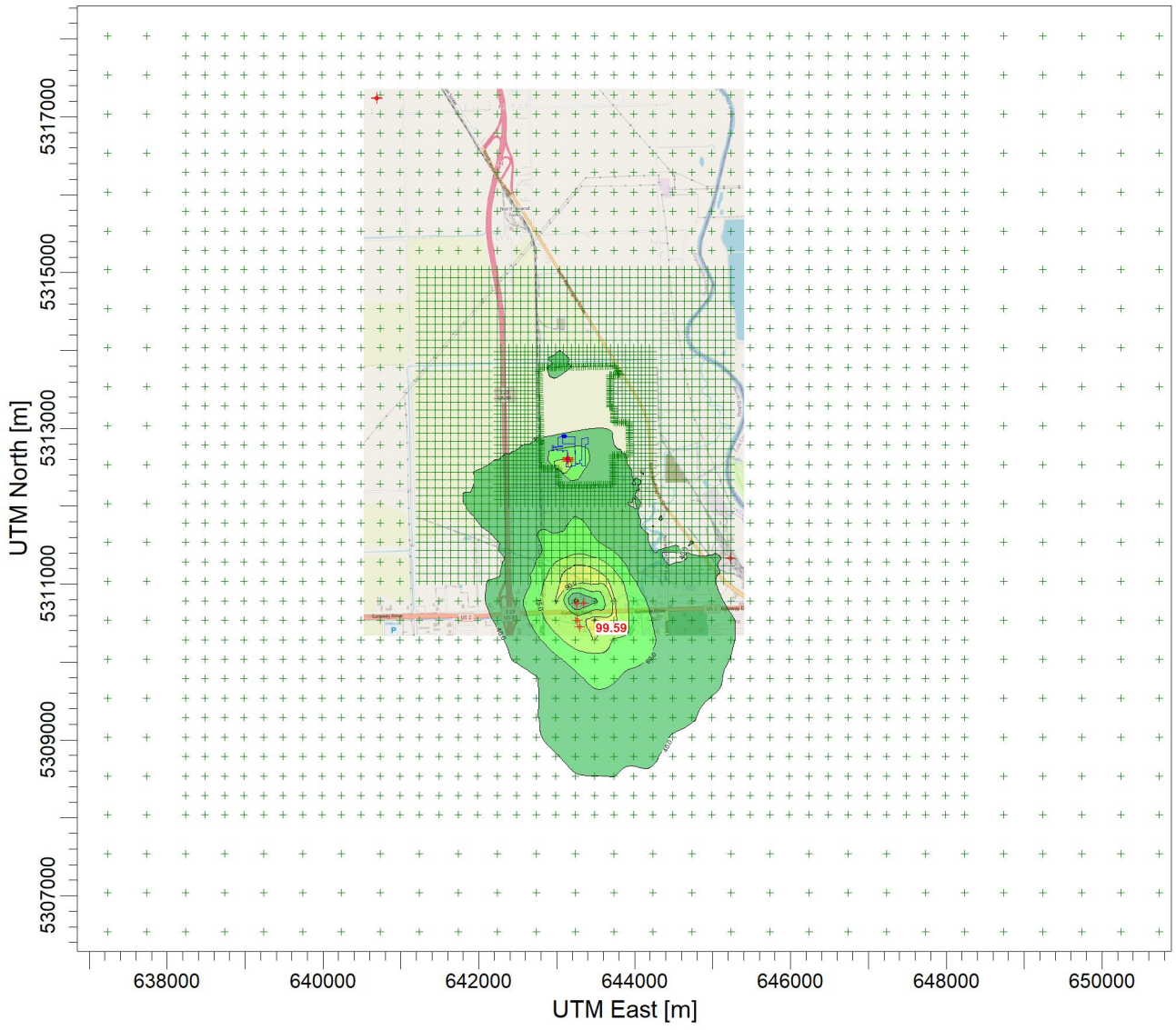


COMMENTS:	SOURCES: **5**	COMPANY NAME: **North Dakota Department of Environmental Quality**	
	RECEPTORS: **5206**	MODELER: **Rhannon Thorton**	NORTH Dakota Be Legendary.™ | Environmental Quality
		SCALE: 1:137,281 — 0 — 5 km	
		DATE: **4/13/2026**	PROJECT NO.: **ACP-18316**

AERMOD View - Lakes Environmental Software

PROJECT TITLE:

Agristo Grand Forks Processing Facility
Plot 5 - NO2 1-HR



PLOT FILE OF 8TH-HIGHEST MAX DAILY 1-HR VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ug/m^3

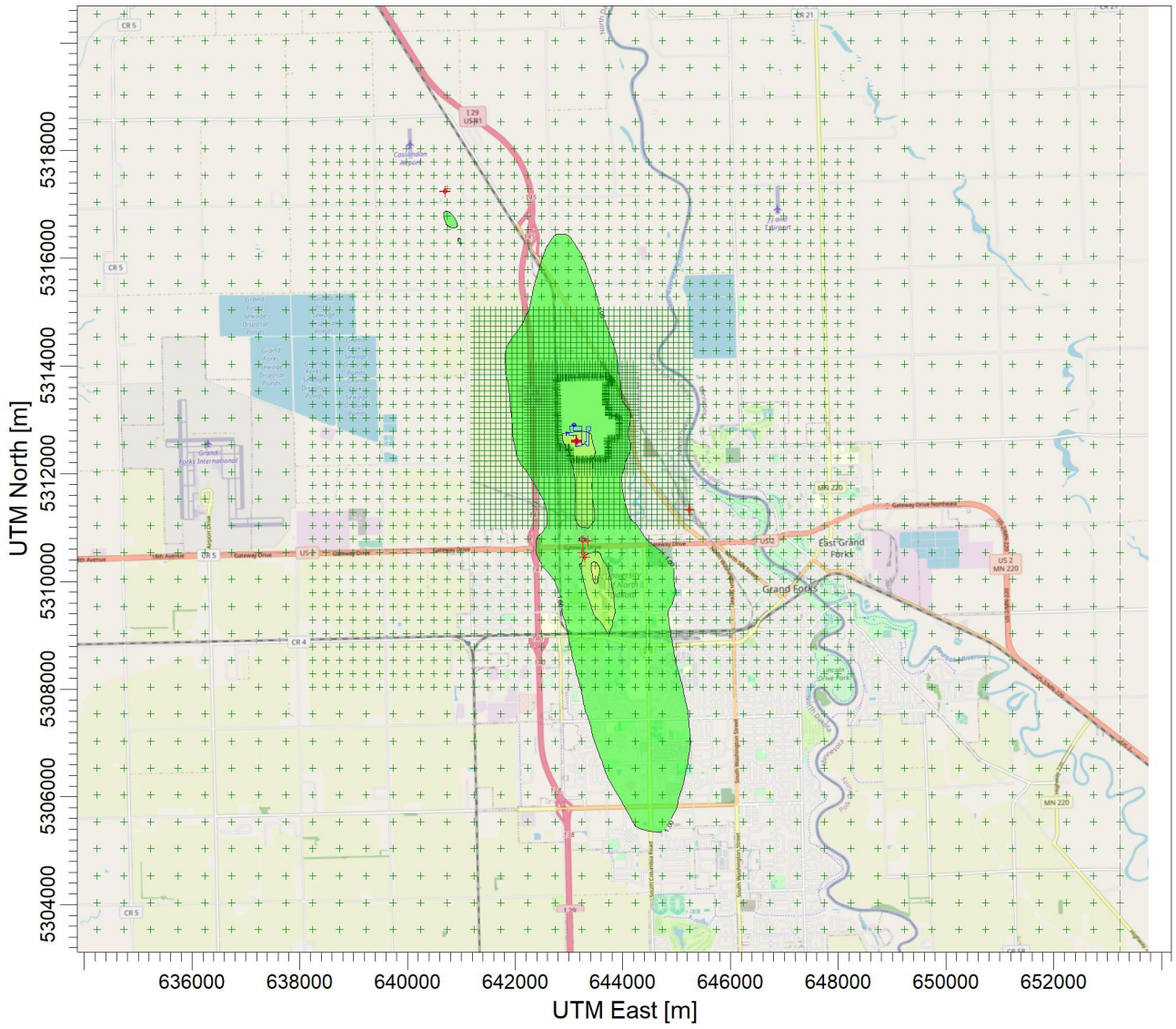
Max: 99.6 [ug/m^3] at (643486.44, 5310537.00)

40.0 60.0 75.0 90.0 99.6

COMMENTS: Background is 35 µg/m3 Total Impact is 134.59 µg/m3 NAAQS is 188 µg/m3	SOURCES: **15**	COMPANY NAME: **North Dakota Department of Environmental Quality**	
	RECEPTORS: **5206**	MODELER: **Rhannon Thorton**	NORTH Dakota Be Legendary.™ | Environmental Quality
	OUTPUT TYPE: **Concentration**	SCALE: 1:88,326 0 3 km	
	MAX: **99.6 ug/m^3**	DATE: **4/10/2026**	PROJECT NO.: **ACP-18316**

PROJECT TITLE:

Agristo Grand Forks Processing Facility
Plot 6 - NO2 Annual



POST/PLOT FILE OF ANNUAL VALUES FOR YEAR 1 FOR SOURCE GROUP: ALL ug/m^3

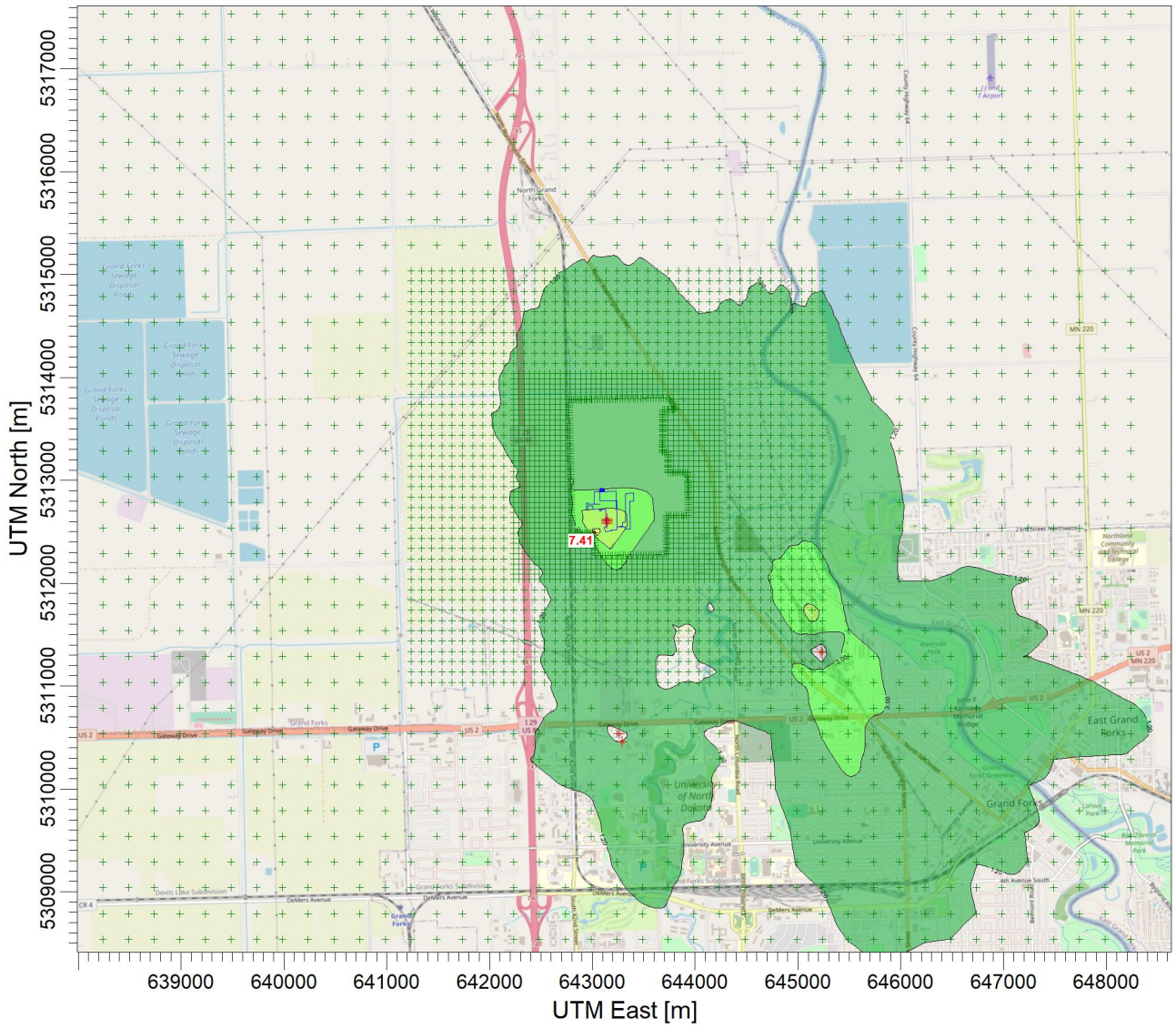
Max: 5.97 [ug/m^3] at (643486.44, 5310287.00)

1.00 3.00 5.00 5.97

COMMENTS: Highest modeled year: 2023 Background is 5 µg/m3 Total Impact is 10.97 µg/m3 NAAQS is 100 µg/m3	SOURCES: **15**	COMPANY NAME: **North Dakota Department of Environmental Quality**	
	RECEPTORS: **5206**	MODELER: **Rhannon Thorton**	NORTH Dakota Be Legendary.™ | Environmental Quality
	OUTPUT TYPE: **Concentration**	SCALE: 1:127,797 0 5 km	
	MAX: **5.97 ug/m^3**	DATE: **4/13/2026**	PROJECT NO.: **ACP-18316**

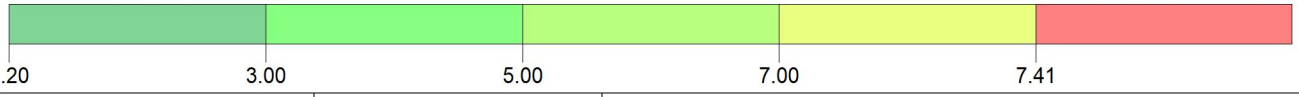
PROJECT TITLE:

Agristo Grand Forks Processing Facility
Plot 7 - PM2.5 24-HR



PLOT FILE OF 8TH-HIGHEST MAX DAILY 24-HR VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ug/m^3

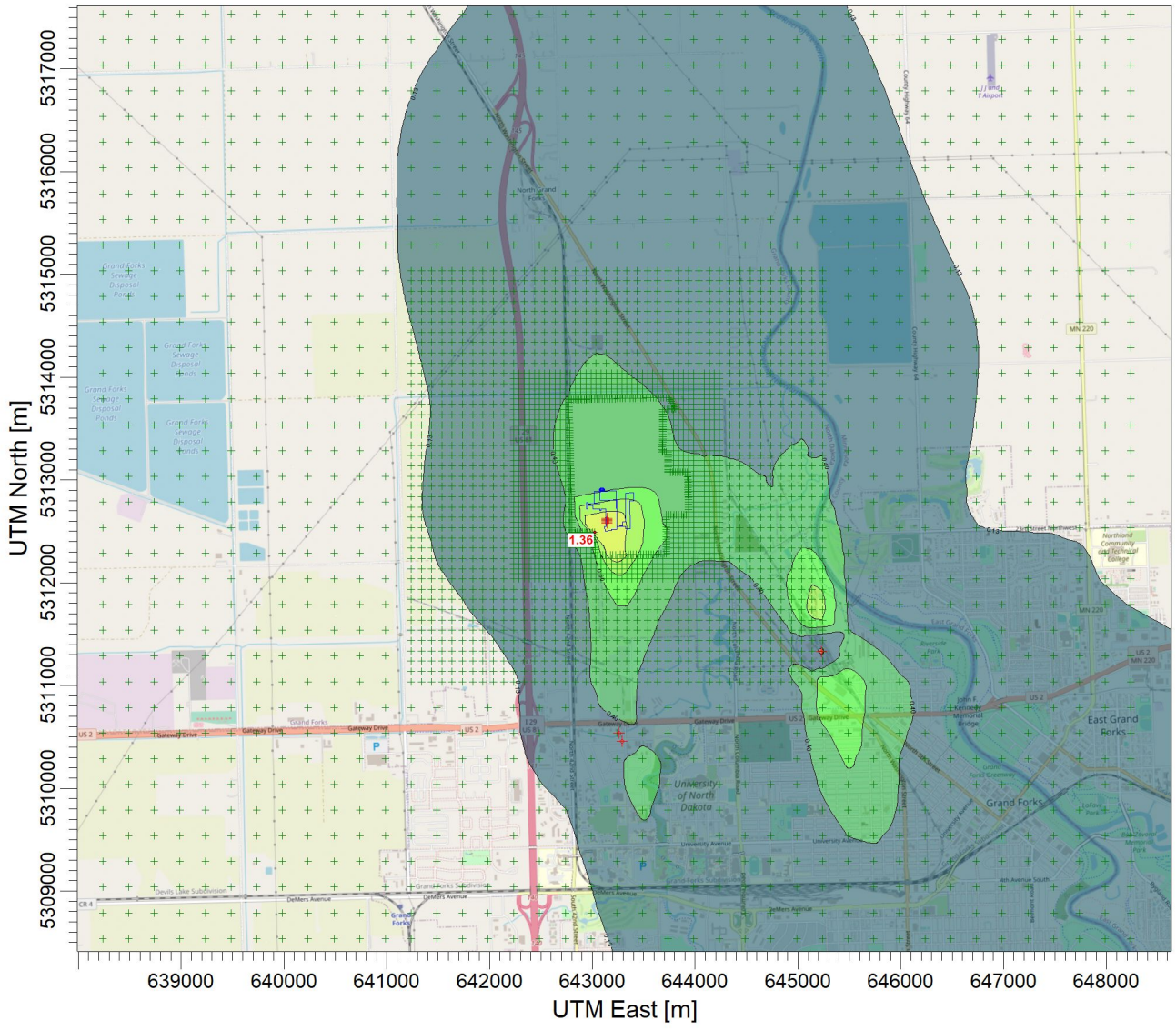
Max: 7.41 [ug/m^3] at (643023.50, 5312491.00)



COMMENTS: Background is 13.7 µg/m3 Total Impact is 21.11 µg/m3 NAAQS is 35 µg/m3	SOURCES: **8**	COMPANY NAME: **North Dakota Department of Environmental Quality**	
	RECEPTORS: **5206**	MODELER: **Rhannon Thorton**	NORTH Dakota Be Legendary. | Environmental Quality
	OUTPUT TYPE: **Concentration**	SCALE: 1:66,941 0 2 km	
	MAX: **7.41 ug/m^3**	DATE: **4/10/2026**	PROJECT NO.: **ACP-18316**

PROJECT TITLE:

Agristo Grand Forks Processing Facility
Plot 8 - PM2.5 Annual



PLOT FILE OF ANNUAL VALUES AVERAGED ACROSS 5 YEARS FOR SOURCE GROUP: ALL ug/m^3

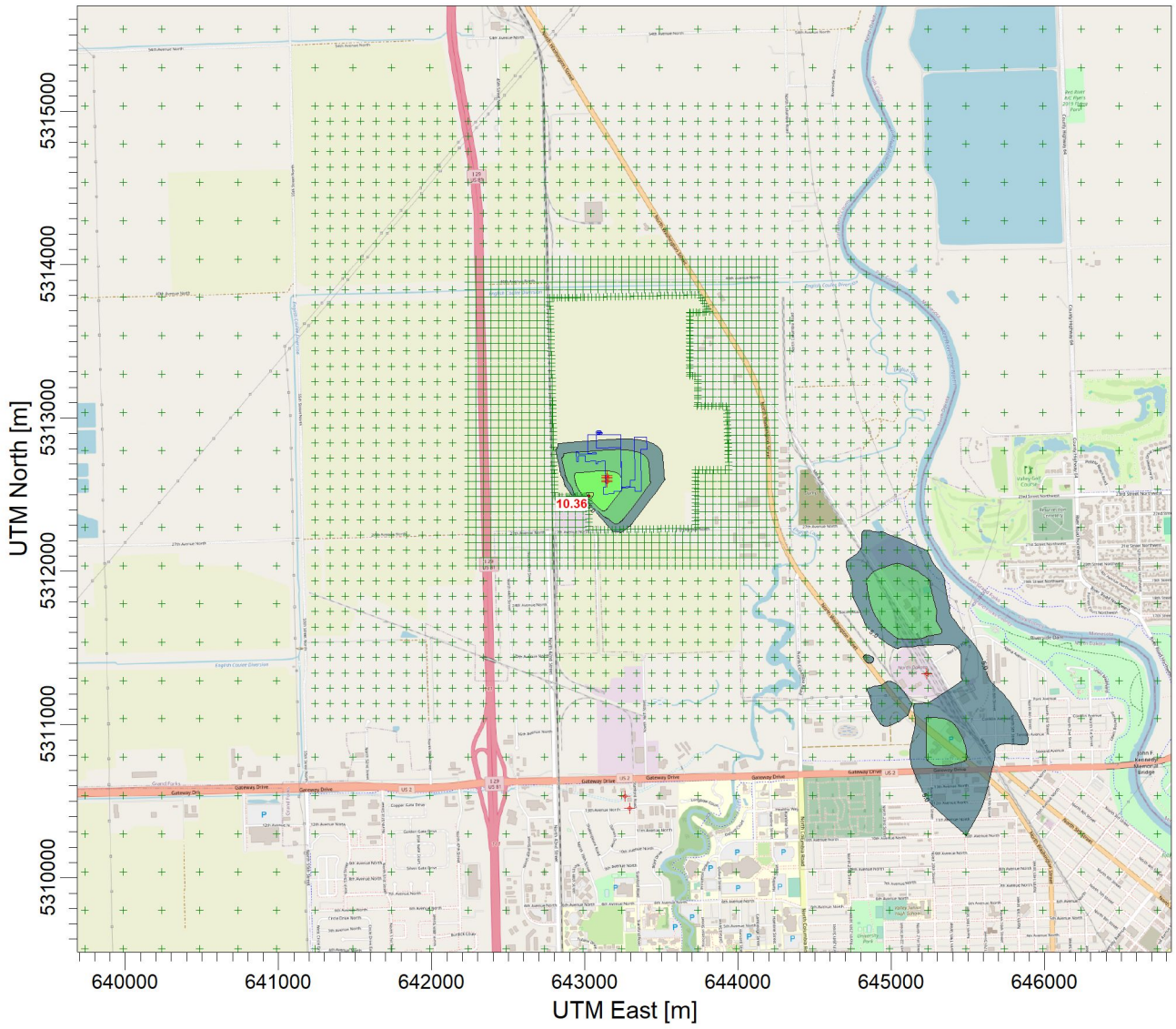
Max: 1.36 [ug/m^3] at (643023.50, 5312491.00)

0.13 0.40 0.60 0.80 1.00 1.36

COMMENTS: Background is 4.75 µg/m3 Total Impact is 6.11 µg/m3 NAAQS is 9 µg/m3	SOURCES: **8**	COMPANY NAME: **North Dakota Department of Environmental Quality**	
	RECEPTORS: **5206**	MODELER: **Rhannon Thorton**	NORTH Dakota Be Legendary. | Environmental Quality
	OUTPUT TYPE: **Concentration**	SCALE: 1:66,941 0 2 km	
	MAX: **1.36 ug/m^3**	DATE: **4/10/2026**	PROJECT NO.: **ACP-18316**

PROJECT TITLE:

Agristo Grand Forks Processing Facility
Plot 9 - PM10 24-HR



PLOT FILE OF HIGH 6TH HIGH 24-HR VALUES FOR SOURCE GROUP: ALL ug/m^3

Max: 10.4 [ug/m^3] at (643023.50, 5312491.00)

5.0 6.0 8.0 10.0 10.4

COMMENTS: Background is 30 µg/m3 Total Impact is 40.36 µg/m3 NAAQS is 150 µg/m3	SOURCES: **8**	COMPANY NAME: **North Dakota Department of Environmental Quality**	
	RECEPTORS: **5206**	MODELER: **Rhannon Thorton**	NORTH Dakota Be Legendary. | Environmental Quality
	OUTPUT TYPE: **Concentration**	SCALE: 1:44,910 0 1 km	
	MAX: **10.4 ug/m^3**	DATE: **4/10/2026**	PROJECT NO.: **ACP-18316**