



State of Utah

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Environmental Quality

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DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQE-IN145770002-26

April 15, 2026

Jennifer Halladay
IBC Advanced Technologies, Inc.
856 East Utah Valley Drive
American Fork, UT 84003
jhalladay@ibcmrt.com

Dear Ms. Halladay:

Re: Intent to Approve: New American Fork Chemical Products Manufacturing Facility
Project Number: N145770002

The attached document is the Intent to Approve (ITA) for the above-referenced project. The ITA is subject to public review. Any comments received shall be considered before an Approval Order (AO) is issued. The Division of Air Quality is authorized to charge a fee for reimbursement of the actual costs incurred in the issuance of an AO. An invoice will follow upon issuance of the final AO.

Future correspondence on this ITA should include the engineer's name, **Christine Bodell**, as well as the DAQE number as shown on the upper right-hand corner of this letter. Christine Bodell, can be reached at (385) 290-2690 or cbodell@utah.gov, if you have any questions.

Sincerely,

Alan D. Humpherys, Manager
New Source Review Section

ADH:CB:jg

cc: Utah County Health Department

STATE OF UTAH
Department of Environmental Quality
Division of Air Quality

INTENT TO APPROVE
DAQE-IN145770002-26
New American Fork Chemical Products Manufacturing Facility

Prepared By
Christine Bodell, Engineer
(385) 290-2690
cbodell@utah.gov

Issued to
IBC Advanced Technologies, Inc. - Chemical Manufacturing Facility

Issued On
April 15, 2026



New Source Review Section Manager
Alan D. Humpherys

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GENERAL INFORMATION

CONTACT/LOCATION INFORMATION

Owner Name

IBC Advanced Technologies, Inc.

Source Name

IBC Advanced Technologies, Inc. - Chemical Manufacturing Facility

Mailing Address856 East Utah Valley Drive
American Fork, UT 84003**Physical Address**856 East Utah Valley Drive
American Fork, UT 84003**Source Contact**Name: Jenniffer Halladay
Phone: (801) 763-8400
Email: jhalladay@ibcmrt.com**UTM Coordinates**434,223 m Easting
4,467,722 m Northing
Datum NAD83
UTM Zone 12**SIC code** 2899 (Chemicals & Chemical Preparations, NEC)

SOURCE INFORMATION

General Description

IBC Advanced Technologies, Inc. (IBC) has requested an Approval Order for a specialty chemical products manufacturing facility in American Fork, Utah County. IBC produces advanced chemical systems to identify, bind, and separate specific ions and molecules from complex mixtures. Chemicals are pumped directly from drums into batch reactors or rotovaps (rotary evaporators). The reactors are sealed closed during the reaction and sealed until the contents are at or below room temperature. IBC controls emissions from each reactor using a condenser. IBC controls emissions from the rotovaps using a condenser and cold trap in series. Condensers circulate cool water (5 to 15 degrees Celsius), and the cold trap contains a mixture of dry ice and isopropyl alcohol (-90 degrees Celsius).

IBC consolidates waste streams into steel totes for offsite disposal. IBC segregates methylene chloride waste from other waste streams in steel drums. The company manages all waste containers to meet the Resource Conservation and Recovery Act (RCRA) standards for being leak- and spill-proof and the RCRA Subpart CC standard of exhibiting "no detectable emissions."

NSR Classification

New Minor Source

Source ClassificationLocated in Southern Wasatch Front O3 NAA
Utah County
Airs Source Size: B

Applicable Federal Standards

None

Project Description

IBC has requested an AO to manufacture specialty chemical products in batch processes using glass batch reactors ranging in capacity from 50 to 200 liters and rotary evaporators (rotovaps) ranging in capacity from 10 to 20 liters. Condensers and cold traps are used to capture and reduce VOC and HAP 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)
Volatile Organic Compounds		7.44

Hazardous Air Pollutant	Change (lbs/yr)	Total (lbs/yr)
1,4-Dioxane (1,4-Diethyleneoxide) (CAS #123911)		388
Acetonitrile (CAS #75058)		203
Ethylene Dichloride (1,2-Dichloroethane) (CAS #107062)		206
Generic HAPs (CAS #GHAPS)		20
Hexane (CAS #110543)		153
Methanol (CAS #67561)		275
Methylene Chloride (Dichloromethane) (CAS #75092)		1981
Toluene (CAS #108883)		601
Xylenes (Isomers And Mixture) (CAS #1330207)		52
	Change (TPY)	Total (TPY)
Total HAPs		1.94

PUBLIC NOTICE STATEMENT

The NOI for the above-referenced project has been evaluated and has been found to be consistent with the requirements of UAC R307. Air pollution producing sources and/or their air control facilities may not be constructed, installed, established, or modified prior to the issuance of an AO by the Director.

A 30-day public comment period will be held in accordance with UAC R307-401-7. A notification of the intent to approve will be published in The Daily Herald on April 17, 2026. During the public comment period, the proposal and the evaluation of its impact on air quality will be available for the public to review and provide comment. If anyone so requests a public hearing within 15 days of publication, it will be held in accordance with UAC R307-401-7. The hearing will be held as close as practicable to the location of the source. Any comments received during the public comment period and the hearing will be evaluated. The proposed conditions of the AO may be changed as a result of the comments received.

SECTION I: GENERAL PROVISIONS

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO.

I.1	All definitions, terms, abbreviations, and references used in this AO conform to those used in the UAC R307 and 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. [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. Emission Inventories. [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

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO.

II.A THE APPROVED EQUIPMENT

II.A.1	Chemical Manufacturing Facility
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II.A.2	<p>Resin Extraction Equipment Glass Batch Reactors Capacity: 50 to 200 liters, each</p> <p>Rotary Evaporators (Rotovaps) Capacity: 10 to 20 liters, each</p> <p>Control Equipment: Condensers and Cold Traps</p>
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SECTION II: SPECIAL PROVISIONS

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO.

II.B REQUIREMENTS AND LIMITATIONS

II.B.1	Site wide Requirements
II.B.1.a	The owner/operator shall control emissions from the batch reactors with a condenser at all times. [R307-401-8]
II.B.1.a.1	The owner/operator shall: <ul style="list-style-type: none"> A. Verify that cooling water is flowing to the condenser B. Record verification that cooling water is flowing to the condenser on a daily basis C. Keep the verification records for all periods the plant is in operation. [R307-401-8]
II.B.1.b	The owner/operator shall control emissions from the rotovaps with a cold trap at all times. The cold trap temperature shall be no warmer than -70 °C during operations. [R307-401-8]
II.B.1.b.1	The owner/operator shall: <ul style="list-style-type: none"> A. Verify that the cold trap temperature is no warmer than -70 °C B. Record the cold trap temperature on a daily basis C. Keep the verification records for all periods the plant is in operation. [R307-401-8]

<p>II.B.1.c</p>	<p>The owner/operator shall not consume more than the following amounts for the following chemicals on site:</p> <ul style="list-style-type: none"> A. 1,214 gallons per rolling 12-month period of Acetonitrile B. 1,317 gallons per rolling 12-month period of Amine C. 1,435 gallons per rolling 12-month period of Dimethyl Formamide D. 3,914 gallons per rolling 12-month period of 1,4-Dioxane E. 17,983 gallons per rolling 12-month period of Ethanol F. 392 gallons per rolling 12-month period of Ethyl Acetate G. 883 gallons per rolling 12-month period of Ethylene Dichloride H. 277 gallons per rolling 12-month period of Hexane I. 550 gallons per rolling 12-month period of Hydrochloric Acid J. 313 gallons per rolling 12-month period of IPA K. 1,241 gallons per rolling 12-month period of Methanol L. 1,467 gallons per rolling 12-month period of Methylene Chloride M. 6,047 gallons per rolling 12-month period of Tetrahydrofuran N. 9,040 gallons per rolling 12-month period of Toluene O. 71 gallons per rolling 12-month period of Triethylamine P. 2,906 gallons per rolling 12-month period of Xylene. <p>[R307-401-8]</p>
<p>II.B.1.c.1</p>	<p>For each chemical listed above, the owner/operator shall:</p> <ul style="list-style-type: none"> A. Determine consumption with chemical purchase invoices B. Record consumption on a weekly basis C. Use the consumption data to calculate a new rolling 12-month total by the 20th day of each month using data from the previous 12 months D. Keep the consumption records for all periods the plant is in operation. <p>[R307-401-8]</p>
<p>II.B.1.d</p>	<p>The owner/operator shall use no other chemicals that contain any HAP and/or VOC not listed above in Condition II.B.1.b. [R307-401-8]</p>

PERMIT HISTORY

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

Is Derived From
Incorporates
Incorporates
Incorporates

NOI dated December 15, 2025
Additional Information dated January 13, 2026
Additional Information dated March 24, 2026
Additional Information dated March 31, 2026

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