State of Utah

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Department of
Environmental Quality

Kimberly D. Shelley
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQE-AN109190024-24

December 27, 2024

Mike Jones
Kimberly-Clark Corporation
2010 North Rulon White Boulevard
Ogden, UT 84404-7802
mdjones@kcc.com

Dear Mr. Jones:

Re: Approval Order: Modification to Approval Order DAQE-AN109190023-23 to Add Equipment and Increase Emissions
Project Number: N109190024

The attached Approval Order (AO) is issued pursuant to the Notice of Intent (NOI) received on September 13, 2024. Kimberly-Clark Corporation must comply with the requirements of this AO, all applicable state requirements (R307), and Federal Standards.

The project engineer for this action is **Stockton Antczak**, who can be contacted at (385) 306-6724 or santczak@utah.gov. Future correspondence on this AO should include the engineer's name as well as the DAQE number shown on the upper right-hand corner of this letter. No public comments were received on this action.

Sincerely,

Bryce C. Bird
Director

BCB:SA:jg

cc: Weber-Morgan Health Department

STATE OF UTAH
Department of Environmental Quality
Division of Air Quality

APPROVAL ORDER
DAQE-AN109190024-24
Modification to Approval Order DAQE-AN109190023-23 to Add Equipment and Increase Emissions

Prepared By
Stockton Antczak, Engineer
(385) 306-6724
santczak@utah.gov

Issued to
Kimberly-Clark Corporation - Ogden Plant

Issued On
December 27, 2024

Issued By

Bryce C. Bird
Director
Division of Air Quality

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GENERAL INFORMATION

CONTACT/LOCATION INFORMATION

Owner Name
Kimberly-Clark Corporation

Source Name
Kimberly-Clark Corporation - Ogden Plant

Mailing Address
2010 North Rulon White Boulevard
Ogden, UT 84404-7802

Physical Address
2010 North Rulon White Boulevard
Ogden, UT 84404-7802

Source Contact
Name: Mike Jones
Phone: (801) 786-2318
Email: mdjones@kcc.com

UTM Coordinates
415,874 m Easting
4,571,869 m Northing
Datum NAD83
UTM Zone 12

SIC code 2676 (Sanitary Paper Products)

SOURCE INFORMATION

General Description
Kimberly-Clark Corporation (KCC) operates a diaper manufacturing plant in Ogden, Weber County. The KCC Ogden plant is a disposable garment manufacturing facility. Various components are purchased from suppliers and are shipped to the plant by truck. Absorbent fluff (made from cellulose and polymer), a protective liner, and an outer plastic shell enter an automated assembly line to form various garments. The fluff material enters the form machine at the front of the line and is uniformly shredded and mixed.

The combined fluff moves by conveyor through a compression stage to form the absorbent bulk of the garment. Once the fluff has been shaped, the protective inside liner and plastic outer shell are added. When all three components have been combined, the final shape is cut and the garment is sealed. The finished garments are stacked and packaged by an automated machine and are conveyor-transported to the loading dock/warehouse area for shipment or storage. The production lines are all vented to cyclones and/or baghouses to control particulate emissions and recycle material.

This facility has a reclaim system where rejected garments and fluff are separated and either baled into fluff bricks, fluff bales, or tailings bales. All processed waste material is sold.

NSR Classification
Minor Modification at Minor Source

Source Classification
Located in Northern Wasatch Front O3 NAA, Salt Lake City UT $PM_{2.5}$ NAA
Weber County

Airs Source Size: B

Applicable Federal Standards
NSPS (Part 60), A: General Provisions
NSPS (Part 60), Dc: Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units
NSPS (Part 60), JJJJ: Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
MACT (Part 63), A: General Provisions
MACT (Part 63), ZZZZ: National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Project Description
KCC plans to modify the Ogden Plant to add the capability to produce a new type of product. The process change includes additional vacuum conveyors with a vacuum fan. Exhaust air from the fan will be routed through the existing U8 Machine Dust Bag filter rack assembly. Additionally, KCC is requesting to add two (2) sets of cooling towers to the permit. The addition of the cooling towers will result in an increase in PM_{10} and $PM_{2.5}$ emissions.

SUMMARY OF EMISSIONS

The emissions listed below are an estimate of the total potential emissions from the source. Some rounding of emissions is possible.

Criteria Pollutant	Change (TPY)	Total (TPY)
CO_2 Equivalent	0	19016.41
Carbon Monoxide	0	8.46
Nitrogen Oxides	0	12.99
Particulate Matter - PM_{10}	5	41.53
Particulate Matter - $PM_{2.5}$	3.80	40.33
Sulfur Dioxide	0	0.06
Volatile Organic Compounds	0	39.91

Hazardous Air Pollutant	Change (lbs/yr)	Total (lbs/yr)
Cresols/Cresylic Acid (Isomers And Mixture) (CAS #1319773)	0	280
Generic HAPs (CAS #GHAPS)	0	128
Methylene Chloride (Dichloromethane) (CAS #75092)	0	700
	Change (TPY)	**Total (TPY)**
Total HAPs	0	0.55

SECTION I: GENERAL PROVISIONS

I.1	All definitions, terms, abbreviations, and references used in this AO conform to those used in the Utah Administrative Code (UAC) Rule 307 (R307) and Title 40 of the Code of Federal Regulations (40 CFR). Unless noted otherwise, references cited in these AO conditions refer to those rules. [R307-101]
I.2	The limits set forth in this AO shall not be exceeded without prior approval. [R307-401]
I.3	Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved in accordance with UAC R307-401. [R307-401-1]
I.4	All records referenced in this AO or in other applicable rules, which are required to be kept by the owner/operator, shall be made available to the Director or Director's representative upon request, and the records shall include the two-year period prior to the date of the request. Unless otherwise specified in this AO or in other applicable state and federal rules, records shall be kept for a minimum of two (2) years. [R307-401-8]
I.5	At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded. [R307-401-4]
I.6	The owner/operator shall comply with UAC R307-107. General Requirements: Breakdowns. [R307-107]
I.7	The owner/operator shall comply with UAC, R307-150 Series. Inventories, Testing and Monitoring. [R307-150]
I.8	The owner/operator shall submit documentation of the status of construction or modification to the Director within 18 months from the date of this AO. This AO may become invalid if construction is not commenced within 18 months from the date of this AO or if construction is discontinued for 18 months or more. To ensure proper credit when notifying the Director, send the documentation to the Director, attn.: NSR Section. [R307-401-18]

SECTION II: PERMITTED EQUIPMENT

II.A THE APPROVED EQUIPMENT

II.A.1	**Kimberly-Clark Corporation** Diaper Manufacturing Plant
II.A.2	**Forming Baghouse #1** Controls: Lines U1, U2, and U8 Max. Rating: 37,000 acfm

II.A.3	**Forming Baghouse #2** Controls: Lines U3 and U4 Max. Rating: 25,000 acfm
II.A.4	**Forming Baghouse #3** Controls: Lines U5 and U6 Max. Rating: 28,000 acfm
II.A.5	**Forming Baghouse #4** Controls: Line U7 Max. Rating: 31,000 acfm
II.A.6	**Collector Baghouses #5 and #8** Controls: Emissions from Forming Baghouse #1 through #4 and Reclaiming Unit Baghouse #6 Max. Rating: 25,000 acfm
II.A.7	**Reclaiming Unit Baghouse #6** Controls: Reclaiming Unit Max. Rating: 27,500 acfm
II.A.8	**Forming Baghouse #9** Controls: Line U10, U11, and U12 Max. Rating: 36,300 acfm
II.A.9	**Forming Baghouse #13** Controls: Line U13 Max. Rating: 48,200 acfm
II.A.10	**Collector Baghouse #10 and #11** Controls exhaust from Forming Baghouse #9 and #13 Max. Rating: 25,000 acfm
II.A.11	**Two (2) Vacuum Pulse Jet Baghouses** Two (2) vacuum system vents Controls the central vacuum system
II.A.12	**Two (2) Boilers** Maximum Rated Capacity: 13.39 MMBtu/hr each Fuel: Natural Gas NSPS Applicability: Subpart Dc
II.A.13	**One (1) Adhesive Shop** Adhesive removal process, classified as a cold cleaning process. Includes hot oil bath, solvent tank, two (2) electric ovens, and a parts cleaner.
II.A.14	**Twenty-two (22) Adhesive Melters** Electric-powered adhesive melters for liquefying adhesive
II.A.15	**Two (2) Emergency Generator Engines** Rating: One (1) 195 hp and one (1) 354 hp Fuel: Natural Gas MACT Applicability: Subpart ZZZZ

II.A.16	**One (1) Emergency Generator Engine** Rating: 530 hp Fuel: Natural Gas NSPS Applicability: Subpart JJJJ MACT Applicability: Subpart ZZZZ
II.A.17	**One (1) Fire Pump Engine** Rating: 255 hp Fuel: Diesel MACT Applicability: Subpart ZZZZ
II.A.18	**One (1) Reclaim Bale Opener**
II.A.19	**Eleven (11) Machine Air Wall Louvers** Included for informational purposes
II.A.20	**One (1) Laboratory Fume Exhaust Hood**
II.A.21	**3D Printer** HP Jet Fusion 3D Printer
II.A.22	**Various Heaters and Boilers** Maximum Rated Capacity: 5.0 MMBtu/hr each Fuel: Natural Gas Source Category Exemption under R307-401-10
II.A.23	**Baby Care (BC) Chiller Cooling Tower** Ceramic Cooling Tower Company Model: PL-4-450-40A counterflow cooling tower Consists of four (4) cells Total GPM required: 6,300 Tower pumping head: 11 ft. Drift loss: 0.0005% (based on DriAir 80 drift eliminators from Evaptech)
II.A.24	**Baby Care (BC) Compressor Cooling Tower** Baltimore Aircoil Company Model: FXV-1212C-36T-P Flow rate: 580 GPM Drift loss: 0.005%
II.A.25	**Child Care (CC) Chiller Cooling Tower** Consists of two (2) cells Total flow rate: 7,500 GPM Drift loss: 0.001%
II.A.26	**Child Care (CC) Compressor Cooling Tower** One (1) unit Flow rate: 694 GPM Drift loss: 0.001%

SECTION II: SPECIAL PROVISIONS

II.B REQUIREMENTS AND LIMITATIONS

II.B.1	**Facility-Wide Requirements**
II.B.1.a	The owner/operator shall not allow visible emissions from the following emission points to exceed the following values: A. Baghouse #1, #2, #3, #4, #5 - 20% opacity B. All other baghouses and cooling towers - 10% opacity C. Reclaim and Central Vacuum System vents - 5% opacity D. All natural gas heaters, boilers, and emergency generator engines - 10% opacity E. All other points - 20% opacity. [R307-401-8]
II.B.1.a.1	Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9. [R307-401-8]
II.B.1.b	The owner/operator shall control the following manufacturing operations with the applicable baghouses listed below. Operation — Baghouse Lines U1, U2, and U8 — Forming Baghouse #1 Lines U3 and U4 — Forming Baghouse #2 Lines U5 and U6 — Forming Baghouse #3 Line U7 — Forming Baghouse #4 Emissions from Forming Baghouses #1, #2, #3, #4 and Reclaiming Baghouse #6 — Collector Baghouses #5 and #8 Reclaiming Unit — Forming Baghouse #6 Lines U10, U11, and U12 — Forming Baghouse #9 Line U13 — Forming Baghouse #13 Exhaust from Forming Baghouses #9 and #13 — Collector Baghouses #10 and #11 [R307-401-8]
II.B.1.c	The owner/operator shall install a manometer or magnehelic pressure gauge to measure the differential pressure across each baghouse. The baghouse shall operate within the static pressure range recommended by the manufacturer. The monitoring device shall measure in one (1) inch water column increments or less. [R307-401-8]

II.B.1.c.1	Pressure drop readings shall be recorded at least once during each day of operation while the baghouse is operating. Records documenting the pressure drop shall be kept in a log and shall include the following: A. Unit Identification; B. Manufacturer-recommended pressure drop for the unit; C. Daily pressure drop readings; D. Date of reading. [R307-401-8]
II.B.1.c.2	The owner/operator shall monitor the pressure drop with equipment located such that an inspector/operator can safely read the output at any time. [R307-401-8]
II.B.1.c.3	The owner/operator shall calibrate all instruments according to the manufacturer's instructions at least once every 12 months. [R307-401-8]
II.B.2	**VOC and HAP Requirements**
II.B.2.a	The owner/operator shall not emit more than the following from evaporative sources (painting, printing, coating, and/or cleaning) on site: 39.91 tons per rolling 12-month period of VOCs 0.55 tons per rolling 12-month period of all HAPs combined. [R307-401-8]
II.B.2.a.1	The owner/operator shall calculate a new 12-month total by the 20th of each month using data from the previous 12 months. The owner/operator shall use a mass-balance method to calculate emissions from evaporative sources. The owner/operator may use the following equations with applicable units to comply with the mass balance method: VOCs = [% VOCs by Weight/100] x [Density] x [Volume Consumed] HAP = [% HAP by Weight/100] x [Density] x [Volume Consumed] [R307-401-8]
II.B.2.a.2	The owner/operator shall keep records each month of the following: A. The name (as per SDS) of the VOC- and HAP-emitting material B. The maximum percent by weight of VOCs and each HAP in each material used C. The density of each material used D. The volume of each VOC- and HAP-emitting material used E. The amount of VOCs and the amount of each HAP emitted from each material F. The total amount of VOCs, the total amount of each HAP, and the total amount of all HAPs combined emitted from all materials (in tons). [R307-401-8]

II.B.2.b	The owner/operator shall comply with all applicable requirements of UAC R307-342. [R307-342, R307-401-8]
II.B.2.c	The owner/operator shall comply with all applicable requirement for UAC R307-335. [R307-355, R307-401]
II.B.3	**Stack Testing Conditions**
II.B.3.a	PM_{10} emissions to the atmosphere from the indicated emission points shall not exceed the following rates and concentrations: Source — lbs/hr — grains/dscf Baghouse #1 — 2.5 — 0.01 Baghouse #2 — 1.63 — 0.01 Baghouse #3 — 1.83 — 0.01 Baghouse #4 — 2.39 — 0.01 Baghouse #5 — 1.63 — 0.01 Baghouse #6 — 1.85 — 0.01 Baghouse #8 — 1.63 — 0.01 Baghouse #9 — 1.07 — 0.005 Baghouse #10 — 0.29 — 0.005 Baghouse #11 — 0.29 — 0.005 Baghouse #13 — 1.63 — 0.005 [R307-401-8]
II.B.3.a.1	**Compliance Demonstration** To demonstrate compliance with the emission limitations above, the owner/operator shall perform stack testing on the emissions unit according to the stack testing conditions contained in this AO. [R307-165-2, R307-401-8]
II.B.3.a.2	**Initial Test** The owner/operator shall conduct an initial stack test on the emission unit within 180 days after startup of the emission unit. This AO required the owner/operator to stack test Forming Baghouse #1 because it is directly controlling new machines. Collector Baghouse #5 and Collector Baghouse #8 are also required to stack test because additional emissions are being vented through these baghouses and need to be tested to ensure emissions limits are not exceeded. [R307-165-2]
II.B.3.a.3	**Test Frequency** The owner/operator shall conduct a stack test on the emission unit within five (5) years after the date of the most recent stack test of the emission unit. The Director may require the owner/operator to perform a stack test at any time. [R307-401-8]
II.B.3.a.4	**Notification** At least 30 days prior to conducting a stack test, the owner/operator shall submit a source test protocol to the Director. The source test protocol shall include the items contained in R307-165-3. If directed by the Director, the owner/operator shall attend a pretest conference. [R307-165-3, R307-401-8]
II.B.3.a.5	**Testing & Test Conditions** The owner/operator shall conduct testing according to the approved source test protocol and according to the test conditions contained in R307-165-4. [R307-165-4, R307-401-8]

II.B.3.a.6	**Access** The owner/operator shall provide Occupational Safety and Health Administration (OSHA)- or Mine Safety and Health Administration (MSHA)-approved access to the test location. [R307-401-8]
II.B.3.a.7	**Reporting** No later than 60 days after completing a stack test, the owner/operator shall submit a written report of the results from the stack testing to the Director. The report shall include validated results and supporting information. [R307-165-5, R307-401-8]
II.B.3.a.8	**Possible Rejection of Test Results** The Director may reject stack testing results if the test did not follow the approved source test protocol or for a reason specified in R307-165-6. [R307-165-6, R307-401-8]
II.B.3.b	**Test Methods** When performing stack testing, the owner/operator shall use the appropriate EPA-approved test methods as acceptable to the Director. Acceptable test methods for pollutants are listed below. [R307-401-8]
II.B.3.b.1	**Standard Conditions** A. Temperature - 68 degrees Fahrenheit (293 K) B. Pressure - 29.92 in Hg (101.3 kPa) C. Averaging Time - As specified in the applicable test method. [40 CFR 60 Subpart A, 40 CFR 63 Subpart A, R307-401-8]
II.B.3.b.2	**PM_{10}** The following methods shall be used to measure filterable particulate emissions: 40 CFR 51, Appendix M, Method 201, Method 201A, or other EPA-approved testing methods, as acceptable to the Director. If other approved testing methods are used which cannot measure the PM_{10} fraction of the filterable particulate emissions, all of the filterable particulate emissions shall be considered PM_{10}. The portion of the filterable particulate emissions considered PM_{10} shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Director. The following methods shall be used to measure condensable particulate emissions: 40 CFR 51, Appendix M, Method 202, or other EPA-approved testing methods, as acceptable to the Director. The condensable particulate emissions shall not be used for compliance demonstration but shall be used for inventory purposes. [R307-401-8]
II.B.4	**Boiler, Heater, and Internal Combustion Engine Requirements.**
II.B.4.a	The owner/operator shall use only natural gas as primary fuel and propane as a backup fuel in the heaters, boilers, and the emergency generator engines (except the fire pump engine). [R307-401-8]
II.B.4.b	The owner/operator shall only use diesel fuel (fuel oil #1, #2, or diesel fuel additives) in the fire pump engine. All diesel burned shall meet the requirements of 40 CFR 80.510(c). [40 CFR 63 Subpart ZZZZ]

II.B.4.c	To demonstrate compliance with the fuel oil requirements, the owner/operator shall keep and maintain fuel purchase invoices. The fuel purchase invoices shall indicate that the diesel fuel meets the ULSD requirements, or the owner/operator shall obtain certification of sulfur content from the fuel supplier. [40 CFR 63 Subpart ZZZZ]
II.B.4.d	The owner/operator shall not operate each internal combustion engine on site for more than 100 hours per rolling 12-month period during non-emergency situations. [R307-401-8]
II.B.4.d.1	To determine compliance with a rolling 12-month total, the owner/operator shall calculate a new 12-month total by the 20th day of each month using data from the previous 12 months. Records documenting the operation of each internal combustion engine shall be kept in a log and shall include the following: A. The date the internal combustion engine was used B. The duration of operation in hours C. The reason for the internal combustion engine usage. [R307-401-8]

PERMIT HISTORY

This Approval Order shall supersede (if a modification) or will be based on the following documents:

Supersedes	AO DAQE-AN109190023-23 dated October 27, 2023
Incorporates	NOI dated September 13, 2024

ACRONYMS

The following lists commonly used acronyms and associated translations as they apply to this document:

40 CFR	Title 40 of the Code of Federal Regulations
AO	Approval Order
BACT	Best Available Control Technology
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CDS	Classification Data System (used by Environmental Protection Agency to classify sources by size/type)
CEM	Continuous emissions monitor
CEMS	Continuous emissions monitoring system
CFR	Code of Federal Regulations
CMS	Continuous monitoring system
CO	Carbon monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent - Title 40 of the Code of Federal Regulations Part 98, Subpart A, Table A-1
COM	Continuous opacity monitor
DAQ/UDAQ	Division of Air Quality
DAQE	This is a document tracking code for internal Division of Air Quality use
EPA	Environmental Protection Agency
FDCP	Fugitive dust control plan
GHG	Greenhouse Gas(es) - Title 40 of the Code of Federal Regulations 52.21 (b)(49)(i)
GWP	Global Warming Potential - Title 40 of the Code of Federal Regulations Part 86.1818-12(a)
HAP or HAPs	Hazardous air pollutant(s)
ITA	Intent to Approve
LB/YR	Pounds per year
MACT	Maximum Achievable Control Technology
MMBTU	Million British Thermal Units
NAA	Nonattainment Area
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOI	Notice of Intent
NO_x	Oxides of nitrogen
NSPS	New Source Performance Standard
NSR	New Source Review
PM_{10}	Particulate matter less than 10 microns in size
$PM_{2.5}$	Particulate matter less than 2.5 microns in size
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
R307	Rules Series 307
R307-401	Rules Series 307 - Section 401
SO_2	Sulfur dioxide
Title IV	Title IV of the Clean Air Act
Title V	Title V of the Clean Air Act
TPY	Tons per year
UAC	Utah Administrative Code
VOC	Volatile organic compounds