
SCHEDULE 14A INFORMATION

**Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934
(Amendment No. 1)**

Filed by the Registrant
Filed by a Party other than the Registrant

Check the appropriate box:

- Preliminary Proxy Statement
 Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
 Revised Definitive Proxy Statement
 Definitive Additional Materials
 Soliciting Material under § 240.14a-12

ALTO INGREDIENTS, INC.

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement if other than the Registrant)

Payment of Filing Fee (Check all boxes that apply):

- No fee required
 Fee paid previously with preliminary materials
 Fee computed on table in exhibit required by Item 25(b) per Exchange Act Rules 14a-6(i)(1) and 0-11
-
-

EXPLANATORY NOTE

This Amendment No. 1 to the Definitive Proxy Statement on Schedule 14A filed by the Registrant with the U.S. Securities and Exchange Commission on April 28, 2023 (the "Original Filing") amends and restates the Original Filing solely to include Inline XBRL tagging of the Registrant's pay versus performance disclosures.

**ALTO INGREDIENTS, INC.
1300 South Second Street
Pekin, Illinois 61554**

May 5, 2023

Dear Fellow Stockholder:

We cordially invite you to attend the 2023 annual meeting ("Annual Meeting") of stockholders of Alto Ingredients, Inc., which will be held at 9:00 a.m., local time, on Thursday, June 22, 2023, at our offices at 2450 Del Paso Road, Building 1, Sacramento, California 95834. All stockholders of record at the close of business on April 24, 2023 are entitled to vote at the Annual Meeting. The formal meeting notice and Proxy Statement are attached.

At this year's Annual Meeting, stockholders will be asked to (i) elect five directors; (ii) cast an advisory vote to approve our executive compensation; (iii) approve an amendment to our 2016 Stock Incentive Plan to increase the number of shares of common stock authorized for issuance under the plan from 8,900,000 shares to 11,400,000 shares; and (iv) ratify the appointment of RSM US LLP to serve as our independent registered public accounting firm for the year ending December 31, 2023.

In addition, stockholders will transact any other business that may properly come before the Annual Meeting. A report on the business operations of Alto Ingredients will also be presented at the meeting and stockholders will have an opportunity to ask questions.

We use the Internet as our primary means of furnishing proxy materials to our stockholders. Accordingly, most stockholders will not receive paper copies of our proxy materials. We will instead send each stockholder a notice with instructions for accessing the proxy materials and voting electronically over the Internet or by telephone. The notice also provides information on how stockholders may request paper copies of our proxy materials. We believe electronic delivery of our proxy materials and annual report will help us reduce the environmental impact and costs of printing and distributing paper copies and improve the speed and efficiency by which our stockholders can access these materials.

Whether or not you plan to attend the Annual Meeting, it is important that your shares be represented and voted at the meeting, and we urge you to vote as soon as possible. As an alternative to voting in person at the Annual Meeting, you may vote electronically over the Internet or by telephone, or if you receive a proxy card or voting instruction form in the mail, by mailing the completed proxy card or voting instruction form. Timely voting by any of these methods will ensure your representation at the Annual Meeting.

For admission to the Annual Meeting, each stockholder may be asked to present valid picture identification, such as a driver's license or passport, and proof of ownership of our capital stock as of the record date, such as the enclosed proxy card or a brokerage statement reflecting stock ownership. As always, we encourage you to vote your shares prior to the Annual Meeting.

We look forward to seeing you June 22nd.

Sincerely,



William L. Jones,
Chairman of the Board

ALTO INGREDIENTS, INC.
NOTICE OF THE 2023 ANNUAL MEETING OF STOCKHOLDERS
TO BE HELD JUNE 22, 2023

NOTICE IS HEREBY GIVEN that the 2023 annual meeting (“Annual Meeting”) of stockholders of Alto Ingredients, Inc., a Delaware corporation, will be held at 9:00 a.m., local time, on Thursday, June 22, 2023 at our offices at 2450 Del Paso Road, Building 1, Sacramento, California 95834, for the following purposes, as more fully described in the Proxy Statement accompanying this notice:

1. To elect five directors to serve on our Board of Directors until the next annual meeting of stockholders and/or until their successors are duly elected and qualified. The nominees for election are Michael D. Kandris, Maria G. Gray, Douglas L. Kieta, Gilbert E. Nathan and Dianne S. Nury.
2. To cast a non-binding advisory vote to approve our executive compensation (“say-on-pay”).
3. To approve an amendment to our 2016 Stock Incentive Plan to increase the number of shares of common stock authorized for issuance under the plan from 8,900,000 shares to 11,400,000 shares.
4. To ratify the appointment of RSM US LLP as our independent registered public accounting firm for the year ending December 31, 2023.
5. To transact such other business as may properly come before the Annual Meeting or any adjournment(s) or postponement(s) thereof.

All stockholders of record at the close of business on April 24, 2023 are entitled to notice of and to vote at the Annual Meeting and any adjournment(s) or postponement(s) thereof.

We cordially invite all stockholders to attend the Annual Meeting in person. Whether or not you plan to attend, it is important that your shares be represented and voted at the meeting. As an alternative to voting in person at the Annual Meeting, you can vote your shares electronically over the Internet, or if you receive a proxy card or voting instruction form in the mail, by mailing the completed proxy card or voting instruction form. For detailed information regarding voting instructions, please refer to the section entitled “How do I vote?” on page 4 of the Proxy Statement.

For admission to the Annual Meeting, each stockholder may be asked to present valid picture identification, such as a driver’s license or passport, and proof of ownership of our capital stock as of the record date, such as the enclosed proxy card or a brokerage statement reflecting stock ownership.

By Order of the Board of Directors,



William L. Jones,
Chairman of the Board

Pekin, Illinois
May 5, 2023

INTERNET AVAILABILITY OF PROXY MATERIALS

WE USE THE INTERNET AS OUR PRIMARY MEANS OF FURNISHING PROXY MATERIALS TO OUR STOCKHOLDERS. CONSEQUENTLY, MOST STOCKHOLDERS WILL NOT RECEIVE PAPER COPIES OF OUR PROXY MATERIALS. WE WILL INSTEAD SEND EACH STOCKHOLDER A NOTICE OF INTERNET AVAILABILITY OF PROXY MATERIALS WITH INSTRUCTIONS FOR ACCESSING OVER THE INTERNET THE PROXY MATERIALS, INCLUDING OUR PROXY STATEMENT AND ANNUAL REPORT, AND VOTING ELECTRONICALLY OVER THE INTERNET. THE NOTICE OF INTERNET AVAILABILITY OF PROXY MATERIALS ALSO PROVIDES INFORMATION ON HOW STOCKHOLDERS MAY OBTAIN PAPER COPIES OF OUR PROXY MATERIALS IF THEY SO CHOOSE. WE BELIEVE ELECTRONIC DELIVERY OF OUR PROXY MATERIALS AND ANNUAL REPORT WILL HELP ALTO INGREDIENTS, INC. REDUCE THE ENVIRONMENTAL IMPACT AND COSTS OF PRINTING AND DISTRIBUTING PAPER COPIES AND IMPROVE THE SPEED AND EFFICIENCY BY WHICH YOU CAN ACCESS THESE MATERIALS. IF YOU PREVIOUSLY ELECTED TO RECEIVE OUR PROXY MATERIALS ELECTRONICALLY, THESE MATERIALS WILL CONTINUE TO BE SENT VIA EMAIL UNLESS YOU CHANGE YOUR ELECTION.

ALTO INGREDIENTS, INC.
PROXY STATEMENT
FOR THE 2023 ANNUAL MEETING OF STOCKHOLDERS
JUNE 22, 2023

TABLE OF CONTENTS

	<u>Page</u>
Voting and Proxy	2
Proposal One—Election of Directors	7
Information About Our Board of Directors, Board Committees and Related Matters	8
Proposal Two—Advisory Vote On Executive Compensation	26
Proposal Three—Approval of Amendment to 2016 Stock Incentive Plan	27
Proposal Four—Ratification of Appointment of Independent Registered Public Accounting Firm	38
Other Matters	38
Audit Matters	39
Audit Committee Report	40
Security Ownership of Certain Beneficial Owners and Management	41
Equity Compensation Plan Information	42
Executive Compensation and Related Information	43
Executive Officers	43
Compensation Discussion and Analysis	45
Compensation Committee Report	67
Compensation Risk Analysis	68
Summary Compensation Table	69
Outstanding Equity Awards at Fiscal Year-End – 2022	74
Option Exercises and Stock Vested	75
Severance and Change in Control Arrangements with Named Executive Officers	75
Calculation of Potential Payments upon Termination or Change in Control	76
CEO Pay Ratio	78
Pay Versus Performance	79
Certain Relationships and Related Transactions	87
Other Information	89

APPENDIX

APPENDIX A – 2016 Stock Incentive Plan (As Amended Through June 22, 2023)	A-1
APPENDIX B – List of Companies Included in Third-Party Survey Data	B-1

ALTO INGREDIENTS, INC.
1300 South Second Street
Pekin, Illinois 61554
PROXY STATEMENT
FOR THE 2023 ANNUAL MEETING OF STOCKHOLDERS

VOTING AND PROXY

This Proxy Statement is being furnished in connection with the solicitation of proxies by our Board of Directors (“Board”) for use at the 2023 annual meeting (“Annual Meeting”) of stockholders to be held on Thursday, June 22, 2023, at 9:00 a.m., local time, at our offices at 2450 Del Paso Road, Building 1, Sacramento, California 95834, and at any adjournment(s) or postponement(s) of the Annual Meeting. We are providing this Proxy Statement and the accompanying proxy card to our stockholders on or about May 5, 2023. Our stockholders are invited to attend the Annual Meeting and are requested to vote on the proposals described in this Proxy Statement.

**IMPORTANT NOTICE REGARDING THE INTERNET AVAILABILITY
OF PROXY MATERIALS FOR THE 2023 ANNUAL MEETING
OF STOCKHOLDERS TO BE HELD JUNE 22, 2023**

This Proxy Statement and our Annual Report on Form 10-K for the year ended December 31, 2022 are available at the website address at <http://proxyvote.com>. You will need your control number located in our Notice of Internet Availability of Proxy Materials sent to you to access the proxy materials. Your control number is also located in your proxy card and your voting instruction form. You are encouraged to access and review all of the important information contained in the proxy materials before voting. The Annual Report is not to be regarded as proxy soliciting material or as a communication through which any solicitation of proxies is made.

What items will be voted on at the Annual Meeting?

Stockholders will vote on four items at the Annual Meeting:

Proposal 1 – Election to our Board of the five nominees named in this Proxy Statement;

Proposal 2 – A non-binding advisory vote to approve our executive compensation (“say-on-pay”);

Proposal 3 – A proposal to amend our 2016 Stock Incentive Plan (the “2016 Plan”) to increase the number of shares of common stock authorized for issuance under the 2016 Plan; and

Proposal 4 – Ratification of the appointment of RSM US LLP as our independent registered public accounting firm for 2023.

What are the Board’s Voting Recommendations?

The Board recommends that you vote your shares as follows:

Proposal 1 – “**FOR**” each of the nominees to our Board;

Proposal 2 – “**FOR**” the approval of our executive compensation (“say-on-pay”);

Proposal 3 – “**FOR**” the proposal to amend our 2016 Plan to increase the number of shares of common stock authorized for issuance under the 2016 Plan; and

Proposal 4 – “**FOR**” the ratification of the appointment of RSM US LLP as our independent registered public accounting firm for 2023.

Who is entitled to vote?

To be able to vote, you must have been a stockholder on April 24, 2023, the record date for determination of stockholders entitled to notice of and to vote at the Annual Meeting. As of the record date, 76,105,690 shares of our voting common stock, par value \$0.001 per share (“common stock”), and 926,942 shares of our Series B Cumulative Convertible Preferred Stock, par value \$0.001 per share (“Series B Preferred Stock”), were issued and outstanding.

As of the record date, 896 shares of our non-voting common stock, par value \$0.001 per share (“Non-Voting Common Stock”), were also issued and outstanding. Holders of our Non-Voting Common Stock are entitled to notice of and to attend the Annual Meeting but are not entitled to vote on any matters in respect of their shares of Non-Voting Common Stock.

How many votes do I have?

Holders of common stock and Series B Preferred Stock will vote at the Annual Meeting as a single class on all matters. Each holder of common stock is entitled to one vote per share held, and each holder of Series B Preferred Stock is entitled to approximately 0.03 votes per share held. As a result, a total of 76,132,171 votes may be cast at the Annual Meeting, of which holders of common stock will be entitled to cast 76,105,690 votes and holders of Series B Preferred Stock will be entitled to cast 26,481 votes.

What is a quorum?

For business to be conducted at the Annual Meeting, a quorum must be present. The presence at the Annual Meeting, either in person or by proxy, of holders of shares of outstanding common stock and Series B Preferred Stock entitled to vote and representing at least a majority of our outstanding voting power will constitute a quorum for the transaction of business. Accordingly, shares representing 38,066,086 votes must be present in person or by proxy at the Annual Meeting to constitute a quorum.

Abstentions and broker non-votes will be counted for the purpose of determining whether a quorum is present for the transaction of business.

If a quorum is not present, the Annual Meeting will be adjourned until a quorum is obtained.

What are abstentions and broker non-votes?

An “abstention” is the voluntary act of not voting by a stockholder who is present at a meeting in person or by proxy and entitled to vote. “Broker non-votes” refers to shares held by a brokerage firm or other nominee (for the benefit of its client) that are represented at the meeting, but with respect to which such broker or nominee is not instructed to vote on a particular proposal and does not have discretionary authority to vote on that proposal.

If you are a beneficial owner whose shares are held in street name and you do not submit voting instructions to your broker, your broker may generally vote your shares in its discretion on routine matters. We believe that Proposal Four is routine and may be voted on by your broker if you do not submit voting instructions. However, pursuant to the rules of The Nasdaq Stock Market (“Nasdaq”), brokers do not have the discretion to vote their clients’ shares on non-routine matters unless the broker receives voting instructions from the beneficial owner. Proposals One, Two and Three are considered non-routine matters. Consequently, if your shares are held in street name, you must provide your broker with instructions on how to vote your shares in order for your shares to be voted on Proposals One, Two and Three.

What are the general effects of abstentions and broker non-votes?

Brokers who hold shares for the accounts of their clients may vote such shares either as directed by their clients or in their own discretion as permitted under Nasdaq’s listing rules. For purposes of the Annual Meeting, brokers or nominees are permitted to vote their clients’ proxies in their own discretion as to the ratification of the appointment of our independent registered public accounting firm if the clients have not furnished voting instructions within 10 days of the meeting. Certain proposals other than the ratification of the appointment of the independent registered public accounting firm, such as the election of directors, are “non-discretionary” and brokers or nominees who have received no instructions from their clients do not have discretion to vote on those items. Abstentions and broker non-votes will not be counted as a vote “for” or “against” any matter, though in certain cases abstentions will have the same effect as votes against a matter as they will be counted toward the tabulation of votes present or represented on the matter. Broker non-votes will not be counted as shares entitled to vote and accordingly will not affect the outcome with respect to any matter to be voted on at the Annual Meeting.

Please note that brokers may not vote your shares on the election of directors or other non-routine matters in the absence of your specific instructions as to how to vote, thus we strongly encourage you to provide instructions to your broker regarding the voting of your shares you hold in “street name” or through a broker or other nominee.

What vote is required to approve each proposal?

Proposal One

The five nominees receiving the highest number of affirmative votes of the outstanding shares of common stock and Series B Preferred Stock, voting together as a single class, present at the Annual Meeting in person or represented by proxy and entitled to vote, will be elected as directors to serve until the next annual meeting of stockholders and/or until their successors are duly elected and qualified. Abstentions will have no effect on the outcome of the election of nominees for director. Should any nominee(s) become unavailable to serve before the Annual Meeting, the proxies will be voted by the proxy holders for such other person(s) as may be designated by our Board or for such lesser number of nominees as may be prescribed by the Board. Votes cast for the election of any nominee who has become unavailable will be disregarded.

Proposal Two

Under Proposal Two, our stockholders will have an advisory vote on executive compensation as described in this Proxy Statement (commonly referred to as “say-on-pay”). The votes under Proposal Two are, however, only advisory in nature, and the outcome of stockholder votes on Proposal Two will not be binding upon us, or our Compensation Committee or full Board. However, our Compensation Committee and our full Board will consider the results of the votes when making future decisions regarding our executive compensation policies and practices and in determining the frequency of future say-on-pay votes.

Proposals Three and Four

The affirmative vote of a majority of the votes of the shares of our common stock and Series B Preferred Stock, voting together as a single class, present at the Annual Meeting in person or represented by proxy and entitled to vote, is required for approval of Proposals Three and Four. Abstentions will be counted toward the tabulation of votes present or represented on these proposals and will have the same effect as votes against Proposals Three and Four.

How do I vote?

If you are a “registered holder,” that is, your shares are registered in your own name through our transfer agent, and you are viewing this Proxy Statement over the Internet you may vote electronically over the Internet. For those stockholders who receive a paper proxy in the mail, you may also vote electronically over the Internet or by telephone, or by completing and mailing the proxy card provided. The website identified in our Notice of Internet Availability of Proxy Materials provides specific instructions on how to vote electronically over the Internet. Stockholders who receive a paper proxy by mail, and who elect to vote by mail, should complete and return the mailed proxy card in the prepaid and addressed envelope that was enclosed with the proxy materials.

4

If your shares are held in “street name,” that is, your shares are held in the name of a brokerage firm, bank or other nominee, you will receive instructions from your record holder that must be followed for your record holder to vote your shares per your instructions. Your broker will send you a Notice of Internet Availability of Proxy Materials which contains instructions on how to access the website to vote your shares electronically over the Internet or by telephone. If, however, you have elected to receive paper copies of our proxy materials from your brokerage firm, bank or other nominee, you will receive an enclosed voting instruction form. Please complete and return the enclosed voting instruction form in the addressed, postage paid envelope provided.

Stockholders who have previously elected to access our proxy materials and annual report electronically over the Internet will continue to receive an email, referred to in this Proxy Statement as an email notice, with information on how to access the proxy information and voting instructions.

Only proxy cards and voting instruction forms that have been signed, dated and timely returned, and only shares that have been timely voted electronically or by telephone will be counted in the quorum and voted. *The Internet and telephone voting facilities will close at 11:59 p.m. Eastern Time, Wednesday, June 21, 2023, for shares held directly and at 11:59 p.m. Eastern Time, Monday, June 19, 2023, for shares held in a plan.*

Stockholders who vote over the Internet or by telephone need not return a proxy card or voting instruction form by mail, but may incur costs, such as usage charges, from telephone companies or Internet service providers. You may also vote your shares in person at the Annual Meeting. If you are a registered holder, you may request a ballot at the Annual Meeting. If your shares are held in street name and you wish to vote in person at the meeting, you must obtain a proxy issued in your name from the record holder (e.g., your broker) and bring it with you to the Annual Meeting. We recommend that you vote your shares in advance as described above so that your vote will be counted if you later decide not to attend the Annual Meeting.

What if I receive more than one Notice of Internet Availability of Proxy Materials, email notice, proxy card or voting instruction form?

If you receive more than one Notice of Internet Availability of Proxy Materials, email notice, proxy card or voting instruction form because your shares are held in multiple accounts or registered in different names or addresses, please vote your shares held in *each account* to ensure that all of your shares will be voted.

I share an address with another stockholder, and we received only one paper copy of the proxy materials. How may I obtain an additional copy of the proxy materials?

We have adopted a Securities and Exchange Commission approved procedure called “householding.” Under this procedure, we deliver a single copy of the Notice of Internet Availability of Proxy Materials and, if applicable, our proxy materials to multiple stockholders who share the same address unless we have received contrary instructions from one or more of such stockholders. This procedure reduces our printing costs, mailing costs and fees. Stockholders who participate in householding will continue to be able to access and receive separate proxy cards. Upon written or oral request, we will deliver promptly a separate copy of the Notice of Internet Availability of Proxy Materials and, if applicable, our proxy materials to any stockholder at a shared address to which we delivered a single copy of any of these materials. To receive a separate copy, or, if a stockholder is receiving multiple copies, to request that we only send a single copy of the Notice of Internet Availability of Proxy Materials and, if applicable, our proxy materials, such stockholder may contact us as follows:

Alto Ingredients, Inc.
Attention: Investor Relations
1300 South Second Street
Pekin, Illinois 61554
telephone (916) 403-2123

Stockholders who hold shares in street name may contact their brokerage firm, bank, broker-dealer, or other similar organization to request information about householding.

5

Who will count the votes and how will my vote(s) be counted?

All votes will be tabulated by the inspector of elections appointed for the Annual Meeting, who will separately tabulate affirmative and negative votes, abstentions and broker non-votes.

If your proxy is properly submitted, the shares represented thereby will be voted at the Annual Meeting in accordance with your instructions. If you are a registered holder and you do not specify how the shares represented thereby are to be voted, your shares will be voted “**FOR**” the election of each of the five nominees to our Board listed in the proxy, “**FOR**” the approval of each of Proposals Two, Three and Four, and in the discretion of the proxy holder(s) as to any other matters that may properly come before the Annual Meeting or any adjournment(s) or postponement(s) of the Annual Meeting, as well as any procedural matters. If your shares are held in street name and you do not specify how the shares represented thereby are to be voted, your broker may exercise its discretionary authority to vote on Proposal Four.

Can I change my vote after I have voted?

If your shares are registered in your name, you may revoke or change your vote at any time before the Annual Meeting by voting again electronically over the Internet or telephone, or by filing a notice of revocation or another proxy card with a later date with our Secretary at Alto Ingredients, Inc., 1300 South Second Street, Pekin, Illinois 61554. If you are a registered stockholder and attend the Annual Meeting and vote by ballot, any proxy that you submitted previously to vote the same shares will be revoked automatically and only your vote at the Annual Meeting will be counted. If your shares are held in street name, you should contact the record holder to obtain instructions if you wish to revoke or change your vote before the Annual Meeting. Please note that if your shares are held in street name, your vote in person at the Annual Meeting will not be effective unless you have obtained and present a proxy issued in your name from the record holder.

Who will bear the cost of soliciting proxies?

We will bear the entire cost of soliciting proxies for the Annual Meeting, including the cost of preparing, assembling, printing and mailing the Notice of Internet Availability of Proxy Materials, this Proxy Statement, the proxy card and any additional solicitation materials furnished to our stockholders. Copies of solicitation materials will be furnished to brokerage firms, fiduciaries and custodians holding shares in their names that are beneficially owned by others so that they may forward the solicitation materials to the beneficial owners. We may reimburse such persons for their reasonable expenses in forwarding solicitation materials to beneficial owners. The original solicitation of proxies may be supplemented by solicitation by personal contact, telephone, facsimile, email or any other means by our directors, officers or employees, and we will reimburse any reasonable expenses incurred for that purpose. No additional compensation will be paid to those individuals for any such services.

The matters to be considered and acted upon at the Annual Meeting are referred to in the preceding notice and are discussed below more fully.

6

PROPOSAL ONE

ELECTION OF DIRECTORS

Our bylaws currently provide for seven directors unless otherwise changed by resolution of our Board. Promptly following the Annual Meeting, and consistent with the number of director nominees for election at the meeting, we intend to reduce the number of directors provided for in our bylaws to five by resolution of our Board.

Directors are elected annually and hold office until the next annual meeting of stockholders and/or until their respective successors are duly elected and qualified. Stockholders who desire to nominate any person for election to our Board must comply with our bylaws, including our advance-notice bylaw provisions relating to the nomination of persons for election to our Board. See “Information about our Board of Directors, Board Committees and Related Matters—Board Committees and Meetings, Nominating and Corporate Governance Committee” below. It is intended that the proxies solicited by our Board will be voted “**FOR**” election of the following five nominees unless a contrary instruction is made on the proxy: Michael D. Kandris, Maria G. Gray, Douglas L. Kieta, Gilbert E. Nathan and Dianne S. Nury. If, for any reason, one or more of the nominees is unavailable as a candidate for director, an event that is not expected, the person named in the proxy will vote for another candidate or candidates nominated by our Nominating and Corporate Governance Committee. However, under no circumstances may a proxy be voted in favor of a greater number of persons than the number of nominees named above. All five of the nominees for director are present directors of Alto Ingredients. All of the nominees have been nominated by our Nominating and Corporate Governance Committee and ratified by our full Board.

Required Vote of Stockholders

The five nominees receiving the highest number of affirmative votes of the outstanding shares of our common stock and Series B Preferred Stock, voting together as a single class, present at the Annual Meeting in person or by proxy and entitled to vote, will be elected as directors to serve until the next annual meeting of stockholders and/or until their successors are duly elected and qualified. Votes against a candidate, abstentions and broker non-votes will be counted for purposes of determining whether a quorum is present for this proposal but will not be included in the vote totals for this proposal and, therefore, will have no effect on the vote.

Majority Voting Guidelines

We have adopted corporate governance guidelines that implement a majority voting standard for uncontested elections of directors—that is, an election where the only nominees are those recommended by the Board. Notwithstanding that a nominee may be within the group of five nominees receiving the highest number of affirmative votes, as determined above, if an incumbent nominee for director in an uncontested election receives a greater number of votes against his or her election than votes in favor of his or her election (a “Majority Against Vote”), our corporate governance guidelines require that the nominee promptly tender his or her resignation following certification of the vote. Our Nominating and Corporate Governance Committee will promptly consider the tendered resignation and recommend to the full Board whether to accept the tendered resignation or take other action, such as rejecting the tendered resignation and addressing the apparent underlying causes of the Majority Against Vote.

In making this recommendation, our Nominating and Corporate Governance Committee will consider all factors deemed relevant, including the underlying ascertainable reasons why stockholders voted against the director, the length of service and qualifications of the director, the director’s contributions to Alto Ingredients, whether by accepting the resignation we will no longer be in compliance with any applicable law, rule, regulation or governing document, and whether or not accepting the resignation is in the best interests of Alto Ingredients and our stockholders. Any director who tenders his or her resignation under these guidelines is not to participate in the Nominating and Corporate Governance Committee recommendation or Board consideration regarding whether to accept the tendered resignation. We will promptly and publicly disclose the Board’s decision and process in a report filed with or furnished to the Securities and Exchange Commission.

Recommendation of the Board of Directors

OUR BOARD UNANIMOUSLY RECOMMENDS A VOTE “**FOR**” THE ELECTION OF EACH OF THE FIVE DIRECTOR NOMINEES LISTED ABOVE.

7

**INFORMATION ABOUT OUR BOARD OF DIRECTORS,
BOARD COMMITTEES AND RELATED MATTERS**

Directors and Director Nominees

The following table sets forth certain information regarding our directors and director nominees as of April 24, 2023. We intend to reevaluate and reconstitute our Board committees and select the Chair of the Board at our annual Board meeting immediately following our Annual Meeting.

Name	Age	Position(s) Held
Michael D. Kandris	75	President, Chief Executive Officer, Chief Operating Officer, Director and Director Nominee
Douglas L. Kieta ⁽¹⁾	80	Vice Chairman of the Board, Director and Director Nominee
Maria G. Gray ⁽²⁾	46	Director and Director Nominee
Gilbert E. Nathan ⁽²⁾	43	Director and Director Nominee
Dianne S. Nury ⁽³⁾	63	Director and Director Nominee
William L. Jones ⁽³⁾	73	Chairman of the Board and Director
Terry L. Stone ⁽⁴⁾	73	Director

- (1) Member of the Nominating and Corporate Governance Committee.
(2) Member of the Compensation Committee.
(3) Member of the Audit and Nominating and Corporate Governance Committees.
(4) Member of the Audit and Compensation Committees.

Experience and Background

The biographies below describe the skills, qualities, attributes and business experience of each of our directors, including the capacities in which they served during the past five years. In addition to those described in the biographies below, our Board members have the skills, experience and diversity characteristics described further below.

Michael D. Kandris has served as a director since June 2008, as our sole President and Chief Executive Officer since September 2020 and as our Chief Operating Officer since January 6, 2013. Mr. Kandris was appointed as our Co-President and Co-Chief Executive Officer in May 2020. Mr. Kandris served as an independent contractor with supervisory responsibility for plant operations from January 1, 2012 to January 5, 2013. Mr. Kandris was President of the Western Division of Ruan Transportation Management Systems from November 2008 until his retirement in September 2009. From January 2000 to November 2008, Mr. Kandris served as President and Chief Operating Officer of Ruan Transportation Management Systems, where he had overall responsibility for all operations, finance and administrative functions. Mr. Kandris has 30 years of experience in all modes of transportation and logistics and 11 years managing our operations, including as our Chief Operating Officer. Mr. Kandris served on the Executive Committee of the American Trucking Association and as a board member for the National Tank Truck Organization until his retirement from Ruan Transportation Management Systems in September 2009. Mr. Kandris has a B.S. degree in Business from California State University, Hayward.

8

Mr. Kandris's qualifications to serve on our Board include:

- extensive experience in various executive leadership positions;
- extensive experience in rail and truck transportation and logistics and plant operations; and
- day-to-day leadership experience affords a deep understanding of business operations, challenges and opportunities.

Douglas L. Kieta has served as a director since April 2006 and as our Vice Chairman of the Board since March 2023. Mr. Kieta is currently retired but also works as a consultant through Century West Projects, Inc., of which he is the President and an owner, providing project and construction management services. Prior to his retirement in January 2009, Mr. Kieta was employed by BE&K, Inc., a large engineering and construction company headquartered in Birmingham, Alabama, where he served as the Vice President of Power from May 2006 to January 2009. From April 1999 to April 2006, Mr. Kieta was employed at Calpine Corporation where he was the Senior Vice President of Construction and Engineering. Calpine Corporation is a major North American power company which leases and operates integrated systems of fuel-efficient natural gas-fired and renewable geothermal power plants and delivers clean, reliable and fuel-efficient electricity to customers and communities in 21 states and three Canadian provinces. Mr. Kieta has a B.S. degree in Civil Engineering from Clarkson University and a Master's degree in Civil Engineering from Cornell University.

Mr. Kieta's qualifications to serve on our Board include:

- extensive experience in various leadership positions;
- day-to-day leadership experience affords a deep understanding of business operations, challenges and opportunities; and
- service with Calpine affords a deep understanding of large-scale construction and engineering projects as well as plant operations, which is particularly relevant to our alcohol production facility operations.

Maria G. Gray has served as a director since June 2022. Prior to that time, Ms. Gray served as an advisor to our Board beginning in June 2021. Ms. Gray served as a Senior Refining Engineer at Marathon Petroleum Company, an American petroleum refining, marketing, and transportation company headquartered in Findlay, Ohio. From 2012 to 2021, Ms. Gray served in several capacities including as a Senior Health, Safety, and Environmental Professional and as a Project Process Engineering Lead, at Marathon Petroleum Company. Ms. Gray also served in various engineering and supervisory capacities from 2001 to 2012 for Motiva Enterprises LLC, then a joint venture between Shell Oil Company and Saudi Refining Inc, a subsidiary of Saudi Aramco, that operates North America's largest refinery in Port Arthur, Texas, producing and distributing fuels and specialty chemicals. Ms. Gray also served as a Process Engineer for Union Carbide Corporation, a wholly-owned subsidiary of Dow Chemical Company, that produces specialty chemicals and polymers. Ms. Gray has a B.S. degree in Chemical Engineering, Minor in Business and Minor in Architecture from Tulane University.

9

Ms. Gray's qualifications to serve on our Board include:

- experience in energy-related roles pertaining to refining and chemical processes, understanding economics and driving results;
- day-to-day engineering experience with a deep understanding of production processes, including plant operations and optimization;
- experience in major capital project development and execution ranging from \$120 million to \$400 million dollar investments;
- experience in driving Process Safety Management initiatives and developing management systems to energize organizations around safety and regulatory compliance; and
- her membership on our Board furthers our goal of increasing Board racial and gender diversity as Ms. Gray is female and of Hispanic/Latinx origin.

Gilbert E. Nathan has served as a director since November 2019 and, prior to formally joining our Board as a director, served as an advisor to our Board since November 2015. Mr. Nathan is the Managing Member of Jackson Square Advisors LLC, which he founded in 2015. Mr. Nathan also serves on the Board of Directors of Ready Capital Corporation, a public company, and as an observer, and it is anticipated that he will be appointed as a member, of the Board of Directors of Magnachip Semiconductor Corporation, a public company. He also serves as the Chief Executive Officer of Keycon Power Holdings LLC, a position he has held since November 2018. He previously served on the boards of directors of Owens Realty Mortgage, Inc. and Emergent Capital, Inc., and as a liquidating trust board member of Hercules Offshore Liquidating Trust. From 2013 to 2015, Mr. Nathan was a Senior Analyst with Candlewood Investment Group, an investment firm with significant debt and equity investments in the ethanol industry. From 2002 to 2012, Mr. Nathan was a Principal at Restoration Capital Management, an investment firm focused on distressed investments, event driven situations, and high-yield debt. Mr. Nathan has a B.S. degree in Management, Major in Finance from the A. B. Freeman School of Business at Tulane University.

Mr. Nathan's qualifications to serve on our Board include:

- experience in research, financial analysis and trading in debt and equity investments;
- experience in energy-related investments, including oil and gas exploration and production; renewable energy; power; and oil field services;
- experience in fiduciary roles, including service on boards of directors and special committees of public companies, and as a trustee;
- would qualify as an "audit committee financial expert," as defined by the Securities and Exchange Commission; and
- satisfies the "financial sophistication" requirements of Nasdaq's listing standards.

Dianne S. Nury has served as a director since November 2019 and, prior to formally joining our Board as a director, served as an advisor to our Board since August 2018. Ms. Nury has served since 1990 as President and Chief Executive Officer of Vie-Del Company, a family-owned winery, distillery and fruit juice processor manufacturing liquid ingredients for spirits, wine, food and beverage companies. Ms. Nury serves on the Board of Directors and is a former Chairman of the Board of the Wine Institute, the largest advocacy and public policy association for California wine. Ms. Nury is a member of the Juice Products Association, the national trade association representing the fruit and juice products industry, and formerly served as Chairman of its Board of Directors. She is a member of the Board of Directors of the Agricultural Foundation for California State University at Fresno, where she serves as the Vice Chairman of the Viticulture and Enology Industry Advisory Board. Ms. Nury previously served on the USDA Fruit and Vegetable Industry Advisory Committee. Ms. Nury is a Board Member of the Foundation for Clovis Schools, Clovis, California, and previously served on the Board of Trustees of the Saint Agnes Medical Center, Fresno, California. Ms. Nury has a B.S. degree in Business from California State University at Fresno.

Ms. Nury's qualifications to serve on our Board include:

- experience in an executive management role as a chief executive officer;
- experience in alcohol, beverage and food ingredient industries;
- experience on boards of alcohol and food products industry associations; and
- her membership on our Board furthers our goal of increasing Board diversity.

William L. Jones has served as Chairman of the Board and as a director since March 2005. Mr. Jones was not nominated for reelection for 2023. Mr. Jones is a co-founder of Pacific Ethanol California, Inc., or PEI California, which is one of our predecessors, and served as Chairman of the Board of PEI California since its formation in January 2003 through March 2004, when he stepped off the board of directors of PEI California to focus on his candidacy for one of California's United States Senate seats. Mr. Jones was California's Secretary of State from 1995 to 2003. Since May 2002, Mr. Jones has also been the owner of Tri-J Land & Cattle, a diversified farming and cattle company in Fresno County, California. Mr. Jones has a B.A. degree in Agribusiness and Plant Sciences from California State University, Fresno.

Mr. Jones's qualifications to serve on our Board include:

- co-founder of PEI California;
- knowledge gained through his extensive work as our Chairman since our inception in 2005;
- extensive knowledge of and experience in the agricultural and feed industries, as well as a deep understanding of operations in political environments; and
- background as an owner of a farming company in California, and his previous role in the California state government.

Terry L. Stone has served as a director since March 2005. Mr. Stone was not nominated for reelection for 2023. Mr. Stone is a Certified Public Accountant with over forty years of experience in accounting and taxation. He has been the owner of his own accountancy firm since 1990 and has provided accounting and taxation services to a wide range of industries, including agriculture, manufacturing, retail, equipment leasing, professionals and not-for-profit organizations. Mr. Stone has served as a part-time instructor at California State University, Fresno, teaching classes in taxation, auditing and financial and management accounting. Mr. Stone is also a financial advisor. Mr. Stone has a B.S. degree in Accounting from California State University, Fresno.

Mr. Stone's qualifications to serve on our Board include:

- extensive experience with financial accounting and tax matters;
- recognized expertise as an instructor of taxation, auditing and financial and management accounting;
- “audit committee financial expert,” as defined by the Securities and Exchange Commission;
- satisfies the “financial sophistication” requirements of Nasdaq’s listing standards; and
- ability to communicate and encourage discussion, together with his experience as a senior independent director of all Board committees on which he serves make him an effective chairman of our Audit Committee.

Family Relationships

There are no family relationships among our directors or director nominees.

Board Skills and Experience, and Diversity

We believe the following skills, experience and diversity characteristics of our Board, our director nominees and potential candidates for director are important factors in evaluating individual strengths as well as the composition of our Board as a whole.

- *Marketing/Commodities.* We source corn and other materials to produce, market, sell, and distribute our products. It is important for our Board to have directors who possess a strong understanding of commodity markets and an understanding of U.S. and global markets impacting the supply and demand guiding our material sourcing and product sales.
- *Operations.* We operate five alcohol production facilities and one break bulk distribution center. It is important for our Board to have directors who are operations and logistics experts and understand the risks and mitigation efforts associated with the operation of these facilities, and the marketing, selling, and distribution of our products.
- *Audit/Risk/Cybersecurity.* We are subject to various public company auditing, accounting and financial reporting obligations. Our Audit Committee’s responsibilities include reviewing our financial statements, financial reporting and internal controls, as well as overseeing our independent registered public accounting firm and our compliance with our Codes of Ethics. The Audit Committee is also responsible for identifying, assessing, managing and monitoring our significant business risks, including operational, privacy, data security, business continuity, legal, regulatory and reputational risks. It is important for our Board to have directors who are financial experts and who understand financial reporting as well as effective risk management practices.
- *Mergers & Acquisitions.* Strategic joint ventures, partnerships, and mergers and acquisitions are important for enhancing our plant production, operations and new technologies and expanding product offerings into new and growing markets. It is important to have Board members well-versed in mergers and acquisitions-related activities to ensure that the right opportunities are pursued.
- *Regulatory/Government Affairs.* Our operations are regulated by various rules and regulations imposed by government entities that require us to understand and comply with them. Noncompliance with these rules and regulations may result in significant costs and disruptions to our business. It is important for our Board to have directors with a strong understanding of the regulatory structure specific to our business. Our production levels and product sales are affected by federal government programs and policies. Government policies such as tariffs, duties, subsidies, import and export restrictions and embargos can also impact our business, and it is important for our Board to have directors with knowledge and experience in these areas.
- *Agriculture.* We market and sell our corn-based products into food and feed industries. It is important for our Board to have directors with a strong understanding of the risks and challenges associated with the agricultural, food and feed industries.
- *Leadership.* It is critical that our Board have the professional experience required for managing and setting corporate governance policies and company strategies. As part of our objective to ensure that our directors collectively provide relevant guidance on our corporate governance and strategy, our Board is comprised of directors with years of leadership experience and accomplishments in their chosen professions and areas of expertise.
- *Finance & Investment.* As a fiduciary to our stockholders, it is critical for our Board to be financially literate to efficiently and effectively oversee our activities and strategies. Further, the Board, through our Audit Committee, is responsible for the integrity of our financial reporting process and our financial statements.

- *Industry Experience.* We are a leading producer and distributor of specialty alcohols and essential ingredients, and the largest producer of specialty alcohols in the United States. It is important for our Board to have a deep comprehension of industrial manufacturing, alcohol production, agricultural, food and feed industries, as well as emerging changes in those industries.
- *HR/DEI/Talent Development.* We continue to focus on employee safety and wellness; talent acquisition; retention and promotion; employee engagement; development and training; diversity and inclusion; and compensation and pay equity. It is important for our Board to have directors with the expertise required to implement and oversee policies to successfully attract and retain a skilled, diverse workforce with opportunities for growth.
- *EHS/Climate Skills/Sustainability.* Our commitments to health and safety include the prevention of work-related injury/illness, a healthy work/life balance, and benchmarked non-compensation benefits to promote employee well-being. We conduct our operations in compliance with applicable laws, directives and regulations, and our executive management team is committed to providing a safe and healthy work environment for employees, contractors and visitors to our facilities. Further, we continue to focus on progressing our environmental, social and governance (“ESG”) initiatives. It is important for our Board to have directors that understand the complexities, risks and management of environmental, health and safety (“EHS”) and sustainability, as these factors are critical for the safe and efficient operations of our facilities.

The following tables sets forth information regarding the skills, experience and diversity characteristics of our directors and director nominees as of April 24, 2023:

Skills and Experience

Skills and Experience	William L. Jones	Michael D. Kandris	Terry L. Stone	Maria G. Gray	Douglas L. Kieta	Gilbert E. Nathan	Dianne S. Nury
Marketing/							
Commodities	X	X				X	X
Operations	X	X		X	X		X
Audit/Risk/							
Cybersecurity		X	X			X	X
Mergers & Acquisitions	X	X	X		X	X	X
Regulatory	X	X	X				X
Government Affairs	X						X
Agriculture	X	X					X
Leadership	X	X		X	X	X	X
Finance & Investments	X	X	X			X	X
Industry Experience	X	X		X	X		X
HR/DEI/Talent Development		X		X	X		X
EHS/Climate Skills/Sustainability		X		X			X
Approximate Years on Board of Alto Ingredients, Inc.	18	15	18	1	17	4	4

13

Diversity

Part I: Gender Identity	Female	Male	Non-Binary	Did Not Disclose Gender
Directors	2	5	–	–
Part II: Demographic Background				
African American or Black	–	–	–	–
Alaskan Native or American Indian	–	–	–	–
Asian	–	–	–	–
Hispanic or Latinx	1	–	–	–
Native Hawaiian or Pacific Islander	–	–	–	–
White	2	5	–	–
Two or More Races or Ethnicities	1	–	–	–
LGBTQ+			–	–
Did Not Disclose Demographic Background			–	–
Additional information:				
One member of the Board identifies as 100% Persian.				
One member of the Board served in the U.S. Military.				

Corporate Governance

Corporate Governance Initiatives

In 2021 and continuing into 2022, we pursued a number of corporate governance initiatives, including initiatives to improve Board and committee diversity and evaluate our committee and other charters. In 2021, our Nominating and Corporate Governance Committee selected and nominated, and our stockholders elected, a diverse director. In 2022, our Nominating and Corporate Governance Committee selected and nominated, and our stockholders elected, an additional diverse director. We also rotated our committee chair positions, resulting in a diverse director acting as chairperson in one out of three committees. In addition, we constituted an ESG Board committee and working group committee in furtherance of our ESG initiatives. See “Environmental, Social and Governance” below. In 2023, we conducted a comprehensive review of our committee and other charters, broadening their collective scope to include cybersecurity oversight.

Corporate Governance Guidelines

Our Board believes that good corporate governance is paramount to ensure that Alto Ingredients is managed for the long-term benefit of our stockholders. Our Board has adopted corporate governance guidelines that guide its actions with respect to, among other things, the composition of the Board and its decision-making processes, Board meetings and involvement of management, the Board’s standing committees and procedures for appointing members of the committees, and its performance evaluation of our Chief Executive Officer.

Our Board has adopted, and recently revised, a Code of Ethics that applies to all of our directors, officers, employees and consultants and an additional Code of Ethics that applies to our Chief Executive Officer and senior financial officers. The Codes of Ethics, as applied to our principal executive officer, principal financial officer and principal accounting officer constitutes our “code of ethics” within the meaning of Section 406 of the Sarbanes-Oxley Act of 2002 and is our “code of conduct” within the meaning of Nasdaq’s listing standards. In addition, we have a Supplier Code of Conduct applicable to all supplier partners for products and services, and all suppliers are required to acknowledge commitment to ethical business practices. Our Codes of Ethics are available on our website at <https://ir.altoingredients.com/corporate-governance/governance-documents>. Information on our website is not, and shall not be deemed to be, a part of this Proxy Statement or incorporated into any other filings we make with the Securities and Exchange Commission.

14

Board Leadership Structure

Our Chairman of the Board is William L. Jones, who is a non-employee director. Mr. Jones has served as our Chairman of the Board since our inception in 2005. Our Chief Executive Officer is Michael D. Kandris. Mr. Kandris has served as our sole Chief Executive Officer since September 2020 and prior to that time served as our Co-Chief Executive Officer beginning in May 2020. Although we do not have a policy mandating the separation of the roles of Chairman and Chief Executive Officer, our Board,

under our corporate governance guidelines, reserves the right to determine the appropriate leadership structure for our Board on a case-by-case basis. Our Board believes this separation remains appropriate as it allows our Chief Executive Officer to focus on the day-to-day business matters while the Chairman focuses on leading the Board in its responsibilities of acting in the best interests of Alto Ingredients and our stockholders. Under our corporate governance guidelines, our Board will appoint a lead independent director, nominated by our independent directors, whenever the offices of Chairman and Chief Executive Officer are held by the same individual, and at other times if requested by our independent directors.

Our Chairman of the Board is responsible for managing the business of the Board, including setting the Board agenda (with Board member and management input), facilitating communication among directors, presiding at meetings of the Board and stockholders, sitting as chair at executive sessions at each regularly scheduled Board meeting, and providing support and counsel to the Chief Executive Officer. Our lead independent director, if separately appointed, and who is currently Douglas L. Kieta, is responsible for coordinating the activities of the independent directors and performing such other duties as the Board may determine. We believe that this Board leadership structure is appropriate in maximizing the effectiveness of our Board oversight and in providing perspective to our business that is independent from management.

Risk Oversight

Our Board has an active role, as a whole and at the committee level, in overseeing the management, including the identification, assessment and mitigation, of Alto Ingredients' risks. Our Board regularly reviews information regarding our credit, liquidity and operations, as well as the risks associated with each of these areas, and assesses options for risk mitigation. Certain Board committees oversee various categories of risks based on the committee's scope of duties, but our entire Board stays informed such as with respect to strategic, competitive, economic, operational, financial, legal, compliance, climate-related, cybersecurity, regulatory and compensatory risks. Our Compensation Committee is responsible for overseeing the management of risks relating to our executive compensation plans and arrangements. Our Audit Committee oversees management of financial risks, including compliance matters, tax matters and internal controls. Our Audit Committee also oversees management of cybersecurity risks. Our Nominating and Corporate Governance Committee manages risks associated with the independence of members of our Board, potential conflicts of interest, the evaluation and composition of our Board and other corporate governance matters. While each committee is responsible for evaluating certain risks and overseeing the management of those risks, our entire Board is regularly informed through committee reports about such risks.

Policy on Hedging

Our insider trading policy prohibits all employees, officers and directors from engaging in any short sale of company securities, as well as any transaction involving puts, calls, collars, forward sales contracts, warrants or other options on company securities. Additionally, our executive officers are restricted from pledging company securities as collateral for a loan.

Environmental, Social and Governance

In late 2021, we engaged Nasdaq as a third-party consultant to review our ESG strategy and disclosures, with ultimate oversight maintained by our Board. We have surveyed all company departments with responsibility for activities that impact our ESG profile, including the operations, quality, commercial, legal, human resources, and accounting departments. Materiality surveys have assisted us in identifying ESG risks and opportunities. Execution of ESG priority action items is managed by our ESG Board committee, our Vice President of Quality & Sustainability, and in collaboration with our executive committee and management. By championing environmental efforts at the Board and executive level, we intend to ensure that our sites have additional support and resources necessary to implement environmental management systems in alignment with ISO 14001 best practices. Through our corporate quality team, operations team, environmental team, and our Director of Environmental, Health, Safety & Security, we now provide trending and reporting to better target key performance indicators that yield the most impactful benefits to environmental, health and safety compliance and strategy. Our ESG Board committee is tasked with ESG strategy and risk assessment for each of our facilities at least once per year, as well as for all potential acquisitions. Our sustainability reporting, which will commence this year, will align with Sustainability Accounting Standards Board (SASB) – Biofuels standards and the Task Force on Climate-Related Financial Disclosures (TCFD), with reference to standards included in the Global Reporting Initiative (GRI).

Environmental

Fueling a low-carbon economy was a founding value of our company and continues to be a key pillar of our commitment to sustainability. As a global producer of high-quality, bio-based alcohols, Alto Ingredients is committed to moving our country towards a greener environment. All production and office facilities are located in regions categorized as Low to Low-Medium Baseline Water Stress as classified by Aqueduct, the World Resources Institute's (WRI) Water Risk Atlas tool. Our specialty alcohol products are in high demand, and we are capitalizing on ethanol's beneficial low-carbon characteristics integral to the ultimate de-carbonization of our environment. As a member of the Carbon Capture Coalition, we are optimistic about industry action to lead carbon reduction efforts.

Our Pekin campus sits on top of the Mount Simon Sandstone formation, considered one of the most significant potential carbon storage resources in the United States. The outlook for carbon capture and sequestration at our Pekin site improved markedly under the Inflation Reduction Act of 2022. Our Pekin site has an annual capacity of approximately 700,000 metric tons of carbon dioxide. We are in advanced negotiations with third parties to provide turnkey transportation, sequestration and monitoring services for the project. In addition, we are in the final stages of selecting engineering services for the design and installation of equipment and technologies to meet the capture, compression and energy requirements of the project. By sequestering the carbon dioxide from our Pekin site, which accounts for approximately 70% of our biogenic carbon dioxide generated from fermentation, we expect to materially reduce our carbon footprint.

An inventory of our greenhouse gas emissions was a focus for 2022. We compiled Scope 1 and 2 emissions data for 2021 and 2022 at all production facilities and engaged a third-party engineering team to complete verification for both years. We recognize that reducing greenhouse gas emissions is one of the most critical components of lowering our environmental impact. As a result, we are committed to measuring our current state of emissions and setting reduction targets. With inventory values in-hand, we have begun to estimate reductions for current and proposed capital projects, including our carbon capture initiatives, boiler replacement and additional utility projects, co-generation, "no flare" operations where possible, upgrades to our cook system, waste heat recovery, new technologies in the industry such as alternative feedstocks, and enzymatic technologies to allow higher cellulosic ethanol production. We are also focused on waste reduction, including toxic waste and landfilled material. We are a Very Small Quantity Generator (VSQG) of hazardous waste, meaning that each of our production facilities generates 100 kilograms or less per month of hazardous waste, most of which is waste from EPA water quality testing.

Health and Safety

We continue to focus on health and safety. Our commitments to health and safety include the prevention of work-related injury/illness, healthy work/life balance, and benchmarked non-compensation benefits for promoting employee well-being. We conduct our operations in compliance with applicable laws, directives and regulations, and

executive management is committed to providing a safe and healthy work environment for employees, contractors and visitors to our facilities. Each facility operates under health and safety policies consistent with OSHA’s requirements. We provide contractor safety training in addition to education and training activities to all employees to successfully carry out their role in our environmental, health, safety and sustainability programs. We use third-party web-based training, and all employees complete key training modules at least annually. Each of our sites has a safety committee with participation encouraged from a broad range of departments, including management, union and non-union hourly employees from all shifts. Safety audits are conducted internally and twice annually externally through our captive insurance group from which we are rated compared to industry peers. We set improvement goals and timelines to address any deficiencies found during our safety audits, and our maintenance staff prioritizes safety work orders.

Each of our facilities has an action plan to address site-specific risks such as flood, fire, loss of power, and other hazards that have the potential to become more frequent and severe over time. These plans are maintained at the site level and most plans are reviewed annually by a third party in coordination with our insurance company, and at some sites in coordination with the Department of Homeland Security.

We are dedicated to maintaining a safe and healthy workplace, reducing environmental impact, and ensuring compliance with all laws and regulations.

Social

As of April 24, 2023, we had a total of approximately 435 employees, of whom approximately 25 are remote/hybrid and approximately 410 are on-site. Of those personnel, approximately 145 of our employees at our Pekin operating facility are members of United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union (“USW Union”), and approximately 45 of our employees at our ICP distillery are members of United Food & Commercial Workers Union (“UFC Union”). We consider our employee relations to be good, and our recent transition to twelve-hour operating facility shifts provides our union employees with a better work-life balance through improved scheduling practices. Our employees are among our most valuable assets, and they have directly and significantly contributed to our success. In 2022, we partnered with Gallup to launch a three-year employee engagement survey and training program. This program offers managers tools to continuously improve training and resources, retention and promotion, our company culture and opportunities to grow and learn, and to recognize the difference that individuals make to the performance of our business.

We continue to focus on talent acquisition, retention and promotion; employee engagement; development and training, diversity, inclusion, and compensation and pay equity.

We continue to raise awareness through periodic diversity and market availability data reporting to our executive committee. These reports also list actions taken to help increase the diversity of our employee base, such as partnering with local workforce development agencies in the counties in which we operate, encouraging minorities and women to apply, and encouraging qualified diverse candidates to interview. We view diversity as important and ensure that our hiring managers know these efforts are supported at the highest levels of management. These efforts have resulted in increased diversity year-over-year along with strong employee retention, resulting in an overall increase in women and minority employees from 2021 to 2022 and an overall median employment tenure of 7 years for our employees, compared to a median employment tenure of 5 years for wage and salary workers in the United States manufacturing industry. The average tenure of our USW Union employees is 12 years, and the average tenure of our UFC Union employees is 13 years compared to an average tenure of 7 years for non-union employees company wide.

Human Capital Management. The well-being of our employees is paramount to our success. All full-time employees are offered a comprehensive and competitive benefits package to benefit the whole-person, including medical, dental and vision benefits; a flexible spending account; life and disability insurance; paid parental and caregiver leave; a 401(k) plan with a dollar-for-dollar matching contribution on the first 6% contributed by the employee, a program in which 98% of our employees participate; and access to a complementary health and wellness program, participation in which qualifies employees for additional insurance reimbursements and contributions. To complement our community outreach programs, we offer our employees a community service day. Further details regarding our employee benefits can be found on our website.

Diversity, Equity and Inclusion. We are committed to fostering a culture that focuses on the importance of diversity, equity and inclusion. One of our core tenets is the care for our employees regardless of race, color, national origin, ancestry, religion, creed, physical or mental disability, marital status, medical condition, gender or gender identity, sexual orientation, age, family care or medical leave status, veteran status or any other basis protected by federal, state or local law. Our continuing diversity initiatives include, among others, practices and policies of recruitment and selection, ensuring that we evaluate and hire candidates that are the most qualified and well-suited for the positions; continued measuring and monitoring of employee demographics (gender and race) in comparison to demographics of operating facility locations; and the ongoing development of a work environment that encourages and enforces respectful communication and teamwork that reflect the significance to us of the principles of diversity.

Products. We are committed to producing ingredients for our customers that embody the highest levels of integrity, purity and quality for products that touch multiple areas of people’s lives. Our products, including high-quality alcohol and food ingredients, are renewable and bio-based. We believe in transparency that extends to our labels and we are committed to making clean ingredients, including Kosher, gluten-free, vegan, GMP/HACCP Certified, Together for Sustainability (TfS) certified and SMETA 4-Pillar certified products. We maintain multi-site ISO 9001 certification for our corporate facilities and our Pekin campus. We are also evaluating the addition of our other facilities into our ISO 9001 Quality Management System and have begun incorporating portions of other ISO systems including ISO 45001 (Occupational Health & Safety), ISO 14001 (Environmental Management), ISO 26000 (Social Responsibility), and ISO 37000 (Governance of Organizations). With more than 150 years of distilling experience, our 190 and 200 proof alcohols are manufactured to meet the highest standards for quality and reliability. Ethical sourcing is a priority, so we not only qualify, monitor and review performance of all material and service vendors, but for those deemed critical to our product quality, we also conduct on-site auditing to ensure commitment to quality and ethical sources, and all operating facility employees and contractors working on-site undergo annual safety training.

Governance

Our Board is committed to bringing a diversity of viewpoints among its members. In 2022, our Board underwent continued refreshment with the retirement of one of its members to allow for the nomination of Maria G. Gray. With her election, our Board increased its diversity such that more than 25% of our Board is now diverse. We anticipate that at the conclusion of our Annual Meeting, 40% of our Board will be diverse.

Board Diversity	2021	2022	Anticipated 2023
Women	14%	29%	40%
Minorities	–%	14%	20%

ESG Governance. Our ESG committees include both a Board committee comprised of Dianne S. Nury (Chair), Michael D. Kandris and Maria G. Gray, and a

working group committee consisting of senior executives, subject matter experts and the members of our ESG Board committee. While our Board holds primary oversight of our ESG initiatives and strategy, our ESG working group committee works with our executive team, our Vice President of Quality & Sustainability, and others within our company on the day-to-day identification and execution of our initiatives and to ensure compliance with the Securities and Exchange Commission's proposals to require disclosure to investors of climate-related matters.

Director Independence

Our corporate governance guidelines provide that a majority of the Board and all members of our Audit, Compensation and Nominating and Corporate Governance Committees shall be independent. On an annual basis, each director and executive officer is obligated to complete a Director and Officer Questionnaire that requires disclosure of any transactions with Alto Ingredients in which a director or executive officer, or any member of his or her immediate family, have a direct or indirect material interest. Following completion of these questionnaires, the Board, with the assistance of the Nominating and Corporate Governance Committee, makes an annual determination as to the independence of each director using the current standards for "independence" established by the Securities and Exchange Commission and Nasdaq, additional criteria contained in our corporate governance guidelines and consideration of any other material relationship a director may have with Alto Ingredients.

The Board has determined that its directors and director nominees are independent under these standards, except for Michael D. Kandris, who serves as our President, Chief Executive Officer and Chief Operating Officer. Mr. Kandris is deemed not to be independent due to his employment relationship with Alto Ingredients.

Stockholder Communications with our Board of Directors

Our Board has implemented a process by which stockholders may send written communications directly to the attention of our Board or any individual member of our Board. The Chairman of our Audit Committee, Terry L. Stone, is responsible for monitoring communications from stockholders and providing copies of such communications to the other directors as he considers appropriate. Communications will be forwarded to all directors if they relate to substantive matters and include suggestions or comments that the Chairman of our Audit Committee considers important for the directors to consider. Stockholders who wish to communicate with our Board can write to Chairman of the Audit Committee, The Board of Directors, Alto Ingredients, Inc., 1300 South Second Street, Pekin, Illinois 61554.

Board Committees and Meetings

Our business, property and affairs are managed under the direction of our Board. Our directors are kept informed of our business through discussions with our executive officers, by reviewing materials provided to them and by participating in meetings of our Board and its committees. During 2022, our Board held twelve meetings. All directors attended at least 75% of all meetings of our Board and of the committees on which they served or that were held during the period they were directors or committee members.

During 2022, members of our Board and its committees consulted informally with management from time to time and acted by written consent without a meeting. Additionally, the independent members of our Board met in executive session regularly without the presence of management.

It is our policy to invite and encourage our directors to attend our annual meetings. At the date of our 2022 annual meeting, we had seven members on our Board, all of whom attended the meeting.

Our Board has established standing Audit, Compensation and Nominating and Corporate Governance Committees. Each committee operates pursuant to a written charter that has been approved by our Board and the corresponding committee and that is reviewed annually and revised as appropriate. Each committee charter is available on our website at <https://ir.altoingredients.com/corporate-governance/governance-documents>. Information on our website is not, and shall not be deemed to be, a part of this Proxy Statement or incorporated into any other filings we make with the Securities and Exchange Commission.

Audit Committee

Our Audit Committee's general functions include monitoring the integrity of our financial reporting process; overseeing processes for monitoring auditor independence; overseeing the implementation of new accounting standards; overseeing and participating in the resolution of internal control issues, when and if identified; communicating with our independent auditors on matters related to the conduct of audits; and reviewing and understanding non-GAAP measures, and related company policies and disclosure controls. Moreover, our Audit Committee selects our independent auditors, reviews the results and scope of the audit and other services provided by our independent auditors, reviews our financial statements for each interim period and for the full year and implements and manages our enterprise risk management program, including financial, operational, privacy, data security, business continuity, legal, regulatory and reputational risks, and reviews the implementation and effectiveness of, and monitors compliance with, our Codes of Ethics. The Audit Committee also has the authority to retain consultants and other advisors.

Messrs. Stone (Chair) and Jones, and Ms. Nury, served on our Audit Committee for all of 2022. In addition, John L. Prince, one of our former directors, served on our Audit Committee through the date of our prior annual meeting in June 2022. Our Board has determined that each member of the Audit Committee is "independent" under the current Nasdaq listing standards and satisfies the other requirements under Nasdaq listing standards and Securities and Exchange Commission rules regarding audit committee membership. Our Board has determined that Mr. Stone qualifies as an "audit committee financial expert" under applicable Securities and Exchange Commission rules and regulations governing the composition of the Audit Committee and satisfies the "financial sophistication" requirements of Nasdaq's listing standards. During 2022, our Audit Committee held five meetings.

The Audit Committee Report for 2022 can be found on page 40 of this Proxy Statement.

Compensation Committee

Our Compensation Committee is responsible for establishing, updating and administering our compensation program for executive officers including, among other things, annual salaries and bonuses, stock options, stock grants, other stock-based awards, and other incentive compensation arrangements. The Compensation Committee establishes the elements and mix of total compensation, sets the parameters and specific target metrics of our performance-based incentive compensation plan, and determines the target compensation of our executive officers. In addition, our Compensation Committee establishes the compensation philosophy and objectives, and oversees the administration of our compensation program for all other employees. Our Compensation Committee also has the authority to administer our equity incentive plans with respect to grants to executive officers and directors and has authority to make equity awards under our equity incentive plans to all other eligible individuals. However, our Board may retain, reassume or exercise from time to time the power to administer our equity incentive plans. Equity awards made to members of the Compensation Committee must be authorized and approved by a disinterested majority of our Board.

Our Compensation Committee believes that our compensation program offered to our executive officers should attract, retain, motivate and reward key executive officers responsible for our success; align and strengthen the mutuality of interests of our executive officers, our company and our stockholders; deliver compensation that reflects our financial and operational performance, while providing the opportunity to earn above-targeted total compensation for exceptional performance; and provide total compensation to each executive officer that is internally equitable, competitive, and influenced by company and individual performance.

Our Compensation Committee has the authority to retain consultants and other advisors, and in furtherance of the foregoing objectives, our Compensation Committee in 2020 engaged Korn Ferry to conduct reviews of our compensation program for our executive officers and other employees. From those reviews, Korn Ferry provided our Compensation Committee with relevant market data and alternatives to consider when making compensation decisions as to our executive officers and other employees.

Messrs. Nathan (Chair) and Stone served on our Compensation Committee for all of 2022 and Ms. Gray served on our Compensation Committee since the date of our prior annual meeting in June 2022. In addition, John L. Prince, one of our former directors, and Ms. Nury, served on our Compensation Committee until the date of our prior annual meeting in June 2022. Our Board has determined that each member of the Compensation Committee is “independent” under the current Nasdaq listing standards. During 2022, our Compensation Committee held seven meetings.

The Compensation Committee Report for 2022 can be found on page 67 of this Proxy Statement.

Nominating and Corporate Governance Committee

Our Nominating and Corporate Governance Committee considers and reports periodically to the Board on matters related to the identification, selection and qualification of Board members and candidates nominated to the Board. Our Nominating and Corporate Governance Committee also advises and makes recommendations to the Board with respect to corporate governance matters. The Nominating and Corporate Governance Committee also has the authority to retain consultants and other advisors.

Messrs. Jones and Kieta served on our Nominating and Corporate Governance Committee for all of 2022 and Ms. Nury (Chair) served on our Nominating and Corporate Governance Committee since the date of our prior annual meeting in June 2022. In addition, John L. Prince, one of our former directors, and Mr. Nathan, served on our Nominating and Corporate Governance Committee until the date of our prior annual meeting in June 2022. Our Board has determined that each member of the Nominating and Corporate Governance Committee is “independent” under the current Nasdaq listing standards. During 2022, our Nominating and Corporate Governance Committee held two meetings.

The Nominating and Corporate Governance Committee will consider candidates for director recommended by any stockholder that is the beneficial owner of shares representing more than 1.0% of the then-outstanding shares of our common stock and who has beneficially owned those shares for at least one year. The Nominating and Corporate Governance Committee will evaluate those recommendations by applying its regular nominee criteria and considering the additional information described in the Nominating and Corporate Governance Committee’s charter. Stockholders who desire to recommend candidates for the Board for evaluation may do so by contacting Alto Ingredients in writing, identifying the potential candidate and providing background and other relevant information. Stockholders must also comply with our bylaws, including our advance notice bylaw provisions relating to the nomination of persons for election to our Board that, among other things, require that nominations of persons for election to our Board at annual meetings be submitted to our Secretary at Alto Ingredients, Inc., 1300 South Second Street, Pekin, Illinois 61554, unless otherwise notified, by the close of business on the 45th day before the first anniversary of the date on which we first mailed our proxy materials for the prior year’s annual meeting. We first mailed our proxy materials for our 2022 annual meeting on or about May 9, 2022 and anticipate mailing our proxy materials for our Annual Meeting on or about May 5, 2023. We have received no stockholder nominations of persons for election to our Board for our Annual Meeting.

Our Nominating and Corporate Governance Committee utilizes a variety of methods for identifying and evaluating nominees for director. Candidates may also come to the attention of the Nominating and Corporate Governance Committee through current Board members, professional search firms and other persons. In evaluating potential candidates, our Nominating and Corporate Governance Committee will consider a number of factors, including, among others, the following:

- the candidate’s independence from management;
- whether the candidate has relevant business experience;
- judgment, skill, integrity and reputation;
- existing commitments to other businesses;
- corporate governance background;
- financial and accounting background, to enable the committee to determine whether the candidate would be suitable for Audit Committee membership; and
- the size and composition of our Board.

In addition, our Board and our Nominating and Corporate Governance Committee are committed to seeking out highly qualified women and minority candidates as well as candidates with diverse backgrounds, skills and experiences as part of each Board member candidate search the Nominating and Corporate Governance Committee undertakes. When searching for director nominees, our Nominating and Corporate Governance Committee will include highly qualified diverse candidates (including gender, race and ethnicity) in the pool from which nominees are chosen. We are committed to ensuring that our Board diversity meets Nasdaq’s minimum requirements.

Our Nominating and Corporate Governance Committee has the authority to retain and terminate any search firm to be used to identify director nominees, including the authority to approve the firm’s fees and other retention terms. Our Nominating and Corporate Governance Committee will direct any search firm it retains to include qualified women and minority candidates in the firm’s list of potential director candidates. We will provide funding, as determined by our Nominating and Corporate Governance Committee, for the payment of compensation to any such search firms.

We will evaluate our diversity policy’s effectiveness by annually reviewing our inclusion of highly qualified diverse candidates in the pool from which nominees are chosen.

We use a combination of cash and equity-based incentive compensation to attract and retain qualified candidates to serve on our Board. In setting the compensation of directors, we consider the significant amount of time that Board members spend in fulfilling their duties to Alto Ingredients as well as the experience level we require to serve on our Board. The Board, through its Compensation Committee, annually reviews the compensation and compensation policies for Board members. In recommending director compensation, the Compensation Committee is guided by the following three goals:

- compensation should pay directors fairly for work required in a company of our size and scope;
- compensation should align directors' interests with the long-term interests of our stockholders; and
- the structure of the compensation should be clearly disclosed to our stockholders.

In making compensation decisions for 2022 as to our directors, our Compensation Committee compared our cash and equity compensation payable to directors against market data obtained by Korn Ferry in 2020. The data included a blend of results from two published surveys to identify companies with revenue and market capitalization comparable to ours. Korn Ferry used a revenue range in one survey that included companies with revenue of \$0.5 billion to \$2.5 billion and used a market capitalization threshold in the second survey that included companies with a market capitalization of less than \$1.0 billion. The surveys did not specifically identify the companies surveyed. For 2022, our Compensation Committee targeted compensation for our directors at approximately the median of compensation paid to directors of the survey group companies.

Cash Compensation

Our annual cash compensation program for directors includes the following:

- annual cash compensation provided to the Chairman of our Board is \$112,500;
- base annual cash compensation provided to our non-employee directors, other than our Chairman, is \$75,000;
- additional annual cash compensation provided to each of our Board committee chairs is \$25,000; and
- additional annual cash compensation provided to our lead independent director is \$12,000.

These amounts are paid in advance in bi-weekly installments. In addition, directors are reimbursed for specified reasonable and documented expenses in connection with attendance at meetings of our Board and its committees. An employee director does not receive director compensation in connection with his or her service as a director. In lieu of cash compensation, directors may elect to receive additional equity compensation having the same cash value.

Equity Compensation

Our Compensation Committee or our full Board typically grants equity compensation to our newly elected or reelected directors which normally vests as to 100% of the grants at the earlier of our next annual meeting or approximately one year after the date of grant. Vesting is typically subject to continued service on our Board during the full year.

In determining the amount of equity compensation for 2022, the Compensation Committee determined a target value of total compensation of approximately the median of compensation paid to directors of the comparable companies identified by Korn Ferry. The Compensation Committee then determined the cash component based on this market data. The balance of the total compensation target was then allocated to equity awards, and the number of shares to be granted to our directors was based on the estimated value of the underlying shares on the expected grant date.

Our annual equity compensation program for directors includes the following:

- the value of annual equity compensation provided to the Chairman of our Board is \$147,500; and
- the value of annual equity compensation provided to our non-employee directors, other than our Chairman, is \$110,000.

In addition, our Compensation Committee may grant, and has from time to time granted, additional equity compensation to directors at its discretion.

Compensation of Employee Directors

Mr. Kandris was compensated as a full-time employee and officer and therefore received no additional compensation for service as a Board member during 2022. Information regarding the compensation awarded to Mr. Kandris is included in "Executive Compensation and Related Information—Summary Compensation Table" below.

Director Compensation Table – 2022

The following table summarizes the compensation of our non-employee directors for the year ended December 31, 2022:

Name	Fees Earned or Paid in Cash (\$) ⁽¹⁾	Stock Awards (\$)	Total (\$) ⁽²⁾
William L. Jones ⁽³⁾	\$ 112,500	\$ 106,781	\$ 219,281
Terry L. Stone ⁽⁴⁾	\$ 100,000	\$ 79,632	\$ 179,632
John L. Prince ⁽⁵⁾	\$ 51,692	\$ —	\$ 51,692
Maria G. Gray ⁽⁶⁾	\$ 63,462	\$ 79,632	\$ 143,094
Douglas L. Kieta ⁽⁷⁾	\$ 106,461	\$ 79,632	\$ 186,093
Gilbert E. Nathan ⁽⁸⁾	\$ 61,538	\$ 118,096	\$ 179,634
Dianne S. Nury ⁽⁹⁾	\$ 88,462	\$ 79,632	\$ 168,094

(1) For a description of annual director fees and fees for chair and lead independent director positions, see the disclosure above under "Compensation of Directors—Cash Compensation."

(2) The value of perquisites and other personal benefits was less than \$10,000 in aggregate for each director.

- (3) At December 31, 2022, Mr. Jones held 183,388 vested shares from stock awards. Mr. Jones was granted 26,965 shares of our common stock on June 23, 2022, having an aggregate grant date fair value of \$106,781, calculated based on the fair market value of our common stock on the grant date. The shares vest on the earlier of the date of our Annual Meeting or July 1, 2023.
- (4) At December 31, 2022, Mr. Stone held 159,849 vested shares from stock awards. Mr. Stone was granted 20,109 shares of our common stock on June 23, 2022, having an aggregate grant date fair value of \$79,632, calculated based on the fair market value of our common stock on the grant date. The shares vest on the earlier of the date of our Annual Meeting or July 1, 2023.
- (5) Mr. Prince retired from our board on the date of our prior annual meeting in June 2022.

- (6) Ms. Gray became a member of our Board on the date of our prior annual meeting in June 2022. The amount of fees paid in cash reflects Ms. Gray's compensation at a rate of \$75,000 per year in Board fees and \$50,000 per year in advisory fees prior to her election to our Board. At December 31, 2022, Ms. Gray held 2,183 vested shares from stock awards. Ms. Gray was granted 20,109 shares of our common stock on June 23, 2022, having an aggregate grant date fair value of \$79,632, calculated based on the fair market value of our common stock on the grant date. The shares vest on the earlier of the date of our Annual Meeting or July 1, 2023.
- (7) At December 31, 2022, Mr. Kieta held 171,823 vested shares from stock awards. Mr. Kieta was granted 20,109 shares of our common stock on June 23, 2022, having an aggregate grant date fair value of \$79,632, calculated based on the fair market value of our common stock on the grant date. The shares vest on the earlier of the date of our Annual Meeting or July 1, 2023.
- (8) At December 31, 2022, Mr. Nathan held 93,112 vested shares from stock awards. Mr. Nathan was granted 20,109 shares of our common stock on June 23, 2022, having an aggregate grant date fair value of \$79,632, calculated based on the fair market value of our common stock on the grant date. The shares vest on the earlier of the date of our Annual Meeting or July 1, 2023. In addition, in lieu of certain cash compensation for service on our Board and its committees, Mr. Nathan elected to receive in 2021 additional unvested shares of our common stock having the same cash value as cash compensation that otherwise would have been paid to Mr. Nathan in 2022. Specifically, the portion of Mr. Nathan's additional share grant in 2021 attributable to cash compensation for 2022 for which Mr. Nathan otherwise would have been eligible was 6,224 shares of our common stock, granted on June 16, 2021, having an aggregate grant date fair value of \$38,464, calculated based on the fair market value of our common stock on the grant date. The 6,224 shares of our common stock vested on June 23, 2022.
- (9) At December 31, 2022, Ms. Nury held 68,969 vested shares from stock awards. Ms. Nury was granted 20,109 shares of our common stock on June 23, 2022, having an aggregate grant date fair value of \$79,632, calculated based on the fair market value of our common stock on the grant date. The shares vest on the earlier of the date of our Annual Meeting or July 1, 2023.

Indemnification of Directors and Officers

Section 145 of the Delaware General Corporation Law permits a corporation to indemnify its directors and officers against expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with a pending or completed action, suit or proceeding if the officer or director acted in good faith and in a manner the officer or director reasonably believed to be in the best interests of the corporation.

Our certificate of incorporation provides that, except in certain specified instances, our directors shall not be personally liable to us or our stockholders for monetary damages for breach of their fiduciary duty as directors, except liability for the following:

- any breach of their duty of loyalty to Alto Ingredients or our stockholders;
- acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the Delaware General Corporation Law; and
- any transaction from which the director derived an improper personal benefit.

In addition, our certificate of incorporation and bylaws obligate us to indemnify our directors and officers against expenses and other amounts reasonably incurred in connection with any proceeding arising from the fact that such person is or was an agent of ours. Our bylaws also authorize us to purchase and maintain insurance on behalf of any of our directors or officers against any liability asserted against that person in that capacity, whether or not we would have the power to indemnify that person under the provisions of the Delaware General Corporation Law. We have entered and expect to continue to enter into agreements to indemnify our directors and officers as determined by our Board. These agreements provide for indemnification of related expenses including attorneys' fees, judgments, fines and settlement amounts incurred by any of these individuals in any action or proceeding. We believe that these bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers. We also maintain directors' and officers' liability insurance.

The limitation of liability and indemnification provisions in our certificate of incorporation and bylaws may discourage stockholders from bringing a lawsuit against our directors for breach of their fiduciary duty. They may also reduce the likelihood of derivative litigation against our directors and officers, even though an action, if successful, might benefit us and other stockholders. Furthermore, a stockholder's investment may be adversely affected to the extent that we pay the costs of settlement and damage awards against directors and officers as required by these indemnification provisions.

Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended ("Securities Act"), may be permitted to our directors, officers and controlling persons under the foregoing provisions of our certificate of incorporation or bylaws, or otherwise, we have been informed that in the opinion of the Securities and Exchange Commission, this indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

PROPOSAL TWO

ADVISORY VOTE ON EXECUTIVE COMPENSATION

We are providing our stockholders with the opportunity to vote on a non-binding, advisory resolution to approve the compensation paid to our named executive officers, as disclosed in this Proxy Statement pursuant to the compensation disclosure rules of the Securities and Exchange Commission under Section 14A of the Securities Exchange Act of 1934, as amended ("Exchange Act"), including the compensation tables and any narrative discussion of our compensation arrangements. This proposal, commonly known as a "say-on-pay" proposal, gives our stockholders the opportunity to express their views on the compensation paid to our named executive officers.

Our compensation program for our executive officers utilizes elements including base salary, annual performance-based cash incentive compensation, long-term equity incentive compensation, and health and other benefits to achieve the following goals:

- attract, retain, motivate and reward key executive officers responsible for our success;

- align and strengthen the mutuality of interests of our executive officers, our company and our stockholders;
- deliver compensation that reflects our financial and operational performance, while providing the opportunity to earn above-targeted total compensation for exceptional performance; and
- provide total compensation to each executive officer that is internally equitable, competitive, and influenced by company and individual performance.

We believe that our success depends in large part on our ability to attract, retain and motivate qualified executives through competitive compensation arrangements. We also believe that the compensation paid to our executive officers should be influenced by the value we create for our stockholders. For these reasons, our Compensation Committee believes that our compensation program should provide incentives to attain both short- and long-term financial and other business objectives and reward those executive officers who contribute meaningfully to attaining those objectives. The Compensation Committee supports a pay-for-performance philosophy within a compensation structure that is competitive, internally equitable and responsible.

Our Compensation Committee’s process for determining overall target compensation for each executive officer is based in part on an analysis of compensation of similarly situated personnel at third-party survey group companies derived from market data provided by the Compensation Committee’s compensation consultant.

This vote is not intended to address any specific item of compensation, but rather the overall compensation of our named executive officers and the philosophy, policies and practices described in this Proxy Statement. Accordingly, we will ask our stockholders to vote “**FOR**” the following resolution at the Annual Meeting:

“RESOLVED, that the compensation paid to Alto Ingredients, Inc.’s named executive officers, as disclosed in Alto Ingredients, Inc.’s proxy statement for its 2023 annual meeting of stockholders pursuant to the compensation disclosure rules of the Securities and Exchange Commission, including the compensation tables and related disclosure, is hereby APPROVED.”

Please read the “Executive Compensation and Related Information” section of this Proxy Statement for additional details about our executive compensation program and the different components of the program, including information about the total compensation of our named executive officers in 2022. See also “Information About our Board of Directors, Board Committees and Related Matters – Board Committees and Meetings – Compensation Committee” of this Proxy Statement.

The say-on-pay vote is advisory, and therefore not binding on us, our Compensation Committee or our Board. The vote will provide our Compensation Committee and our Board with information relating to the opinions of our stockholders which the Compensation Committee will consider as it makes determinations with respect to future action regarding executive compensation and our executive compensation program.

Recommendation of the Board of Directors

OUR BOARD UNANIMOUSLY RECOMMENDS A VOTE “**FOR**” APPROVAL OF THE 2022 COMPENSATION PAID TO OUR NAMED EXECUTIVE OFFICERS, AS DISCLOSED IN THIS PROXY STATEMENT PURSUANT TO THE COMPENSATION DISCLOSURE RULES OF THE SECURITIES AND EXCHANGE COMMISSION.

PROPOSAL THREE

APPROVAL OF AMENDMENT TO 2016 STOCK INCENTIVE PLAN

In 2016, our Board adopted, and our stockholders ratified and approved the adoption of, our 2016 Plan. On March 29, 2018, our Board approved, and on June 14, 2018 our stockholders ratified and approved, an increase in the number of shares of common stock authorized for issuance under our 2016 Plan from 1,150,000 shares to 3,650,000 shares. On August 6, 2019, our Board approved, and on November 7, 2019 our stockholders ratified and approved, a further increase in the number of shares of common stock authorized for issuance under our 2016 Plan from 3,650,000 shares to 5,650,000 shares as well as other amendments to the 2016 Plan. On September 2, 2020, our Board approved, and on November 18, 2020 our stockholders ratified and approved, a further increase in the number of shares of common stock authorized for issuance under our 2016 Plan from 5,650,000 to 7,400,000 shares. On March 30, 2022, our Board approved, and on June 22, 2022 our stockholders ratified and approved, a further increase in the number of shares of common stock authorized for issuance under our 2016 Plan from 7,400,000 shares to 8,900,000 shares. On April 20, 2023, our Board approved, subject to stockholder approval, a further increase in the number of shares of common stock authorized for issuance under our 2016 Plan from 8,900,000 shares to 11,400,000 shares.

Our Board recommends approval of the amendment to the 2016 Plan to enable the continued use of the 2016 Plan for stock-based grants consistent with the objectives of our compensation program. The 2016 Plan is intended to promote our interests by providing eligible persons in our service with the opportunity to acquire a proprietary or economic interest, or otherwise increase their proprietary or economic interest, in Alto Ingredients as an incentive for them to remain in service and render superior performance during their service. The 2016 Plan consists of two equity-based incentive programs, the Discretionary Grant Program and the Stock Issuance Program. Principal features of each program are summarized below.

A total of 8,900,000 shares of common stock are currently authorized for issuance under the 2016 Plan. A total of 11,400,000 shares of common stock will be authorized for issuance under the 2016 Plan upon stockholder approval of this proposal. Currently, equity awards totaling 8,624,434 shares of common stock have been issued under the 2016 Plan. We believe that the 2016 Plan will be exhausted of shares available for issuance in 2023, leaving insufficient shares available for equity grants in 2023 and future years. By increasing the number of shares authorized for issuance under the 2016 Plan by 2,500,000, a total of 11,400,000 shares of common stock would be available for issuance. This increase would, in essence, provide us with the flexibility to continue to make stock-based grants in amounts deemed appropriate by our Compensation Committee. We believe that our equity incentive program and grants made under the program are essential to retain critical personnel and align the incentives of our personnel with our stockholders.

The proposed share increase amendment will not be implemented unless approved by our stockholders, and no additional equity awards beyond the existing 8,900,000 shares of common stock have been or will be issued under the 2016 Plan unless and until stockholder approval of the amended 2016 Plan is obtained. If the proposed share increase amendment is not approved by our stockholders, the 2016 Plan will remain in effect in the form attached to this Proxy Statement as Appendix A but without the share increase amendments to the 2016 Plan.

Set forth below is information concerning awards of restricted stock and options under our 2016 Plan for each of the years ended December 31, 2018, 2019, 2020, 2021 and 2022. No other equity incentive compensation, whether under the 2016 Plan or otherwise, was awarded in such years.

	Year Ended December 31,					Three-Year Average
	2018	2019	2020	2021	2022	
Shares and options granted	1,175,477	1,433,771	1,663,372	750,451	872,040	1,095,288
Shares outstanding at year-end	45,772,318	55,508,314	72,486,962	72,777,694	75,154,495	73,473,050

Annual run rate ⁽¹⁾	2.6%	2.6%	2.3%	1.0%	1.2%	1.5%
Unvested shares and options outstanding at year-end	1,864,991	2,201,924	2,260,028	1,388,363	1,170,308	1,606,233
Overhang ⁽²⁾	4.1%	4.0%	3.1%	1.9%	1.6%	2.2%

(1) Annual run rate is the number of shares of common stock and options granted during the year, divided by the number of shares of common stock outstanding at year-end.

(2) Overhang is the number of unvested shares of restricted common stock and options outstanding at year-end, divided by the total number of shares of common stock outstanding at year-end.

The following is a summary of the principal features of our 2016 Plan. The summary does not purport to be a complete description of all provisions of our 2016 Plan and is qualified in its entirety by the text of the 2016 Plan, a copy of which (as amended to reflect the proposed share increase and other amendments) is attached to this Proxy Statement as [Appendix A](#).

Administration

The Compensation Committee of our Board has the exclusive authority to administer the Discretionary Grant and Stock Issuance Programs with respect to option grants, restricted stock awards, restricted stock units, stock appreciation rights, direct stock issuances and other stock-based awards (“equity awards”) made to executive officers and non-employee Board members, and has the authority to make equity awards under those programs to all other eligible individuals. However, the Board may retain, reassume or exercise from time to time the power to administer those programs. Equity awards made to members of the Compensation Committee must be authorized and approved by a disinterested majority of the Board.

The term “plan administrator,” as used in this summary, means the Compensation Committee or the Board, to the extent either entity is acting within the scope of its administrative power under the 2016 Plan.

Share Reserve

An aggregate of 8,900,000 shares of common stock are currently authorized for issuance under the 2016 Plan. A total of 11,400,000 shares of common stock will be authorized for issuance under the 2016 Plan upon stockholder approval of this proposal. No additional equity awards beyond the existing 8,900,000 shares of common stock have been or will be issued under the 2016 Plan unless and until stockholder approval is obtained.

No participant in the 2016 Plan may be granted equity awards for shares of common stock having a value in excess of \$1,000,000 per calendar year.

The shares of common stock issuable under the 2016 Plan may be drawn from shares of our authorized but unissued shares or from shares reacquired by us, including shares repurchased on the open market.

Shares of common stock subject to outstanding awards under the 2016 Plan shall in no event become eligible for reissuance under the 2016 Plan, whether as a result of expiration or termination of an award, cancellation or repurchase of unvested shares, tender of shares in connection with a net/cashless exercise program, withholding of shares to cover withholding taxes, or otherwise.

We have registered the issuance of the shares of common stock currently authorized for issuance under our 2016 Plan on Form S-8 under the Securities Act. As soon as practicable following stockholder approval to increase the number of shares of common stock authorized for issuance under the 2016 Plan, we intend to register the issuance of those securities under the 2016 Plan under a registration statement on Form S-8 under the Securities Act.

Eligibility

Officers, employees, non-employee directors, and consultants and independent advisors who are under written contract and whose securities issued under the 2016 Plan could be registered under a registration statement on Form S-8, all of whom are in our service or the service of any parent or subsidiary of ours, whether now existing or subsequently established, are eligible to participate in the Discretionary Grant and Stock Issuance Programs.

As of April 24, 2023, four executive officers, approximately 430 other employees, six non-executive officer members of our Board and an indeterminate number of consultants and independent advisors were eligible to participate in the 2016 Plan.

Valuation

The fair market value per share of our common stock on any relevant date under the 2016 Plan will be deemed to be equal to the closing price per share of our common stock at the close of regular trading hours on that date on The Nasdaq Capital Market (or any other primary successor exchange or market on which our securities are listed or traded). If there is no closing price for our common stock on the date in question, the fair market value will be the closing price on the last preceding date for which a quotation exists. On April 24, 2023, the fair market value determined on that basis was \$1.31 per share.

Discretionary Grant Program

The plan administrator has complete discretion under the Discretionary Grant Program to determine which eligible individuals are to receive equity awards under that program, the time or times when those equity awards are to be made, the number of shares subject to each award, the time or times when each equity award is to vest and become exercisable (subject to a minimum initial vesting period of one (1) year and certain restrictions on vesting in connection with a change in control or hostile takeover), the maximum term for which the equity award is to remain outstanding and the status of any granted option as either an incentive stock option or a non-statutory option under the federal tax laws.

Stock Options. Each granted option will have an exercise price per share determined by the plan administrator, provided that the exercise price will not be less than 85% or 100% of the fair market value of a share on the grant date in the case of non-statutory or incentive options, respectively. No granted option will have a term in excess of ten years. Incentive options granted to an employee who beneficially owns more than 10% of our outstanding common stock must have exercise prices not less than 110% of the fair market value of a share on the grant date and a term of not more than five years measured from the grant date. Options generally will become exercisable in one or more installments over a specified period of service measured from the grant date. Any unvested shares acquired under options will be subject to repurchase, at the exercise

price paid per share, if the optionee ceases service with us prior to vesting in those shares.

We are prohibited from repurchasing any option the exercise price of which is in excess of the fair market value of the underlying shares at the time of any such repurchase.

An optionee who ceases service with us other than due to misconduct will have a limited time within which to exercise outstanding options for any shares for which those options are vested and exercisable at the time of cessation of service. The plan administrator does not have discretion to extend the period following an optionee's cessation of service during which outstanding options may be exercised; provided, however that the plan administrator may do so and/or accelerate the exercisability or vesting of the options in whole or in part in connection with an optionee's retirement.

Stock Appreciation Rights. The plan administrator has the authority to issue the following three types of stock appreciation rights under the Discretionary Grant Program:

- Tandem stock appreciation rights, which provide the holders with the right, upon approval of the plan administrator, to surrender their options for an appreciation distribution in an amount equal to the excess of the fair market value of the vested shares of common stock subject to the surrendered option over the aggregate exercise price payable for those shares.
- Standalone stock appreciation rights, which allow the holders to exercise those rights as to a specific number of shares of common stock and receive in exchange an appreciation distribution in an amount equal to the excess of the fair market value on the exercise date of the shares of common stock as to which those rights are exercised over the aggregate base price in effect for those shares. The base price per share may not be less than the fair market value per share of the common stock on the date the standalone stock appreciation right is granted, and the right may not have a term in excess of ten years.

29

- Limited stock appreciation rights, which may be included in one or more option grants made under the Discretionary Grant Program to executive officers or directors who are subject to the short-swing profit liability provisions of Section 16 of the Exchange Act. Upon the successful completion of a hostile takeover for more than 50% of our outstanding voting securities or a change in a majority of our Board as a result of one or more contested elections for Board membership over a period of up to 36 consecutive months, each outstanding option with a limited stock appreciation right may be surrendered in return for a cash distribution per surrendered option share equal to the excess of the fair market value per share at the time the option is surrendered or, if greater and the option is a non-statutory option, the highest price paid per share in the transaction, over the exercise price payable per share under the option.

Payments with respect to exercised tandem or standalone stock appreciation rights may, at the discretion of the plan administrator, be made in cash or in shares of common stock. All payments with respect to exercised limited stock appreciation rights will be made in cash. Upon cessation of service with us, the holder of one or more stock appreciation rights will have a limited period within which to exercise those rights as to any shares as to which those stock appreciation rights are vested and exercisable at the time of cessation of service. The plan administrator does not have discretion to extend the period following the holder's cessation of service during which his or her outstanding stock appreciation rights may be exercised; provided, however that the plan administrator may do so and/or accelerate the exercisability or vesting of the stock appreciation rights in whole or in part in connection with the holder's retirement.

Stock Issuance Program

Shares of common stock may be issued under the Stock Issuance Program for valid consideration under the Delaware General Corporation Law as the plan administrator deems appropriate, including cash, past services or other property. In addition, restricted shares of common stock may be issued under restricted stock awards that vest in one or more installments over the recipient's period of service or upon attainment of specified performance objectives. Shares of common stock may also be issued under the program under restricted stock units or other stock-based awards that entitle the recipients to receive the shares underlying those awards upon the attainment of designated performance goals, the satisfaction of specified service requirements and/or upon the expiration of a designated time period following the vesting of those awards or units, including a deferred distribution date following the termination of the recipient's service with us.

The plan administrator will have complete discretion under the Stock Issuance Program to determine which eligible individuals are to receive equity awards under the program, the time or times when those equity awards are to be made, the number of shares subject to each equity award, the vesting schedule to be in effect for the equity award (subject to a minimum initial vesting period of one (1) year and certain restrictions on vesting in connection with a change in control or hostile takeover), and the consideration, if any, payable per share. The shares issued under an equity award may vest upon the completion of a designated service period (subject to a minimum initial vesting period of one (1) year), and/or the attainment of pre-established performance goals.

The plan administrator will also have the discretionary authority to structure one or more equity awards under the Stock Issuance Program so that the shares subject to those particular awards will vest only upon the achievement of pre-established corporate performance goals. Goals may be based on one or more of the following criteria: (i) return on total stockholders' equity; (ii) net income per share; (iii) net income or operating income; (iv) earnings before interest, taxes, depreciation, amortization and stock-based compensation costs, or operating income before depreciation and amortization; (v) sales or revenue targets; (vi) return on assets, capital or investment; (vii) cash flow; (viii) market share; (ix) cost reduction goals; (x) budget comparisons; (xi) implementation or completion of projects or processes strategic or critical to our business operations; (xii) measures of customer satisfaction; (xiii) any combination of, or a specified increase in, any of the foregoing; and (xiv) the formation of joint ventures, research and development collaborations, marketing or customer service collaborations, or the completion of other corporate transactions intended to enhance our revenue or profitability or expand our customer base; provided, however, that for purposes of items (ii), (iii) and (vii) above, the plan administrator may, at the time the equity awards are made, specify adjustments to those items as reported in accordance with United States generally accepted accounting principles ("GAAP"), which will exclude from the calculation of those performance goals one or more of the following: charges related to acquisitions, stock-based compensation, employer payroll tax expense on stock option exercises, settlement costs, restructuring costs, gains or losses on strategic investments, non-operating gains, other non-cash charges, valuation allowance on deferred tax assets, and the related income tax effects, purchases of property and equipment, and any extraordinary non-recurring items, provided that those adjustments are in conformity with those reported by us on a non-GAAP basis. In addition, performance goals may be based upon the attainment of specified levels of our performance under one or more of the measures described above relative to the performance of other entities and may also be based on the performance of any of our business groups or divisions thereof or any parent or subsidiary. Performance goals may include a minimum threshold level of performance below which no award will be earned, levels of performance at which specified portions of an award will be earned, and a maximum level of performance at which an award will be fully earned. The plan administrator may provide that, if the actual level of attainment for any performance objective is between two specified levels, the amount of the award attributable to that performance objective shall be interpolated on a straight-line basis.

30

No vesting requirements tied to the attainment of performance objectives may be waived with respect to shares that were intended at the time of issuance to qualify as performance-based compensation under Section 162(m) of the Internal Revenue Code of 1986, as amended (the "Code"), except in the event of specified involuntary terminations or changes in control or ownership.

Outstanding restricted stock units or other stock-based awards under the Stock Issuance Program will automatically terminate, and no shares of common stock will be issued in satisfaction of those awards, if the performance goals or service requirements established for those awards are not attained, subject to their treatment in connection with a change in control or hostile takeover as provided under the terms of the 2016 Plan.

General Provisions

Acceleration. If a change in control occurs, but except as otherwise provided in the corresponding award agreement or an employment agreement, each outstanding equity award under the Discretionary Grant Program or Stock Issuance Program will automatically accelerate and vest in full, unless (i) that award is assumed by the successor corporation or otherwise continued in effect; (ii) the award is replaced with a cash retention program that preserves the spread existing on the unvested shares subject to that equity award (the excess of the fair market value of those shares over the exercise or base price in effect for the shares) and provides for subsequent payout of that spread in accordance with the same vesting schedule in effect for those shares; or (iii) the acceleration of the award is subject to other limitations imposed by the plan administrator; provided, that any award that would vest upon the attainment of designated performance goals or pre-established performance milestones, or the satisfaction of specified service requirements other than time-based vesting, shall accelerate and vest at the greater of (i) the actual amount based upon actual performance or the service requirements attained, and (ii) the target amount (and, for the avoidance of doubt, in cases where this proviso applies, no such award shall accelerate and vest at the minimum amount or the maximum amount unless, in the case of the maximum amount, the actual performance or service requirement attained results in achievement of the maximum amount).

In addition, all unvested shares outstanding under the Discretionary Grant and Stock Issuance Programs will immediately vest upon the change in control, except to the extent our repurchase rights with respect to those shares are to be assigned to the successor corporation or otherwise continued in effect or accelerated vesting is precluded by other limitations imposed by the 2016 Plan or the plan administrator. Except as otherwise provided in an award or employment agreement, each outstanding equity award under the Discretionary Grant Program and the Stock Issuance Program will vest as to the number of shares of common stock subject to that award immediately prior to the change in control, unless that equity award is assumed by the successor corporation or otherwise continued in effect or replaced with a cash retention program similar to the program described in clause (ii) above or unless vesting is precluded by its terms. Immediately following a change in control, all outstanding awards under the Discretionary Grant Program will terminate and cease to be outstanding except to the extent assumed by the successor corporation or its parent or otherwise expressly continued in full force and effect under the terms of the change in control transaction.

Except as otherwise provided in an award or employment agreement, the plan administrator does not have the discretion to structure one or more equity awards under the Discretionary Grant Program or Stock Issuance Program so that those equity awards will vest in full in the event of a specified involuntary termination of the individual's service with us or the successor entity (actually or constructively) following a change in control transaction.

A change in control will be deemed to have occurred if, in a single transaction or series of related transactions:

- (i) any person (as that term is used in Section 13(d) and 14(d) of the Exchange Act), or persons acting as a group, other than a trustee or fiduciary holding securities under an employment benefit program, is or becomes a beneficial owner (as defined in Rule 13-3 under the Exchange Act), directly or indirectly of securities representing 51% or more of the combined voting power of our company;
- (ii) there is a merger, consolidation, or other business combination transaction of us with or into another corporation, entity or person, other than a transaction in which the holders of at least a majority of the shares of our voting capital stock outstanding immediately prior to the transaction continue to hold (either by the shares remaining outstanding or by their being converted into shares of voting capital stock of the surviving entity) a majority of the total voting power represented by the shares of voting capital stock of our company (or the surviving entity) outstanding immediately after the transaction; or
- (iii) all or substantially all of our assets are sold.

Stockholder Rights and Option Transferability. The holder of an option or stock appreciation right will have no stockholder rights with respect to the shares subject to that option or stock appreciation right unless and until the holder exercises the option or stock appreciation right and becomes a holder of record of shares of common stock distributed upon exercise of the award. Incentive options are not assignable or transferable other than by will or the laws of inheritance following the optionee's death, and during the optionee's lifetime, may only be exercised by the optionee. However, non-statutory options and stock appreciation rights may be transferred or assigned during the holder's lifetime to one or more members of the holder's family or to a trust established for the benefit of the holder and/or one or more family members or to the holder's former spouse, to the extent the transfer is in connection with the holder's estate plan or under a domestic relations order.

A participant will have a number of rights with respect to shares of common stock issued to the participant under the Stock Issuance Program, whether or not the participant's interest in those shares is vested. Accordingly, the participant will have the right to vote the shares but will not have the right to receive any regular cash dividends paid on unvested shares or the right to transfer the shares prior to vesting; however, we will withhold and retain any dividends on unvested shares until such time as the shares vest, if at all, and will thereafter pay to the participant any such dividends withheld and retained or, if the shares do not vest, return any such dividends to the corporate treasury. A participant will not have any stockholder rights with respect to the shares of common stock subject to restricted stock units or other stock-based awards until the awards vest and the shares of common stock are issued. However, dividend-equivalent units may be paid or credited, either in cash or in actual or phantom shares of common stock, on outstanding restricted stock units or other stock-based awards, subject to terms and conditions the plan administrator deems appropriate and subject to the withholding and retention of dividends with respect to any unvested awards on the same terms as set forth above.

Changes in Capitalization. If any change is made to the outstanding shares of common stock by reason of any recapitalization, stock dividend, stock split, combination of shares, exchange of shares or other change in corporate structure effected without our receipt of consideration, appropriate adjustments will be made to (i) the maximum number and/or class of securities issuable under the 2016 Plan; (ii) the maximum number and/or class of securities for which any one person may be granted equity awards under the 2016 Plan per calendar year; (iii) the number and/or class of securities and the exercise price or base price per share in effect under each outstanding option or stock appreciation right; and (iv) the number and/or class of securities subject to each outstanding restricted stock unit or other stock-based award under the 2016 Plan and the cash consideration, if any, payable per share. All adjustments will be designed to preclude any dilution or enlargement of benefits under the 2016 Plan and the outstanding equity awards thereunder.

Special Tax Election. Subject to applicable laws, rules and regulations, the plan administrator may permit any or all holders of equity awards to utilize any or all of the following methods to satisfy all or part of the federal and state income and employment withholding taxes to which they may become subject in connection with the issuance, exercise or vesting of those equity awards:

- *Stock Withholding.* The election to have us withhold, from the shares otherwise issuable upon the issuance, exercise or vesting of an equity award, a portion of those shares with an aggregate fair market value equal to the percentage of the withholding taxes (not to exceed 100%) designated by the holder and make a cash payment equal to the fair market value directly to the appropriate taxing authorities on the individual's behalf.
- *Stock Delivery.* The election to deliver to us shares of common stock previously acquired by the holder (other than in connection with the issuance, exercise or vesting that triggered the withholding taxes) with an aggregate fair market value equal to the percentage of the withholding taxes (not to exceed 100%) designated by the holder.
- *Sale and Remittance.* The election to deliver to us, to the extent the award is issued or exercised for vested shares, through a special sale and remittance procedure under which the optionee or participant will concurrently provide irrevocable instructions to a brokerage firm to effect the immediate sale of the purchased or issued shares and remit to us, out of the sale proceeds available on the settlement date, sufficient funds to cover the withholding taxes we are required to withhold by reason of the issuance, exercise or vesting.

Amendment, Suspension and Termination

Our Board may suspend or terminate the 2016 Plan at any time. Our Board may amend or modify the 2016 Plan, subject to any required stockholder approval. Stockholder approval will be required for any amendment that materially increases the number of shares available for issuance under the 2016 Plan, materially expands the class of individuals eligible to receive equity awards under the 2016 Plan, materially increases the benefits accruing to optionees and other participants under the 2016 Plan or materially reduces the price at which shares of common stock may be issued or purchased under the 2016 Plan, materially extends the term of the 2016 Plan, expands the types of awards available for issuance under the 2016 Plan, or as to which stockholder approval is required by applicable laws, rules or regulations.

Unless sooner terminated by our Board, the 2016 Plan will terminate on the earliest to occur of: (i) March 25, 2026; (ii) the date on which all shares available for issuance under the 2016 Plan have been issued as fully-vested shares; (iii) and the termination of all outstanding equity awards upon specified changes in control or ownership. If the 2016 Plan terminates on March 25, 2026, then all equity awards outstanding at that time will continue to have force and effect in accordance with the provisions of the documents evidencing those awards.

Federal Income Tax Consequences

The following discussion summarizes the principal income tax consequences of equity awards granted under the 2016 Plan under current federal income tax law, which is subject to change, and is intended for general information only. In addition, the tax consequences described below may be subject to the limitations of Code Section 162(m), as discussed in further detail below. Other federal taxes and foreign, state and local income taxes are not discussed, and may vary depending upon individual circumstances and from locality to locality. We will not summarize the special rules that may apply if the recipient pays the exercise price of any equity award or any associated tax withholdings by delivery of shares the recipient already owns or will acquire with respect to the equity award.

Option Grants. Options granted under the 2016 Plan may be either incentive stock options, which satisfy the requirements of Code Section 422, or non-statutory stock options, which are not intended to meet those requirements. The federal income tax treatment for the two types of options differs as follows:

Incentive Stock Options. No taxable income is recognized by the optionee at the time of the option grant, and, if there is no disqualifying disposition of the underlying shares at the time of exercise, no taxable income is recognized for regular tax purposes at the time the option is exercised, although taxable income may arise at that time for alternative minimum tax purposes equal to the excess of the fair market value of the purchased shares at the time over the exercise price paid for those shares.

The optionee will recognize taxable income in the year in which the purchased shares are sold or otherwise made the subject of some dispositions. For federal tax purposes, dispositions are divided into two categories: qualifying and disqualifying. A qualifying disposition occurs if the sale or other disposition is made more than two years after the date the option for the shares involved in the sale or disposition was granted and more than one year after the date the option was exercised for those shares. If either of these two requirements is not satisfied, a disqualifying disposition will result.

Upon a qualifying disposition, the optionee will recognize long-term capital gain in an amount equal to the excess of the amount realized upon the sale or other disposition of the purchased shares over the exercise price paid for the shares or long-term capital loss to the extent the amount realized is less than the exercise price paid for the shares. If there is a disqualifying disposition of the shares, the excess of the fair market value of those shares on the exercise date over the exercise price paid for the shares will be taxable as ordinary income to the optionee if the amount realized exceeds the sum of that excess plus the exercise price paid for the shares. Otherwise, only the excess of the amount realized over the price paid for the shares will be treated as ordinary income to the optionee. Any additional gain or any loss recognized upon the disposition will be taxable as a capital gain or capital loss (long-term if the shares were held for more than one year and short-term otherwise).

If the optionee makes a disqualifying disposition of the purchased shares, we will generally be entitled to an income tax deduction, for our taxable year in which the disposition occurs, equal to the amount of ordinary income the optionee is to recognize. If the optionee makes a qualifying disposition, we will not be entitled to any income tax deduction.

Non-Statutory Stock Options. No taxable income is generally recognized by an optionee upon the grant of a non-statutory option (assuming the option is exempt from Code Section 409A). The optionee will, in general, recognize ordinary income, in the year in which the option is exercised, equal to the excess of the fair market value of the purchased shares on the exercise date over the exercise price paid for the shares, and we will be required to collect withholding taxes from the optionee on that amount of ordinary income. A participant's subsequent disposition of shares acquired upon the exercise of an option generally will result in only capital gain or loss.

We will generally be entitled to an income tax deduction equal to the amount of any ordinary income recognized by the optionee with respect to an exercised non-statutory option. The deduction will in general be allowed for our taxable year in which the ordinary income is recognized by the optionee.

If the shares acquired upon exercise of the non-statutory option are unvested and subject to repurchase in the event of the optionee's cessation of service prior to vesting in those shares, however the optionee will not recognize any taxable income at the time of exercise but will have to report as ordinary income (and we will have to withhold with respect thereto), as and when our repurchase right lapses, an amount equal to the excess of the fair market value of the shares on the date the repurchase right lapses over the exercise price paid for the shares. The optionee may elect under Code Section 83(b) to include as ordinary income in the year of exercise of the option an amount equal to the excess of the fair market value of the purchased shares on the exercise date over the exercise price paid for the shares. If a timely Code Section 83(b) election is made, the optionee will not recognize any additional income as and when the repurchase right lapses.

Stock Appreciation Rights. No taxable income is generally recognized upon receipt of a stock appreciation right. The holder will recognize ordinary income in the

year in which the stock appreciation right is settled in an amount equal to the cash and the fair market value of the shares of common stock on the settlement date received for the right, and we will be required to collect withholding taxes from the holder on that ordinary income. A participant's subsequent disposition of shares acquired upon the exercise of a stock appreciation right generally will result in only capital gain or loss.

We will generally be entitled to an income tax deduction equal to the amount of any ordinary income recognized by the holder in connection with the exercise of a stock appreciation right. The deduction will in general be allowed for our taxable year in which the ordinary income is recognized by the holder.

Direct Stock Issuances. Stock granted under the 2016 Plan may include issuances of unrestricted stock, restricted stock and restricted stock units (in each case, subject to a minimum initial vesting period of one (1) year).

Unrestricted Stock Grants. The holder will recognize ordinary income in the year in which shares are issued to the holder. The amount of that income will be equal to the fair market value of the shares on the date of issuance (minus the amount, if any, paid by the participant for the shares), and we will be required to collect withholding taxes from the holder on that ordinary income. A participant's subsequent disposition of shares issued pursuant to an unrestricted stock grant generally will result in only capital gain or loss.

We generally will be entitled to an income tax deduction equal to the amount of ordinary income recognized by the holder at the time the shares are issued. The deduction will in general be allowed for our taxable year in which the ordinary income is recognized by the holder.

Restricted Stock Grants. No taxable income is recognized upon receipt of stock that qualifies as restricted stock unless the recipient elects to have the value of the stock (without consideration of any effect of the vesting conditions) included in income on the date of receipt. In that event, the recipient may elect under Code Section 83(b) to include as ordinary income in the year the shares are issued an amount equal to the fair market value of the shares at the time of issuance (and we will be required to withhold on that amount). If a timely Code Section 83(b) election is made, the holder will not recognize any additional income when the vesting conditions lapse and will not be entitled to a deduction in the event the stock is forfeited as a result of failure to vest.

If the recipient does not file an election under Code Section 83(b), the recipient will not recognize income until the shares vest. At that time, the holder will recognize ordinary income in an amount equal to the fair market value of the shares on the date the shares vest. We will be required to collect withholding taxes from the holder at that time on that ordinary income. A participant's subsequent disposition of shares issued pursuant to a restricted stock grant generally will result in only capital gain or loss.

The holder also will recognize ordinary income and be subject to withholdings with respect to any cash dividends that are paid in connection with a restricted stock grant if they are paid prior to the time the shares vest (and assuming the holder does not make the election under Code Section 83(b)). If the holder makes the Code Section 83(b) election, all dividends received on a restricted stock award will be taxed as an ordinary dividend.

We generally will be entitled to an income tax deduction equal to the amount of ordinary income recognized by the holder at the time the shares are issued, if the holder elects to file an election under Code Section 83(b), or we will be entitled to an income tax deduction equal to the amount of ordinary income recognized by the holder at the time the vesting conditions occur if the holder does not elect to file an election under Code Section 83(b).

Restricted Stock Units. No taxable income is generally recognized upon receipt of a restricted stock unit award. The holder will recognize ordinary income in the year in which the cash is paid and/or shares subject to that unit are issued to the holder. The amount of that income will be equal to the cash and the fair market value of the shares received on the date of issuance, and we will be required to collect withholding taxes from the holder on that ordinary income. A participant's subsequent disposition of shares issued pursuant to a restricted stock unit grant generally will result in only capital gain or loss.

We will generally be entitled to an income tax deduction equal to the amount of ordinary income recognized by the holder at the time the shares are issued. The deduction will in general be allowed for our taxable year in which the ordinary income is recognized by the holder.

Code Section 409A. A number of awards, including non-statutory stock options and stock appreciation rights granted with an exercise price that is less than fair market value, and some restricted stock units, might be considered "non-qualified deferred compensation" and subject to Code Section 409A. Awards that are subject to but do not meet the requirements of Code Section 409A will result in an additional 20% tax obligation, plus penalties and interest to the recipient, and may result in accelerated imposition of income tax at the time of vesting (as opposed to settlement) and the related withholding. The foregoing tax discussion assumes that the applicable equity award is exempt from Code Section 409A. Equity awards subject to Code Section 409A may only be paid on certain trigger events and are subject to a myriad number of other requirements.

Deductibility of Executive Compensation

Any compensation deemed paid by us in connection with awards under the 2016 Plan may be taken into account for purposes of the annual \$1,000,000 limitation per covered individual on the deductibility of compensation paid to certain executive officers under Code Section 162(m).

Accounting Treatment

In accordance with accounting standards established by the Financial Accounting Standards Board's Accounting Standards Codification Topic 718, *Stock Compensation*, we are required to recognize all share-based payments, including grants of stock options, restricted stock and restricted stock units, in our financial statements. Accordingly, stock options are valued at fair value as of the grant date under an appropriate valuation formula, and that value will be charged as stock-based compensation expense against our reported earnings over the designated vesting period of the award. For shares issuable upon the vesting of restricted stock units that may be awarded under the 2016 Plan, we are required to expense over the vesting period a compensation cost equal to the fair market value of the underlying shares on the date of the award. Restricted stock issued under the 2016 Plan results in a direct charge to our reported earnings equal to the excess of the fair market value of those shares on the issuance date over the cash consideration (if any) paid for the shares. If the shares are unvested at the time of issuance, then any charge to our reported earnings is amortized over the vesting period. This accounting treatment for restricted stock units and restricted stock issuances is applicable whether vesting is tied to service periods or performance criteria.

New Plan Benefits

No additional awards under the 2016 Plan are determinable at this time because awards under the 2016 Plan are discretionary and no specific additional awards have been approved by the plan administrator beyond currently outstanding unvested restricted stock grants in respect of 8,624,434 shares of common stock.

Other Arrangements Not Subject to Stockholder Action

Information regarding our equity compensation plan arrangements that existed as of the end of 2022 is included in this Proxy Statement under the heading “Equity Compensation Plan Information.”

Interests of Related Parties

The 2016 Plan provides that our officers, employees, non-employee directors, and some consultants and independent advisors will be eligible to receive awards under the 2016 Plan. However, if this proposal is not approved by our stockholders, then no awards in excess of the existing 8,900,000 shares authorized for issuance under the 2016 Plan will be made under the 2016 Plan unless stockholder approval is otherwise obtained.

As discussed above, we may be eligible in some circumstances to receive a tax deduction for some executive compensation resulting from awards under the 2016 Plan that would otherwise be disallowed under Section 162(m).

Possible Anti-Takeover Effects

Although not intended as an anti-takeover measure by our Board, one of the possible effects of the 2016 Plan could be to place additional shares, and to increase the percentage of the total number of shares outstanding, or to place other incentive compensation, in the hands of the directors and officers of Alto Ingredients. Those persons may be viewed as part of, or friendly to, incumbent management and may, therefore, under some circumstances be expected to make investment and voting decisions in response to a hostile takeover attempt that may serve to discourage or render more difficult the accomplishment of the attempt.

In addition, options or other incentive compensation may, in the discretion of the plan administrator, contain provisions providing for the acceleration of the exercisability or vesting of outstanding options and other incentive compensation upon a hostile takeover or other change in control, including a tender or exchange offer, merger, consolidation, other business combination, sale of all or substantially all of our assets, significant changes in the composition of our Board, or other attempted changes in the control of Alto Ingredients, in each case subject to the limitations imposed under the terms of the 2016 Plan. In the opinion of our Board, this acceleration provision merely ensures that optionees under the 2016 Plan will be able to exercise their options or obtain their incentive compensation as intended by our Board and stockholders prior to any extraordinary corporate transaction which might serve to limit or restrict that right. Our Board is, however, presently unaware of any threat of hostile takeover involving Alto Ingredients.

Clawback Policy

The plan administrator has the power and authority, and is required, to terminate any vested or unvested award or require repayment to us of the proceeds received by our executive officers, including any named executive officer, arising from any award, to apply our Policy for Recoupment of Incentive Compensation dated March 29, 2018. The plan administrator will also apply any amended or successor “clawback” or similar policy adopted by us, including any policy or policy changes mandated by or implemented pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act or the applicable listing requirements or rules and regulations of The Nasdaq Capital Market, if applicable, and any other stock exchange or other market on which our common stock is then quoted or listed for trading.

37

Required Vote of Stockholders

Nasdaq Listing Rule 5635(c) generally requires us to obtain stockholder approval of compensation plans pursuant to which our stock may be acquired by officers, directors, employees or consultants. The approval of this Proposal Three requires the affirmative vote of a majority of the votes of the shares of our common stock and Series B Preferred Stock, voting together as a single class, present at the Annual Meeting in person or by proxy and entitled to vote.

Recommendation of the Board of Directors

OUR BOARD UNANIMOUSLY RECOMMENDS A VOTE “**FOR**” APPROVAL OF PROPOSAL THREE.

PROPOSAL FOUR

RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Our Audit Committee has appointed the independent registered public accounting firm RSM US LLP to audit and comment on our financial statements for the year ending December 31, 2023, and to conduct whatever audit functions are deemed necessary. RSM US LLP audited our financial statements for the year ended December 31, 2022 that were included in our most recent Annual Report on Form 10-K. A representative of RSM US LLP will not be present at the Annual Meeting.

Required Vote of Stockholders

Although a vote of stockholders is not required on this proposal, our Board is asking our stockholders to ratify the appointment of our independent registered public accounting firm. The ratification of the appointment of our independent registered public accounting firm requires the affirmative votes of a majority of the votes of the shares of our common stock and Series B Preferred Stock, voting together as a single class, present at the Annual Meeting in person or by proxy and entitled to vote.

If our stockholders do not ratify the appointment of RSM US LLP as our independent registered public accounting firm, the appointment will be reconsidered by our Audit Committee. Even if the appointment is ratified, our Audit Committee, in its discretion, may direct the appointment of a different independent registered public accounting firm at any time during the year if the Audit Committee believes that such a change would be in our and our stockholders’ best interests.

Recommendation of the Board of Directors

OUR BOARD UNANIMOUSLY RECOMMENDS A VOTE “**FOR**” RATIFICATION OF THE APPOINTMENT OF RSM US LLP TO SERVE AS OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR THE YEAR ENDING DECEMBER 31, 2023.

OTHER MATTERS

Our Board knows of no other matters to be brought before the Annual Meeting. However, if other matters should come before the Annual Meeting, it is the intention of the person named in the proxy to vote such proxy in accordance with his or her judgment on such matters.

38

AUDIT MATTERS

Principal Accountant Fees and Services

The following table presents fees for professional audit services rendered by RSM US LLP for the years ended December 31, 2022 and 2021.

	2022	2021
Audit Fees	\$ 699,423	\$ 592,702
Audit-Related Fees	25,200	22,680
Tax Fees	—	—
All Other Fees	—	—
Total	<u>\$ 724,623</u>	<u>\$ 615,382</u>

Audit Fees. Consist of amounts billed for professional services rendered for the audit of our annual consolidated financial statements included in our Annual Reports on Form 10-K, reviews of our interim consolidated financial statements included in our Quarterly Reports on Form 10-Q, our Registration Statements on Forms S-3 and S-8, and for professional services performed in connection with our acquisition activities.

Audit-Related Fees. Audit-Related Fees consist of fees billed for professional services that are reasonably related to the performance of the audit or review of our consolidated financial statements but are not reported under “Audit Fees.” Such fees would include amounts billed for professional services performed in connection with audits of 401(k) plans, pension plans and RIN audits.

Tax Fees. Tax Fees consist of fees for professional services for tax compliance activities, including the preparation of federal and state tax returns and related compliance matters.

All Other Fees. Consists of amounts billed for services other than those noted above.

Our Audit Committee considered all non-audit services provided by RSM US LLP and determined that the provision of such services was compatible with maintaining such firm’s audit independence.

Audit Committee Pre-Approval Policy

Our Audit Committee is responsible for approving all audit, audit-related, tax and other services. The Audit Committee pre-approves all auditing services and permitted non-audit services, including all fees and terms to be performed for us by our independent auditor at the beginning of the fiscal year. Non-audit services are reviewed and pre-approved by project at the beginning of the fiscal year. Any additional non-audit services contemplated by us after the beginning of the fiscal year are submitted to the Chairman of our Audit Committee for pre-approval prior to engaging our independent auditor for such services. These interim pre-approvals are reviewed with the full Audit Committee at its next meeting for ratification. During 2022 and 2021, all services performed by RSM US LLP were pre-approved by our Audit Committee in accordance with these policies and applicable Securities and Exchange Commission regulations.

AUDIT COMMITTEE REPORT

The Audit Committee is comprised entirely of independent directors who meet the independence requirements of the Listing Rules of Nasdaq and the Securities and Exchange Commission. The Audit Committee operates under a written charter adopted by the Board that is available on Alto Ingredients’ website at <https://ir.altoingredients.com/corporate-governance/governance-documents>. As described more fully in its charter, the Audit Committee oversees, among other things, the financial reporting process, the internal control structure and disclosure controls and procedures on behalf of the Board.

Management is responsible for the preparation, presentation and integrity of Alto Ingredients’ financial statements; the appropriateness of the accounting principles and reporting policies that are used; and procedures designed to reasonably assure compliance with accounting standards, and applicable laws and regulations. Management is also responsible for the effectiveness of Alto Ingredients’ internal control over financial reporting, and reports to the Audit Committee on any deficiencies found.

Alto Ingredients’ independent registered public accounting firm, RSM US LLP, is responsible for performing an independent audit of Alto Ingredients’ consolidated financial statements in accordance with standards of the Public Company Accounting Oversight Board (United States) and, when required, expressing an opinion on the effectiveness of Alto Ingredients’ internal control over financial reporting. The Audit Committee is directly responsible for the selection, compensation, evaluation and oversight, and retention of Alto Ingredients’ independent registered public accounting firm, and evaluates its independence.

Under its written charter, the Audit Committee has the authority to conduct any investigation appropriate to fulfilling its responsibilities, has direct access to Alto Ingredients’ independent registered public accounting firm as well as any of Alto Ingredients’ employees, and may retain, at Alto Ingredients’ expense, special legal, accounting, or other experts or advisors it deems necessary in the performance of its duties, apart from counsel or advisors hired by management.

Audit Committee members are not acting as professional accountants or auditors, and their functions are not intended to duplicate or to certify the activities of management or Alto Ingredients’ independent registered public accounting firm. The Audit Committee serves a Board-level oversight role in which it provides advice, counsel, and direction to management and to the auditors on the basis of the information it receives, discussions with management and the auditors, and the experience of the Audit Committee’s members in business, financial, and accounting matters.

In accordance with Audit Committee policy and the requirements of law, the Audit Committee pre-approves all services to be provided by Alto Ingredients’ independent registered public accounting firm. Pre-approval includes audit services, audit-related services, tax services, and all other services.

The Audit Committee reviewed and discussed with management its assessment of and report on the effectiveness of Alto Ingredients’ internal control over financial reporting as of December 31, 2022, which it made based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework).

The Audit Committee reviewed and discussed the audited financial statements in Alto Ingredients’ Annual Report on Form 10-K for the fiscal year ended December 31, 2022 with management and RSM US LLP. The Audit Committee also discussed with RSM US LLP the matters required to be discussed by Auditing Standard No. 1301, “Communications with Audit Committees” issued by the Public Company Accounting Oversight Board. The Audit Committee has also discussed with RSM US LLP all other matters required to be discussed by the applicable requirements of the Public Company Accounting Oversight Board and the Securities and Exchange Commission. In addition, the Audit Committee obtained from RSM US LLP the written disclosures and the letter required by applicable requirements of the Public Company Accounting

Oversight Board regarding the independent accountants' communications with the Audit Committee concerning independence and discussed with RSM US LLP its independence from Alto Ingredients, Inc. and management.

The Audit Committee considered all non-audit services provided by RSM US LLP and determined that the provision of such services was compatible with maintaining such firm's audit independence.

Based on the reviews and discussions referred to above, as well as such other matters deemed relevant and appropriate by the Audit Committee, the Audit Committee recommended to the Board, and the Board approved, the inclusion of the audited financial statements referred to above in Alto Ingredients' Annual Report on Form 10-K for the fiscal year ended December 31, 2022 for filing with the Securities and Exchange Commission.

Respectfully submitted,
Audit Committee

Terry L. Stone, Chair
William L. Jones
Dianne S. Nury

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth information with respect to the beneficial ownership of our voting securities as of April 24, 2023, the date of the table, by:

- each of our named executive officers;
- each of our directors;
- all of our executive officers and directors as a group; and
- each person known by us to beneficially own more than 5% of the outstanding shares of any class of our voting capital stock.

Beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission and includes voting or investment power with respect to the securities. To our knowledge, except as indicated by footnote, and subject to community property laws where applicable, the persons named in the table below have sole voting and investment power with respect to all shares of common stock shown as beneficially owned by them. Shares of common stock underlying derivative securities, if any, that currently are exercisable or convertible or are scheduled to become exercisable or convertible for or into shares of common stock within 60 days after the date of the table are deemed to be outstanding in calculating the percentage ownership of each listed person or group but are not deemed to be outstanding as to any other person or group. Except as indicated by footnote, percentage of beneficial ownership is based on 76,105,690 shares of common stock and 926,942 shares of Series B Preferred Stock outstanding as of the date of the table.

Name and Address of Beneficial Owner ⁽¹⁾	Title of Class	Amount and Nature of Beneficial Ownership	Percent of Class
Michael D. Kandris	Common	930,530 ⁽²⁾	1.22%
Gilbert E. Nathan	Common	600,109 ⁽³⁾	*
Bryon T. McGregor	Common	487,456 ⁽⁴⁾	*
William L. Jones	Common	223,916 ⁽⁵⁾	*
	Series B Preferred	12,820	1.38%
James R. Sneed	Common	319,931 ⁽⁶⁾	*
Douglas L. Kieta	Common	192,912	*
Terry L. Stone	Common	179,958	*
Dianne S. Nury	Common	89,078	*
Auste M. Graham	Common	173,435	*
Maria G. Gray	Common	27,292	*
Black Rock, Inc.	Common	5,701,185 ⁽⁷⁾	7.49%
The Vanguard Group	Common	3,875,167 ⁽⁸⁾	5.09%
Neil M. Koehler	Common	1,168,058 ⁽⁹⁾	1.53%
	Series B Preferred	256,410	27.66%
Lyles United, LLC	Common	546,055 ⁽¹⁰⁾	*
	Series B Preferred	512,820	55.32%
SCF Investments LLC	Common	90,121 ⁽¹¹⁾	*
	Series B Preferred	85,180	9.19%
All executive officers and directors as a group (10 persons)	Common	3,224,617 ⁽¹²⁾	4.24%
	Series B Preferred	12,820	1.38%

* Less than 1.00%

(1) Messrs. Kandris, Nathan, Jones, Kieta and Stone, and Meses. Nury and Gray, are directors of Alto Ingredients, Inc. Messrs. Kandris, McGregor and Sneed, and Ms. Graham, are named executive officers of Alto Ingredients, Inc. The address of each of these persons is c/o Alto Ingredients, Inc., 1300 South Second Street, Pekin, Illinois 61554.

(2) Includes 31,746 shares of common stock underlying options.

(3) Includes 26,200 shares of common stock held by Mr. Nathan's spouse.

(4) Includes 31,746 shares of common stock underlying options.

(5) Amount represents 210,353 shares of common stock held by William L. Jones and Maurine Jones, husband and wife, as community property and 13,563 shares of common stock underlying our Series B Preferred Stock held by Mr. Jones.

(6) Includes 10,204 shares of common stock underlying options.

(7) The information with respect to Black Rock, Inc., including the information in this footnote, is based solely on the Schedule 13G filed with the Securities and Exchange Commission on January 31, 2023 by Black Rock, Inc. as the reporting person. Black Rock, Inc. beneficially owns 5,701,185 shares, holds sole voting power over 5,538,888 shares and holds sole dispositive power over 5,701,185 shares. The address of Black Rock, Inc. is 55 East 52nd Street, New York, New York 10055.

- (8) The information with respect to The Vanguard Group, including the information in this footnote, is based solely on the Schedule 13G filed with the Securities and Exchange Commission on February 9, 2023 by The Vanguard Group as the reporting person. The Vanguard Group beneficially owns 3,875,167 shares, holds shared voting power over 95,372 shares, holds sole dispositive power over 3,713,457 shares and shared dispositive power over 161,710 shares. The address of The Vanguard Group is 100 Vanguard Blvd., Malvern, Pennsylvania 19355.
- (9) Amount represents 896,775 shares of common stock held directly and 271,283 shares of common stock underlying our Series B Preferred Stock. The information with respect to Neil M. Koehler's shares of common stock held directly is based solely on our Proxy Statement filed with the Securities and Exchange Commission on April 27, 2021 as to which Mr. Koehler confirmed the number of shares of common stock set forth therein as held directly by him at that time.
- (10) Amount includes 542,567 shares of common stock underlying our Series B Preferred Stock. In addition, The Lyles Foundation holds 3,488 shares of common stock. The address of Lyles United, LLC is P.O. Box 4376, Fresno, California 93744-4376.
- (11) Amount represents shares of common stock underlying our Series B Preferred Stock. The address of SCF Investments LLC is c/o SC Fuels, 1800 West Katella Ave., Suite 400, Orange, California 92867.
- (12) Amount represents 3,137,358 shares of common stock held directly, 73,696 shares of common stock underlying options and 13,563 shares of common stock underlying our Series B Preferred Stock.

EQUITY COMPENSATION PLAN INFORMATION

The following table provides information about our common stock that may be issued upon the exercise of options, warrants and rights under our existing equity compensation plans as of December 31, 2022.

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans ⁽¹⁾⁽²⁾
Equity Compensation Plans Approved by Security Holders:			
2006 Stock Incentive Plan ⁽¹⁾	73,696	\$ 3.74	—
2016 Stock Incentive Plan	—	\$ —	2,178,882

- (1) Our 2006 Stock Incentive Plan terminated on July 19, 2016, except to the extent of unvested shares of our restricted common stock and options to purchase shares of our common stock outstanding as of that date.
- (2) Excludes an additional 2,500,000 shares of common stock available for future issuance upon approval by our stockholders of an amendment to the 2016 Plan. The amendment is included as Proposal Three of this Proxy Statement.

EXECUTIVE COMPENSATION AND RELATED INFORMATION

Executive Officers

The following table sets forth certain information regarding our named executive officers as of April 24, 2023:

Name	Age	Position(s) Held
Michael D. Kandris	75	President, Chief Executive Officer, Chief Operating Officer and Director
Bryon T. McGregor	59	Chief Financial Officer
Auste M. Graham	43	General Counsel, Vice President and Secretary
James R. Sneed	56	Vice President and Chief Commercial Officer
Christopher W. Wright	70	Former Senior Vice President, General Counsel and Secretary

Michael D. Kandris has served as a director since June 2008, as our sole President and Chief Executive Officer since September 2020 and as our Chief Operating Officer since January 6, 2013. Mr. Kandris was appointed as our Co-President and Co-Chief Executive Officer in May 2020. Mr. Kandris served as an independent contractor with supervisory responsibility for plant operations from January 1, 2012 to January 5, 2013. Mr. Kandris was President of the Western Division of Ruan Transportation Management Systems from November 2008 until his retirement in September 2009. From January 2000 to November 2008, Mr. Kandris served as President and Chief Operating Officer of Ruan Transportation Management Systems, where he had overall responsibility for all operations, finance and administrative functions. Mr. Kandris has 30 years of experience in all modes of transportation and logistics, and 11 years managing our operations, including as our Chief Operating Officer. Mr. Kandris served on the Executive Committee of the American Trucking Association and as a board member for the National Tank Truck Organization until his retirement from Ruan Transportation Management Systems in September 2009. Mr. Kandris has a B.S. degree in Business from California State University, Hayward.

Bryon T. McGregor has served as our Chief Financial Officer since November 19, 2009. Mr. McGregor served as Vice President, Finance at Alto Ingredients from September 2008 until he became Interim Chief Financial Officer in April 2009. Prior to joining Alto Ingredients, Mr. McGregor was employed as Senior Director for E*TRADE Financial from February 2002 to August 2008, serving in various capacities including International Treasurer based in London, England from 2006 to 2008, Brokerage Treasurer and Director from 2003 to 2006 and Assistant Treasurer and Director of Finance and Investor Relations from 2002 to 2003. Prior to joining E*TRADE, Mr. McGregor served as Manager of Finance and Head of Project Finance for BP (formerly Atlantic Richfield Company – ARCO) from 1998 to 2001. Mr. McGregor has extensive experience in banking and served as a Director of International Project Finance for Credit Suisse from 1992 to 1998, as Assistant Vice President for Sumitomo Mitsubishi Banking Corp (formerly The Sumitomo Bank Limited) from 1989 to 1992, and as Commercial Banking Officer for Bank of America from 1987 to 1989. Mr. McGregor has a B.S. degree in Business Management from Brigham Young University.

Auste M. Graham has served as General Counsel, Vice President and Secretary since February 2022. Prior to joining Alto Ingredients, Ms. Graham was employed as Vice President, Legal for Essentra plc, a packaging, components and filters manufacturer headquartered in the U.K., where she was responsible for all legal affairs in the Americas from January 2018 to February 2022. Prior to joining Essentra plc, Ms. Graham served as Senior Legal Counsel in the U.S. for AkzoNobel, a global paints, coatings and special chemicals company headquartered in the Netherlands, from 2015 to 2018. Ms. Graham began her career at Schiff Hardin LLP, where she provided general

James R. Sneed has served as a Vice President since September 2012. Mr. Sneed has worked for over 20 years in various senior management and executive positions in the alcohol production industry. Prior to joining Alto Ingredients in 2012, Mr. Sneed was employed by Hawkeye Gold, LLC from April 2010 to September 2012, ultimately serving as Vice President – Ethanol Marketing and Trading. Prior to that time, from May 2003 to April 2010, Mr. Sneed was employed by Aventine Renewable Energy, an ethanol production and marketing company, where he helped build its operations from two ethanol plants in two states to marketing for fifteen production facilities in eight states, ultimately serving as Vice President, Marketing and Logistics. Mr. Sneed is a Certified Public Accountant, has a B.S. degree in Accounting from Olivet Nazarene University, and has an MBA degree from Northwestern University, Kellogg School of Management.

Christopher W. Wright served as Vice President, General Counsel and Secretary from June 2006 until stepping down from his position as General Counsel and Secretary in February 2022 in anticipation of his retirement. Mr. Wright then served as our Senior Vice President until his retirement in May 2022. Thereafter, and through the filing of this Proxy Statement, Mr. Wright has served as a consultant to us. From April 2004 until he joined Alto Ingredients in June 2006, Mr. Wright operated an independent consulting practice, advising companies on complex transactions, including acquisitions and financings. Prior to that time, from January 2003 to April 2004, Mr. Wright was a partner with Orrick, Herrington & Sutcliffe, LLP, and from July 1998 to December 2002, Mr. Wright was a partner with Cooley Godward LLP, where he served as Partner-in-Charge of the Pacific Northwest office. Mr. Wright has extensive experience advising boards of directors on compliance, securities matters and strategic transactions, with a particular focus on guiding the development of rapidly growing companies. He has acted as general counsel for numerous technology enterprises in all aspects of corporate development, including fund-raising, business and technology acquisitions, mergers and strategic alliances. Mr. Wright has an A.B. degree in History from Yale College and a J.D. from the University of Chicago Law School.

Family Relationships

Our officers are appointed by and serve at the discretion of our Board. There are no family relationships among our executive officers and directors.

Compensation Discussion and Analysis

In this section, we explain the material elements of our executive compensation program for our Chief Executive Officer and our other named executive officers, or NEOs, identified below whose compensation is in the executive compensation tables beginning with the “Summary Compensation Table” below.

- **Michael D. Kandris**, *President, Chief Executive Officer and Chief Operating Officer*
- **Bryon T. McGregor**, *Chief Financial Officer*
- **Auste M. Graham**, *General Counsel, Vice President and Secretary*
- **James R. Sneed**, *Vice President and Chief Commercial Officer*
- **Christopher W. Wright**, *Former Senior Vice President, General Counsel and Secretary*

The executive compensation tables provide additional important information regarding the compensation and benefits awarded to, earned by or paid to our NEOs over our last three fiscal years, as well as the compensation program in which our NEOs are eligible to participate. You should read that section in conjunction with this section.

The Compensation Committee of our Board administers our executive compensation program. Each member of the Compensation Committee is “independent” under applicable Nasdaq listing standards, is an “outside director” within the meaning of Internal Revenue Code (“Code”) Section 162(m) and is a non-employee director within the meaning of Section 16 of the Exchange Act.

Executive Summary

Our executive compensation program is intended to achieve the following objectives:

- attract, retain, motivate and reward key executive officers responsible for our success;
- align and strengthen the mutuality of interests of our executive officers, our company and our stockholders;
- deliver compensation that reflects our financial and operational performance, while providing the opportunity to earn above-targeted total compensation for exceptional performance; and
- provide total compensation to each executive officer that is internally equitable, competitive, and influenced by company and individual performance.

We believe that our success depends in large part on our ability to attract, retain and motivate qualified executives through competitive compensation arrangements. We also believe that the compensation paid to our executive officers should be influenced by the value we create for our stockholders. For these reasons, our Compensation Committee believes that our compensation program should provide incentives to attain both short- and long-term financial and other business objectives and reward those executive officers who contribute meaningfully to attaining those objectives. The Compensation Committee supports a pay-for-performance philosophy within a compensation structure that is competitive, internally equitable and responsible.

Our executive compensation program consists of three primary elements:

- base salary;
- annual performance-based cash incentive compensation; and

- long-term equity incentive compensation.

2022 Business Highlights

Our base salary, annual performance-based cash incentive compensation and long-term equity incentive compensation decisions for 2022 described in this Executive Compensation section were made in March 2022 and 2023. Although we experienced a challenging commodity price environment throughout most of the year, and particularly in the second half of 2022, during the year we achieved significant progress towards our strategic and other business objectives. Highlights of 2022 include:

- *Secured capital to significantly expand and accelerate our strategic initiatives.* We secured debt financing for up to \$125 million to accelerate funding of our diversification growth strategies, including carbon capture sequestration, additional corn oil production, protein and yeast product expansion, and renewable natural gas and natural gas pipeline installations. This financing will facilitate, without the need to rely solely on our cash flow from operations, the simultaneous undertaking and timely completion of larger capital projects with a greater cost-benefit return to all stakeholders through a more stable business. We expect these projects, when complete, to contribute significantly to our revenues and net income and to help insulate our results of operations from commodity price and margin volatility.
- *Executed on numerous plant improvement initiatives.* We advanced our plant improvement initiatives to optimize our production and generate meaningful returns. Among other projects, we:
 - o *Advanced our plans for carbon capture and sequestration at our Pekin campus.* The outlook for carbon capture and sequestration at our Pekin campus, which has an annual capacity of approximately 700,000 metric tons of carbon dioxide, improved markedly under the Inflation Reduction Act of 2022. We progressed to advanced negotiations with third parties to provide turnkey transportation, sequestration and monitoring services for the project. In addition, we advanced to the final stages of selecting engineering services for the design and installation of equipment and technologies to meet the capture, compression and energy requirements of the project. By sequestering the carbon dioxide from our Pekin campus, which accounts for approximately 70% of our biogenic carbon dioxide generated from fermentation, we expect to materially reduce our carbon footprint enabling us to monetize additional value from the alcohol and essential ingredients we produce.
 - o *Installed enhanced protein and corn oil extraction technologies.* We installed Harvesting Technology's patented CoPromax™ system at our Magic Valley plant to extract corn oil and produce enhanced protein. Once the system is fully operational and tested, we will evaluate additional deployments at our other plants.
 - o *Upgraded our GNS system.* We further upgraded our grain neutral spirits, or GNS, distillation system at our Pekin campus wet mill to produce the highest quality beverage-grade product available on the market. With these improvements, we are introducing new high-quality 190 proof and low-moisture 200-proof GNS products to our existing and target customers in the beverage, food, flavor, personal care and pharmaceutical industries.
 - o *Doubled corn storage capacity at our Pekin campus.* We installed a new silo and related equipment to double our corn storage capacity at our Pekin campus to increase our corn-buying flexibility and reduce the need to purchase product at premium prices when farmers and elevators are less inclined to ship corn, including during holidays, unfavorable weather conditions, or due to supply chain and other logistical constraints. In addition to reducing the cost of delivered corn, this new storage capacity will lower the cost of silo cleaning and increase our operating reliability at the site.

-
- o *Installed new boilers at our Pekin campus.* We purchased and installed two new state-of-the-art boilers to enhance our steam capabilities and increase interconnectivity among our Pekin campus facilities. This increased capacity will allow us to replace three older boiler units. Our new boiler system is more reliable and efficient, resulting in lower energy use and costs. Additional redundancy from the new boilers will also increase our control of process steam across our Pekin campus.
 - o *Made significant progress in our plans to install a natural gas pipeline at our Pekin campus.* We made significant progress in planning the installation of a new natural gas pipeline to bypass our current utility at our Pekin campus. The line would help fulfill our increased energy needs associated with our numerous growth initiatives, including primary yeast production and carbon capture and sequestration. The new gas pipeline would also lower our carbon score. We currently produce approximately 250,000 MMBTUs annually in biogas, enough energy to heat 2,300 homes for a full year. Presently, most of our biogas is flared. We believe that once converted to renewable natural gas, we could use the natural gas pipeline to monetize the value of this current waste stream and produce renewable natural gas.
 - *Successfully acquired and integrated Eagle Alcohol Company LLC.* We successfully acquired and integrated Eagle Alcohol Company LLC, an established leader in premium alcohol distribution. Eagle Alcohol specializes in break bulk distribution of specialty alcohols. The company purchases bulk alcohol from suppliers and then stores, denatures, packages, and resells alcohol products in smaller sizes, including tank trucks, totes and drums, that typically garner a premium price to bulk alcohols. Eagle Alcohol delivers products to customers in the beverage, food, industrial and related-process industries via its own dedicated trucking fleet and common carrier.
 - *Developed and executed on multiple ESG initiatives.* We developed and executed on multiple ESG initiatives, including to improve Board and committee diversity; evaluate and update our committee and other charters; constitute an ESG Board committee and working group; identify ESG risks and opportunities; provide trending and reporting to better target key performance indicators that yield the most impactful benefits to energy, emissions and waste; implement an annual ESG strategy and risk assessment for each of our facilities; compile Scope 1 and 2 emissions data for 2021 and 2022 at all production facilities, including engaging a third-party engineering team to complete verification for both years; improve the diversity of our workforce; increase Board and management reporting for environmental, health and safety; conduct an employee engagement survey and execute department action plans; and revise and implement comprehensive employee training programs that included environmental, health, safety and quality components. See "Environmental, Social and Governance" above.

As a result of our financial performance and other factors discussed under "Compensation Decisions for 2022" below and elsewhere in this Executive Compensation and Related Information section, total actual direct compensation for 2022 as compared to 2021—which includes actual base salary, annual performance-based cash incentive compensation and long-term equity incentive compensation—declined by approximately 21% for Michael D. Kandris, our President, Chief Executive Officer and Chief Operating Officer; declined by approximately 21% for Bryon T. McGregor, our Chief Financial Officer; did not change for Auste M. Graham, our General Counsel, Vice President and Secretary, as she first joined us in February 2022; and declined by approximately 24% for James R. Sneed, our Vice President and Chief Commercial Officer. Christopher W. Wright retired and his employment relationship with us was terminated in May 2022, but he continued on in a consultant capacity for the remainder of the

These declines reflect a challenging business environment and our financial performance in 2022 compared to our strong financial performance in 2021.

The 2022 compensation information in this Proxy Statement includes actual results for 2022 under our performance-based annual cash incentive compensation plan. Our annual cash incentive compensation plan payouts were determined and made in or about March 2023. No payouts were made in respect of the financial performance element of our annual cash incentive compensation plan because our Adjusted EBITDA of negative \$9,760,000 fell below the payout threshold for 2022 of positive Adjusted EBITDA of \$27,000,000. Our NEOs performed well, however, in their execution of a number of strategic and other initiatives in 2022, as noted in the 2022 business highlights summarized above, and consequently, our NEOs each received maximum payouts under the individual performance element of the plan.

Compensation Philosophy and Objectives

Our compensation philosophy and objectives are to align the interests of our executive officers with those of our stockholders and incentivize our executive officers to attain our short- and long-term financial and other business goals. We also seek to ensure that our executive compensation structure and total compensation is fair, reasonable and competitive in the marketplace so that we can attract and retain superior personnel in key positions. In addition, we endeavor to provide an executive compensation structure and total compensation that are internally equitable based upon each executive officer's role and responsibilities. Our Compensation Committee seeks to make executive compensation decisions that embody this philosophy and that are directed towards attaining these objectives.

In implementing our compensation philosophy and objectives, our Compensation Committee reviews and analyzes each executive position, including the importance and scope of the role and how the position compares to other Alto Ingredients executive officers and personnel. Our Compensation Committee also compares these positions to similar positions at organizations from across the United States, including organizations engaged in the chemicals, light and heavy manufacturing, and construction and materials industries, as further described below under "Benchmarking." In addition, our Compensation Committee draws from other compensation-related market data. This information helps provide our Compensation Committee with an understanding of how total compensation for each executive officer relates to the value of his or her position.

We believe that structuring our executive officer compensation program to align the interests of our executive officers with our interests and those of our stockholders, and properly incentivizing our executive officers to attain our short- and long-term business goals, best serves the interests of our stockholders and creates stockholder value. We believe this occurs through motivating our executive officers to attain our short- and long-term business goals and retaining these executive officers by providing compensation opportunities that are competitive in the marketplace and internally equitable. We also endeavor to design our executive compensation program so that it is not reasonably likely to materially and adversely affect us, as discussed in more detail in "Compensation Risk Analysis" below. We intend that total compensation paid or available to our executive officers, including base salary, annual cash incentive compensation and any special discretionary bonuses, long-term equity incentive compensation and benefits, is consistent with our compensation philosophy and objectives described above.

Compensation Governance Practices

Below we highlight various executive compensation governance practices intended to align the interests of our executive officers with those of our stockholders, incentivize the attainment of our short- and long-term business objectives, and attract and retain superior employees in key positions.

- *Pay-for-performance.* We tie a substantial portion of pay to company and individual performance. We structure total compensation with significant annual cash incentives and a long-term equity component, thereby making a substantial portion of each NEO's targeted total compensation dependent upon company and individual performance as well as the performance of our stock price.
- *Retention through long-term equity awards.* We employ long-term equity awards through grants of restricted stock that vest in the future. These equity awards are designed to aid in our retention of key personnel in important positions and align the interests of our executive officers with those of our stockholders.
- *Long and minimum vesting periods.* Our equity awards to our NEOs generally vest in annual installments over a three-year period and with an initial minimum vesting period of one year.
- *Executive stock holding policy.* We have adopted an executive stock holding policy to better align executive compensation with our long-term interests and those of our stockholders and to address the time horizon of risks.
- *Linkage of annual cash incentive compensation plan to company performance.* Our annual cash incentive compensation plan links a majority of targeted and potential payouts to our financial performance. The 2022 financial performance measure for the compensation pool for our annual incentive compensation plan was Adjusted EBITDA, which we weighted at 80% for our NEOs. The 2022 non-financial performance measure for funding the compensation pool of this incentive compensation plan was individual performance measured against pre-established goals, which we weighted at 20% for our NEOs.
- *Perquisites.* We do not currently offer our NEOs any significant perquisites, other than certain travel perquisites or those offered to our employees generally. Our executive officers are not guaranteed any retirement or pension benefits or any non-qualified deferred compensation plans. Instead, we offer our NEOs the opportunity to accumulate assets through their equity awards and the appreciation of their equity awards and offer the opportunity to participate in our 401(k) plan and a health savings account plan on the same basis as our other employees.
- *Independent compensation consultant.* Our independent compensation consultant, Korn Ferry, is retained directly by our Compensation Committee.
- *No short selling, pledging or hedging.* Our insider trading policy prohibits all employees, officers and directors from engaging in any short sale of Alto Ingredients securities, as well as any transaction involving puts, calls, collars, forward sales contracts, warrants or other options on Alto Ingredients securities. Additionally, our executive officers are restricted from pledging Alto Ingredients securities as collateral for a loan.
- *No option re-pricing.* Our 2016 Plan does not permit options or stock appreciation rights to be repriced to a lower exercise price without the approval of our stockholders, except in connection with certain changes to our capital structure.

- *Clawback policy.* If we are required to restate our financial statements, regardless of cause, including, without limitation, due to: (i) material noncompliance with any financial reporting requirements under the federal securities laws; (ii) an error, miscalculation or omission; or (iii) the commission of an act of fraud or other misconduct, including dishonesty, unethical conduct or falsification of our records, then our Compensation Committee is required to recoup incentive compensation, including any cash or equity incentive compensation, awarded or paid to any executive officer, including any NEO, during at least a three-year recoupment period. See “Summary Compensation Table—Clawback Policy” below.

Executive Compensation Program and Processes

Participants

Compensation Committee

Our Compensation Committee, with input from our management and one or more independent compensation consultants, establishes, updates and administers our executive compensation program. Our Compensation Committee establishes our compensation philosophy and objectives; oversees the design and administration of our executive compensation program; establishes the elements and mix of total compensation; sets the parameters and specific target metrics of our performance-based incentive compensation plan; and determines the target compensation of our executive officers.

Our Compensation Committee has the authority to retain independent counsel, advisors and other experts to assist it in the compensation-setting process and receives adequate funding to engage those service providers.

Independent Compensation Consultant

In 2013, following a competitive request for proposal from three different compensation consultants, our Compensation Committee retained Korn Ferry as its independent advisor for its compensation review. Korn Ferry was selected based on its expertise and skilled team dedicated to meet the needs of our Compensation Committee and its experience with alcohol production and other companies closely tied to agriculture and commodity businesses. Our Compensation Committee reengaged Korn Ferry as its independent advisor in subsequent years, with the latest engagement occurring in 2021.

Korn Ferry furnishes independent data, market analyses and advice to our Compensation Committee concerning executive compensation, including regarding the competitiveness of compensation plan design and evolving executive compensation trends and practices. Korn Ferry is available to attend and participate in Compensation Committee meetings from time to time as and when requested by our Compensation Committee. Korn Ferry also advises our Compensation Committee on the principal aspects of our executive compensation program, including the implementation of our compensation philosophy and objectives, and specific elements of executive compensation.

50

In evaluating Korn Ferry’s independence, our Compensation Committee considered multiple factors. In particular, our Compensation Committee reviewed all services Korn Ferry provided to Alto Ingredients since our business relationship commenced. These services included consulting services and market benchmarking to help us determine appropriate compensation for our NEOs as well as certain non-NEO personnel, including our non-employee directors. Korn Ferry’s services also included dilution modeling for our equity incentive plan and advice concerning our long-term equity incentive compensation. The fees for these consulting services were not segregated between consulting services in respect of NEO compensation and consulting services in respect of non-NEO personnel compensation. In total, fees paid to Korn Ferry for services rendered to help us determine appropriate compensation for 2020-2021 were approximately \$41,000. We had no such expenses for 2022. We did not engage Korn Ferry, and no fees were paid to Korn Ferry, in respect of any services other than Korn Ferry’s work with our Compensation Committee and management to help us determine appropriate compensation for 2020 through 2022 for our NEOs and certain non-NEO personnel, including our non-employee directors. In evaluating Korn Ferry’s independence, our Compensation Committee also considered Korn Ferry’s internal mechanisms and policies to ensure Korn Ferry’s ability to provide objective advice, including that:

- Korn Ferry is hired by the Compensation Committee and reports directly to the Compensation Committee; and
- Korn Ferry has a broad base of clients, which reduces its reliance on any specific account for achieving its business goals.

Korn Ferry also represented to the Compensation Committee that there are no personal or business relationships between the Korn Ferry account manager and any member of the Compensation Committee or any NEO beyond the Alto Ingredients relationship. Further, the Korn Ferry account manager does not directly own any Alto Ingredients shares (although some of the account manager’s investments controlled solely by independent, third-party managers may own Alto Ingredients shares by way of indexed funds). Based on the above and other factors, including the factors set forth under Rule 10C-1 of the Exchange Act, the Compensation Committee assessed Korn Ferry’s independence and concluded that no conflict of interest exists that would prevent Korn Ferry from independently advising the Compensation Committee.

Management

Our Chief Executive Officer and other executive officers attend Compensation Committee meetings as requested by the Compensation Committee. These individuals are not present during executive sessions of Compensation Committee meetings except at the invitation of the Compensation Committee. Our Vice President of Human Resources, under the direction of our Chief Executive Officer, leads our management in preparing recommendations on executive and employee compensation requested by the Compensation Committee.

Benchmarking

Our Compensation Committee benchmarks the total compensation of our NEOs using compensation market data as a reference to assist it in understanding the competitive pay positioning of total compensation and each element of compensation. Our Compensation Committee reviews compensation for each executive officer in relation to the 25th, 50th and 75th percentiles of the compensation market data that, along with other factors, provides context for executive pay decisions. Korn Ferry provided, for comparative purposes, compensation data from surveys of third parties that includes information from United States industrial companies, including organizations engaged in the chemicals, light and heavy manufacturing, and construction and materials industries. We have included in [Appendix B](#) to this Proxy Statement the companies included in the survey data.

51

Other Factors Considered in Setting Compensation

In addition to a review of our competitive market position, our Compensation Committee also considered several other important factors in setting executive compensation for 2022, including company performance, such as progress towards our strategic and other business objectives; internal pay equity considerations; the experience and responsibilities of each NEO; budget constraints; market conditions; and individual performance, including individual contributions to company achievements.

As part of the 2022 compensation-setting process for our NEOs, our Compensation Committee also reviewed “tally sheets” comprised of spreadsheets and tabular information that indicated the dollar amount of each component of compensation, including current and proposed base salaries, the proposed actual cash incentives to be paid for the prior year and the targeted cash incentives for the current year, and current projected values for the proposed equity-based awards based on stock price assumptions. The purpose of those tally sheets was to provide our Compensation Committee with a comprehensive snapshot of both the actual compensation provided to our executive officers and the potential compensation that could result from the various components of their proposed 2022 compensation packages. The Compensation Committee did not consider the potential payments under our severance and change-in-control arrangements as the Compensation Committee sought to maintain the appropriate incentives with regard to transactions that might result in severance and change-in-control payments. See “Other Policies and Factors Affecting Executive Officer Compensation—Severance and Change-in-Control Arrangements” below.

The Role of Stockholder Say-on-Pay Votes

We provide our stockholders with the opportunity to cast an advisory vote on the compensation of our NEOs each year. Our 2022 “say-on-pay” proposal received approximately 51% support. The Compensation Committee and the full Board took this vote outcome very seriously and, as a result, was highly focused on gathering and responding to our stockholders’ feedback regarding our executive compensation programs. Beginning in the fall of 2022, we conducted a stockholder engagement outreach program led by our engagement team that included the Chair of our Compensation Committee, General Counsel, Vice President of Human Resources, and Vice President and Treasurer. Since commencing our engagement, we contacted approximately 25 of our largest stockholders representing approximately 43% of outstanding shares of common stock and met with all three responding stockholders representing approximately 10% of our outstanding shares (in each case, based on stockholder data as of December 31, 2022). Key topics discussed during those meetings included, among others, executive compensation, Board composition, and ESG matters. Several attempts were made to obtain an audience with other large stockholders, but our meeting requests were declined. As part of our stockholder outreach efforts, we also engaged Institutional Shareholder Services Inc. (ISS) and Alliance Advisors, LLC to assist us in addressing a multitude of issues important to our stockholders.

While the primary focus of engagement was to gain stockholders’ perspectives on our executive compensation program, we also discussed topics including responsiveness to stockholder feedback, director evaluations and Board composition, and our ESG program.

We expressed to our stockholders that we are open to and appreciate candid feedback on not only compensation, but all aspects of our corporate governance.

Below is a summary of stockholder feedback we received that influenced our 2022 say-on-pay vote results and other items we discussed with our stockholders. This summary table also highlights the actions that our Compensation Committee intends to take in response to the feedback we received.

What We Heard

Responsiveness

Some of our stockholders voiced concerns about our failure to respond to the 2021 “say-on-pay” proposal vote which received a 68% favorable vote.

Long-Term Equity Incentive Compensation (LTI)

Some of our stockholders expressed concern that some portion of our LTI program for our NEOs was not tied to a performance metric.

Transparency of changes to our executive compensation program

Some stockholders expressed a desire to see an explanation of changes made to our executive compensation program.

Board evaluation and assessment

Some stockholders inquired about our Board evaluation process, including the substantive process and frequency.

Board composition

Some stockholders stressed that directors should provide value to our company, and in turn, to stockholders, and that we should consider the composition of our Board based on the value provided by our directors.

How We Will Address

While we regularly engage investors by participating in investor conferences, we ramped up our stockholder outreach program in the fall of 2022 to strengthen lines of communication with our stockholders and better understand their concerns regarding our executive compensation program and other matters. We will continue to engage with our stockholders on a regular basis throughout the year to ensure that we are made aware of stockholder concerns and work to address them.

Our Compensation Committee is reviewing its LTI program and considering potential performance metrics to tie some portion of our LTI compensation to NEO performance. Given the timing of our shareholder engagement calls, our Compensation Committee was unable to complete its review of our LTI program prior to the filing of this Proxy Statement. However, our Compensation Committee intends to incorporate performance metrics as to some portion of our LTI program for NEOs, targeting the implementation of one or more performance metrics in 2024.

We have recently implemented an executive stock holding policy requiring our executive officers to hold for 12 months after vesting any net shares of our common stock received as equity incentive compensation.

Going forward, we will summarize significant changes to our executive compensation program and explain how and why we make such changes.

We provided an overview of our Board evaluation process to the stockholders with whom we engaged during our outreach process. Our Nominating and Corporate Governance Committee annually assesses our directors. The results of our director self-evaluation and peer evaluations are taken into consideration to determine the proposed slate of directors for each annual stockholder meeting. The charter of our Nominating and Corporate Governance Committee can be found here: <https://ir.altoingredients.com/corporate-governance/governance-documents>. Information on our website is not, and shall not be deemed to be, a part of this Proxy Statement or incorporated into any other filings we make with the Securities and Exchange Commission.

We take the questions and concerns regarding director contribution seriously. As part of our annual assessment of directors, we review the skills, experience, background, and personal characteristics of our directors. Our objective is to ensure that our directors collectively provide relevant guidance on our corporate governance and strategy.

In addition to experience and well-suited qualifications, we value diversity and Board refreshment. In June 2022, we refreshed the Board through one director retirement and the election of a new director who brought age, gender and racial diversity to the Board. With her election, our Board increased its diversity such that more than 25% of our Board is diverse. We anticipate that at the conclusion of our Annual Meeting, 40% of our Board will be diverse.

We believe that every member of the Board should be a significant contributor. Based on stockholder concerns regarding director contributions and our subsequent analysis of our future needs, we nominated five directors for election to our Board based on their contributions and will commensurately reduce the size of our Board at the conclusion of our Annual Meeting.

We continue to focus on progressing our ESG initiatives. We made great strides over the past year and we are on target to issue a sustainability tear-sheet in 2023. See “Environmental, Social and Governance” above.

ESG initiative

Some of our stockholders have commended our ESG efforts and expressed the importance of seeing a comprehensive ESG program.

In keeping with the approval of our proposal at our 2019 annual meeting to submit “say-on-pay” advisory proposals to our stockholders annually, we will continue to do so for the foreseeable future and our Compensation Committee will continue to consider the results of future “say-on-pay” advisory votes in its ongoing evaluation of our compensation program and practices.

Our Compensation Committee and our full Board value input from our stockholders. We will continue to carefully consider the results of our “say-on-pay” vote and seek direct feedback from our stockholders.

Risk Considerations

As discussed in “Compensation Risk Analysis” below, the Compensation Committee reviews our compensation program annually and for 2022 concluded that this program did not create risks that are reasonably likely to have a material adverse effect on us.

Elements of Compensation

Our executive compensation program is comprised of three principal elements designed to operate together as part of an integrated compensation package to further our compensation objectives. The three principal elements of our executive compensation program are:

- cash compensation in the form of base salary;
- annual cash incentive compensation; and
- long-term equity incentive compensation.

In addition, our executive compensation program also includes indirect compensation in the form of standard employee benefits, limited perquisites and other executive benefits, and severance and change-in-control benefits. Our executive compensation program also allows for special discretionary cash or equity awards to address specific individual or other circumstances not fully addressed by the three principal elements of our executive compensation program.

In making compensation decisions, our Compensation Committee exercises its judgment on the overall level of compensation provided by this total compensation package as well as the mix of the three principal elements of compensation.

Base Salary

Our Compensation Committee reviews the base salary levels of our executive officers annually and makes such adjustments as it deems appropriate after considering the officer’s level and scope of responsibility and experience, company and individual performance, competitive market data, and internal pay equity considerations.

Annual Cash Incentive Compensation

Annual cash incentive compensation for key employees, including our NEOs, consists of cash awards under our short-term incentive plan. We have an annual cash incentive compensation plan applicable to all NEOs. Participants are eligible for annual cash incentive compensation based upon the attainment of pre-established goals. Awards under the plan are based on two elements: company financial performance and the NEO’s individual performance. Our Compensation Committee believes that these elements will best incentivize our NEOs to attain our short- and long-term financial and other business goals. The 2022 payout structure under our annual cash incentive compensation plan for our NEOs is set forth below:

Target (\$)	x	Performance Factor	=	Overall Payout
<ul style="list-style-type: none"> • Target \$ = % of base salary • NEO Target %: <ul style="list-style-type: none"> ➢ CEO: 70% ➢ Other NEOs: 50% 		<ul style="list-style-type: none"> • Financial performance: <ul style="list-style-type: none"> ➢ 80% weight ➢ Min/max payout for Adjusted EBITDA: 0%/200% of target • Individual performance: <ul style="list-style-type: none"> ➢ 20% weight ➢ Min/max payout: 0%/100% of target 		<ul style="list-style-type: none"> • Minimum payout: 0% of target • Target Payout: 100% of target • Maximum payout: 180% of target

Our Compensation Committee selected our annual cash incentive compensation plan as the vehicle for cash incentive compensation for 2022 for our executive officers because the Compensation Committee believes the plan properly incentivizes our executive officers by focusing primarily on our financial performance, as further discussed below, while allowing awards to reflect other important factors, including an executive officer's individual performance and accomplishments.

Financial Performance

We have an annual cash incentive compensation plan applicable to all NEOs. Our annual cash incentive compensation plan uses our Adjusted EBITDA as its sole financial performance element and is based on an Adjusted EBITDA goal established by our Compensation Committee. The Compensation Committee expects to change the numerical Adjusted EBITDA goal from year to year and may include financial performance measures other than Adjusted EBITDA in future years.

The Compensation Committee selected the Adjusted EBITDA metric because it believes that earnings before interest income/expense, provision/benefit for income taxes, and depreciation and amortization, or EBITDA, is an industry-accepted measure of overall financial performance and demonstrates our financial performance and ability to reinvest in our business. The Compensation Committee departed from the standard EBITDA metric because it believes Adjusted EBITDA better reflects Alto Ingredients' financial performance on a year-over-year basis by excluding non-recurring, non-cash charges or gains from asset impairments, loss on extinguishment of debt, acquisition-related expense and fair value adjustments. Use of the Adjusted EBITDA metric also allowed the Compensation Committee to incentivize our executive officers to focus on factors over which they can exert control, such as attaining higher margins through managing production volumes relative to both specialty alcohol and essential ingredient sales prices and production input costs, increasing production efficiencies, and controlling operating costs such as selling, general and administrative expenses, all of which impact Adjusted EBITDA. The Compensation Committee also desired to omit from the financial performance metric factors over which the executive officers have less control and which it viewed as less relevant to measuring year-over-year financial performance, such as recurring interest income/expense and taxes as well as non-cash charges or gains from depreciation and amortization, asset impairments, loss on extinguishment of debt, acquisition-related expense and fair value adjustments.

The financial performance element for 2022 was weighted at 80% and was the most heavily weighted element. This element was assigned the highest weighting because the principal purpose of our annual cash incentive compensation plan is to motivate and reward participants for achieving our financial goals, while allowing significantly higher payouts for 2022 of up to 200% of the targeted payout amount for financial outperformance, and to align participant and stockholder interests.

Individual Performance

The individual performance element for 2022 was weighted at 20% and is based on individual participant goals formulated with reference to quantitative criteria and subjective elements established by each participant's supervisor, in consultation with our executive committee. The extent to which a participant is deemed to have achieved his or her individual performance goals is determined by our executive committee in consultation with the participant's supervisor. However, the extent to which a participant who is an executive officer (other than our Chief Executive Officer) is deemed to have achieved his or her individual performance goals is recommended by our Chief Executive Officer but ultimately determined by our Compensation Committee. Payout under the individual performance element is in the discretion of the Compensation Committee and could range from 0% to 100% of the participant's targeted payout amount; provided, that the Compensation Committee retained discretion to grant a payout in excess of 100% of a participant's targeted payout amount for his or her individual performance if the total amount granted to all participants for their individual performances did not exceed the total targeted payout amount for all participants for their individual performances.

Long-Term Equity Incentive Compensation

Long-term equity incentive compensation for key employees, including our NEOs, generally consists of awards of restricted stock under our equity incentive plans. Although we have granted stock options in the past, awards under our equity incentive plans have primarily been in the form of restricted stock grants as a means of providing long-term equity incentive compensation. We believe that shares of restricted stock are less subject to market volatility than stock options and therefore offer a more balanced and competitive equity compensation arrangement.

In light of feedback received from our stockholders, our Compensation Committee is reviewing our long-term equity incentive compensation program and considering potential performance metrics to tie some portion of our long-term equity incentive compensation to NEO performance. Given the timing of our shareholder engagement, our Compensation Committee was unable to complete its review of our long-term equity incentive compensation program prior to the filing of this Proxy Statement. However, our Compensation Committee intends to incorporate performance metrics as to some portion of our long-term equity incentive compensation program for NEOs, targeting the implementation of one or more performance metrics in 2024.

The Compensation Committee approves equity awards for our NEOs in connection with the annual review of their individual performance and overall compensation. The annual awards are typically made near the end of the first quarter and represent the majority of the shares granted for the year under our long-term equity incentive compensation program. Each award is designed primarily as a retention tool, typically requiring the executive to remain with Alto Ingredients for at least one year to receive the benefit of one-third of the award on partial vesting and at least three years to receive the full benefit of the award on full vesting. We believe our equity incentive compensation aligns the interests of our NEOs with those of our stockholders and provides each NEO with a significant incentive to manage our company from the perspective of an owner with an equity stake in the business by tying significant portions of the recipients' compensation to the market price of our common stock.

Awards of restricted stock typically vest annually over a three-year period of continued service measured from the grant date. Each award of restricted stock will provide a return to the NEO only to the extent he or she remains employed with us during the partial or full vesting period.

In making long-term equity incentive awards, our Compensation Committee sets a target value for the award for each executive officer based on its judgment about the factors used in setting executive officer total compensation described under "Compensation Philosophy and Objectives" above as well as our Compensation Committee's judgment regarding the desired mix of base salary, annual cash incentives and long-term equity incentives. Our Compensation Committee also considers outstanding vested and unvested equity awards to executive officers, the stock ownership levels of executive officers and the potential dilutive effect on our stockholders.

For annual grants, once our Compensation Committee determines the target value of a recipient's long-term equity incentive award, we establish the specific number of shares subject to the award by dividing the target value of the equity grant by the closing price of a share of our common stock on March 15th or a higher price determined appropriate under the circumstances by our Compensation Committee. Grants typically occur at a later date during our annual compensation decision-making cycle. We chose the date of March 15th to avoid the appearance of market-timing and because it is a consistent date year-to-year. However, the number of shares granted multiplied by the closing price of a share of our common stock on the date of grant is the valuation model we use for our financial statements determined in accordance with the Financial Accounting Standards Board's Accounting Standards Codification Topic 718, *Stock Compensation*. For this reason, the long-term equity incentive compensation target

amounts for our NEOs differ from the actual amounts reflected in the Stock Awards column in the Summary Compensation Table below. See “Individual Executive Officer Compensation Targets” and “Summary Compensation Table” below.

Option grants are not part of our current long-term equity incentive award program or other current equity incentive grant practices, however, our grant practices in the case of options would include timing option awards in a manner to avoid grants while in the possession of material non-public information, and may include awards granted on a pre-determined schedule. We have not timed our disclosure of material nonpublic information for the purpose of affecting the value of executive compensation.

Other Compensation and Benefits

We do not currently offer retirement or pension benefits or any non-qualified deferred compensation plans. Instead, we provide our NEOs with the opportunity to accumulate retirement income primarily through a defined contribution plan and through the appreciation of the value of their equity awards. Consistent with our pay-for-performance compensation philosophy, we do not provide our executive officers with any significant perquisites, other than certain travel perquisites or those offered to our employees generally. Except as noted below, our NEOs are eligible to participate in the following employee benefit programs on the same basis as all other regular employees:

401(k) Plan. Each of our NEOs and other salaried employees are eligible to participate in a defined contribution plan qualified under Code Section 401(k). In 2022, we contributed \$1.00 for each \$1.00 of employee contributions, up to a maximum contribution of 6.0% of the participant’s eligible compensation, and subject to a maximum matching contribution of \$20,500. We have included our contributions to the accounts of the NEOs for the applicable years in the “All Other Compensation” column in the Summary Compensation Table below to the extent “All Other Compensation” exceeded \$10,000 for a particular NEO.

Group Life, Health and Disability Plans. We have established group life, health and disability plans for our employees. The NEOs may participate in these plans on the same basis as other employees.

Perquisites and Other Benefits. We furnish a limited number of perquisites to our NEOs, of which only travel-related perquisites, together with matching contributions under our 401(k) plan, as discussed above, and contributions to health savings accounts, meet the threshold for reporting in the “All Other Compensation” column in the Summary Compensation Table under the rules of the Securities and Exchange Commission.

Other Policies and Factors Affecting Executive Officer Compensation

Severance and Change-in-Control Arrangements

We have established executive employment agreements that include severance and change-in-control arrangements with each of our NEOs. These arrangements set forth the terms and conditions upon which these NEOs would be entitled to receive certain benefits upon termination of employment.

These agreements are intended to help us attract and retain executive talent in a competitive marketplace; enhance the prospects that the NEOs would remain with us and devote their attention to our performance in the event of a potential change in control; foster their objectivity in considering a change-in-control proposal; and facilitate their attention to our affairs without the distraction that could arise from the uncertainty inherent in severance and change-in-control situations.

The disclosure below under “—Summary Compensation Table—Executive Employment Agreements” and “—Severance and Change in Control Arrangements with Named Executive Officers” and “—Calculation of Potential Payments upon Termination or Change in Control” explains in detail the benefits under these arrangements and the circumstances under which these NEOs would be entitled to them.

Trading Policy

Our insider trading policy prohibits all employees, officers and directors from engaging in any short sale of Alto Ingredients securities, as well as any transaction involving puts, calls, collars, forward sales contracts, warrants or other options on Alto Ingredients securities. Additionally, our executive officers are restricted from pledging Alto Ingredients securities as collateral for a loan.

Tax Considerations

Code Section 162(m) generally disallows a tax deduction to publicly held corporations for compensation paid to certain of their executive officers to the extent such compensation exceeds \$1,000,000 per covered officer in any year.

Compensation Recovery Policies

Pursuant to Section 304 of the Sarbanes-Oxley Act of 2002, if we are required as the result of misconduct to restate our financial results due to our material noncompliance with any financial reporting requirements under the federal securities laws, our Chief Executive Officer and Chief Financial Officer may be legally required to reimburse us for any bonus or incentive-based or equity-based compensation they receive. In addition, on March 29, 2018, our Compensation Committee instituted a revised “clawback” policy with respect to incentive compensation that requires recoupment of incentive compensation, including any cash or equity incentive compensation, awarded or paid to any of our executive officers, including all of our NEOs, in the event we are required to restate our financial statements, regardless of cause. See “Summary Compensation Table—Clawback Policy” below.

We will also apply any amended or successor “clawback” or similar policy adopted by us, including any policy or policy changes mandated by or implemented pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act or the applicable listing requirements or rules and regulations of The Nasdaq Capital Market, if applicable, and any other stock exchange or other market on which our common stock is then quoted or listed for trading.

Executive Stock Holding Policy.

We have an Executive Stock Holding Policy that requires our executive officers to hold 100% of net shares (i.e., shares remaining after payment of taxes) of our common stock acquired pursuant to the exercise of stock options or vesting of restricted stock or other equity incentive compensation until the earlier of twelve months following the exercise of stock options or vesting of restricted stock or other equity incentive compensation, or the executive officer’s termination of employment.

Compensation Decisions for 2022

Our Compensation Committee established compensation for our NEOs in 2022 in a manner consistent with our executive compensation philosophy and objectives. Our Compensation Committee made its annual compensation decisions for 2022 in March 2022 and 2023.

Our Compensation Committee's decisions were based upon its judgment about our financial and other business performance for 2021, expected and actual financial and other business performance for 2022, and the positions, scope and importance of the roles of our NEOs and how their positions compared to other Alto Ingredients executive officers and personnel. Our Compensation Committee's decisions were also based on comparing and adjusting the compensation of our NEOs in reference to the compensation of similarly situated personnel at other organizations through a benchmarking process. See "Benchmarking" above. The Compensation Committee also considered certain other factors such as budget constraints and executive officer recommendations. Through these efforts, our Compensation Committee established a desired level and mix of total compensation.

In setting the compensation of our executive officers, except as noted below, our Compensation Committee did not adhere to any specific formulas tied to market data, nor did it rely on market data to determine the specific mix of compensation components. Instead, our Compensation Committee used this data as a guide and a resource for tracking executive compensation trends.

Total Compensation

Our Compensation Committee targeted total compensation for our NEOs to be competitive with similarly situated personnel at the 50th percentile relative to our third-party survey group companies based on the market data provided by Korn Ferry. Our Compensation Committee, based on Korn Ferry's advice, generally considers target compensation as competitive if, as to base salary, it falls within 10% of the 50th percentile of comparable market data; as to total cash compensation, if it falls within 15% of the 50th percentile of comparable market data; and as to total direct compensation, if it falls within 20% of the 50th percentile of comparable market data. The Compensation Committee determined that targeting total compensation for our NEOs to be competitive with similarly situated personnel at the 50th percentile was appropriate because that level is consistent with the Compensation Committee's intention for 2022 to target total compensation for our executive officers at the median of total compensation of similarly situated personnel at other organizations. Although the Compensation Committee set targeted compensation for 2022 at less than the 50th percentile, we anticipate that compensation will approach the 50th percentile as our financial performance improves over time.

Base Salary

Our Compensation Committee increased base salaries for our executive officers by between 2.5% and 5.0%, inclusive, over 2021 levels, representing merit adjustments, which we believe were generally in-line with average industry increases.

Targeted base salaries for 2022 were at approximately the 25th percentile relative to base salaries of comparable executives among our third-party survey group companies based on the market data provided by Korn Ferry.

59

Annual Cash Incentive Compensation

Our Compensation Committee targeted 2022 annual cash incentive compensation at 70% of base salary for our President, Chief Executive Officer and Chief Operating Officer, at 50% of base salary for our Chief Financial Officer, at 50% of base salary for our General Counsel, Vice President and Secretary, and at 50% of base salary for our Vice President and Chief Commercial Officer. These levels were generally consistent with the targeted percentage bonus amounts included in each NEO's employment agreement.

Targeted annual cash incentive compensation for 2022 was between the 25th and 50th percentiles relative to annual cash incentive compensation of comparable executives among our third-party survey group companies based on the market data provided by Korn Ferry.

As discussed above, awards under our annual cash incentive compensation plan are based on two elements: company financial performance and the NEO's individual performance. For 2022, our Compensation Committee weighted for each of our NEOs, company financial performance at 80% and individual NEO performance at 20%. In doing so, our Compensation Committee desired to incentivize most heavily activities that lead to strong overall financial performance while still rewarding individual performance.

Our Compensation Committee established our 2022 financial performance goal of Adjusted EBITDA at \$40,000,000 based on our financial projections determined early in the year. Our Adjusted EBITDA goal of \$40,000,000 was viewed as attainable but aspirational at the time the projections were finalized. Payout under the financial performance element was non-discretionary and was funded at a rate of 0% to 200% of the participants' targeted payout amount for the financial performance element based on our actual Adjusted EBITDA for 2022 compared to our Adjusted EBITDA goal of \$40,000,000.

Our Adjusted EBITDA goal of \$40,000,000 for 2022 was set slightly below our goal for 2021 as we pivoted away from the unique circumstances arising from the coronavirus pandemic to a more normal operating environment, reliant on markets for specialty alcohols and essential ingredients as compared to the more price-insensitive, higher-margin markets for disinfectants and sanitizers we temporarily experienced during the pandemic.

Our Compensation Committee approved a sliding scale of achievement and payout opportunities under which lower actual Adjusted EBITDA for 2022 corresponded to lower levels of goal achievement and lower payouts, subject to a minimum Adjusted EBITDA threshold; and higher actual Adjusted EBITDA for 2022 corresponded to higher levels of goal achievement and higher payouts, subject to a maximum payout.

The Compensation Committee established for 2022 a targeted payout amount of \$3,100,000 if all personnel covered by the plan attained all of their individual performance goals and we achieved our Adjusted EBITDA goal of \$40,000,000. The targeted payout amount of \$3,100,000 was comprised of \$1,700,000 attributable to financial performance and \$1,400,000 attributable to individual performance. The Compensation Committee established for 2022 a maximum aggregate plan pool of \$4,800,000 comprised of \$3,400,000 attributable to financial performance and \$1,400,000 attributable to individual performance.

In setting the targeted and maximum plan payout amounts, the Compensation Committee assumed that all eligible plan participants would continue their eligibility through 2022 and until final payment of amounts earned under the plan. In addition, in setting the targeted and maximum plan payout amounts, the Compensation Committee did not provide for an increase in the plan pool for any new eligible plan participants.

The \$1,700,000 difference between the maximum aggregate plan pool of \$4,800,000 and the targeted payout amount of \$3,100,000 was available if our actual Adjusted EBITDA for 2022 equaled or exceeded approximately 140% of our Adjusted EBITDA goal of \$40,000,000.

60

We had to attain minimum Adjusted EBITDA of \$27,000,000 for 2022, or 67.5% of our Adjusted EBITDA goal, to support any payout under the financial performance element. This feature was intended to assure that we achieved an acceptable minimum level of financial performance before annual cash incentives would be paid to any participant, including our NEOs, under the financial performance element of the plan. The Compensation Committee set an Adjusted EBITDA ceiling of \$55,800,000 for 2022, above which there would be no additional incremental payout under the financial performance element. At the Adjusted EBITDA ceiling of \$55,800,000, the aggregate payout for the financial performance element would have been \$3,400,000; however, plan participants were capped at 200% of the participants' targeted payout amount for the financial performance element.

The payout under the financial performance element would be calculated on a straight-line prorated basis at actual Adjusted EBITDA levels below our Adjusted EBITDA goal of \$40,000,000, subject to minimum Adjusted EBITDA \$27,000,000 for 2022. Likewise, the payout under the financial performance element would be calculated on a straight-line prorated basis at actual Adjusted EBITDA levels above our Adjusted EBITDA goal of \$40,000,000, subject to a maximum payout of \$3,400,000 corresponding to our Adjusted EBITDA ceiling of \$55,800,000 for 2022.

The targeted and maximum payout for the individual performance element was \$1,400,000 under all scenarios if all personnel covered by the plan attained 100% of their individual performance goals.

Long-Term Equity Incentive Compensation

Our Compensation Committee targeted 2022 long-term equity incentive compensation for our NEOs at a level comparable to similarly situated personnel at the 5th percentiles relative to our third-party survey group companies based on the market data provided by Korn Ferry. In making equity awards, our Compensation Committee established the specific number of shares subject to the award of long-term equity incentive compensation by dividing the target value of the equity grant by the closing price of a share of our common stock on March 15th or a higher price determined appropriate under the circumstances by our Compensation Committee. Grants typically occur at a later date during our annual compensation decision-making cycle.

Long-term equity incentive compensation decisions and grants were made in late March 2022 based on the closing price of a share of our common stock on March 15th. As noted above, we chose the date of March 15th to avoid the appearance of market-timing and because it is a consistent date year-to-year.

Individual NEO Compensation Targets

Target direct compensation for each of our NEOs for 2022, other than incentive compensation for Christopher W. Wright, who retired in May 2022, is set forth below.

Specific results against performance objectives that influenced the amount and mix of our NEOs' total direct compensation for 2022 included our Adjusted EBITDA for 2022, which fell short of the Adjusted EBITDA threshold of \$27,000,000, and full attainment by our NEOs of their respective individual performance goals under our annual cash incentive compensation plan. We did not achieve our Adjusted EBITDA threshold or target for 2022 due to challenging industry conditions resulting primarily from extreme commodity price volatility and negative gross profit margins. As a result, we did not make any payments to our NEOs under the financial performance element of our annual cash incentive compensation plan. Our NEOs performed well under their individual performance elements, in particular, their execution of a number of strategic and other initiatives in 2022, as noted in the 2022 business highlights summarized above, resulting in maximum payouts under that measure.

The long-term equity incentive compensation target amounts for our NEOs set forth below differ from the actual amounts reflected in the Stock Awards column in the Summary Compensation Table below. This is because our Compensation Committee determines the target value of a recipient's long-term equity incentive award and establishes the specific number of shares subject to the award by dividing the target value of the equity grant by the closing price of a share of our common stock on March 15th or a higher price determined appropriate under the circumstances by our Compensation Committee. Grants typically occur at a later date during our annual compensation decision-making cycle. As noted above, we chose the date of March 15th to avoid the appearance of market-timing and because it is a consistent date year-to-year.

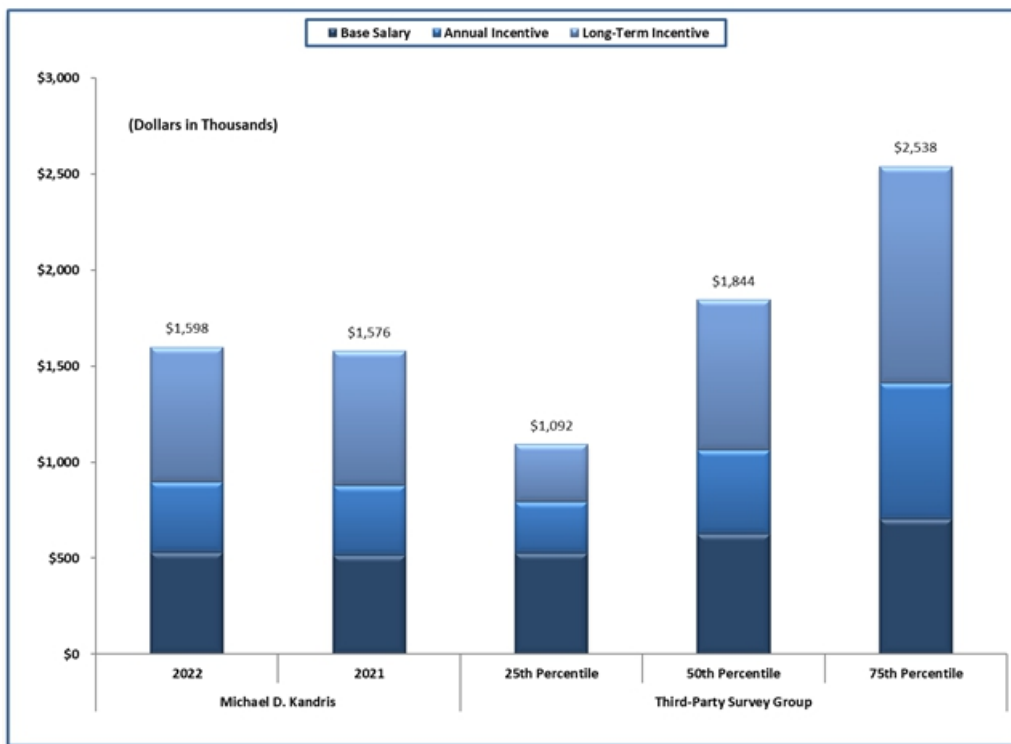
See "Summary Compensation Table" below for actual amounts paid to our NEOs.

Michael D. Kandris, President, Chief Executive Officer and Chief Operating Officer

The following table shows Mr. Kandris's direct target compensation for 2022 and 2021. The graph below shows the positioning of Mr. Kandris's 2022 and 2021 direct target compensation relative to similarly situated personnel at our third-party survey group companies based on the market data provided by Korn Ferry:

Michael D. Kandris	2022	2021	Change	
			Dollars	Percent
Base Salary*	\$ 528,403	\$ 515,515	\$ 12,888	2.5%
Annual Cash Incentive Compensation				
Target Percent of Base Salary	70.0%	70.0%	—	—%
Target Dollars	\$ 369,882	\$ 360,861	\$ 9,021	2.5%
Long-Term Equity Incentive Compensation				
Target Percent of Base Salary	132.5%	135.8%		(2.4)%
Target Dollars	\$ 700,000	\$ 700,000	\$ —	—%
Target Total Direct Compensation	\$ 1,598,285	\$ 1,576,376	\$ 21,909	1.4%

* The base salary amounts represent Mr. Kandris's final annual base salary rates for 2022 and 2021. In April 2022, we increased Mr. Kandris's annual base salary rate to \$528,403, which remained in effect through December 31, 2022. In May 2021, we increased Mr. Kandris's annual base salary rate to \$515,515, which remained in effect through December 31, 2021 and until its increase in April 2022. Mr. Kandris's annual base salary rate was \$500,500 for the period in 2021 prior to its increase in May 2021.



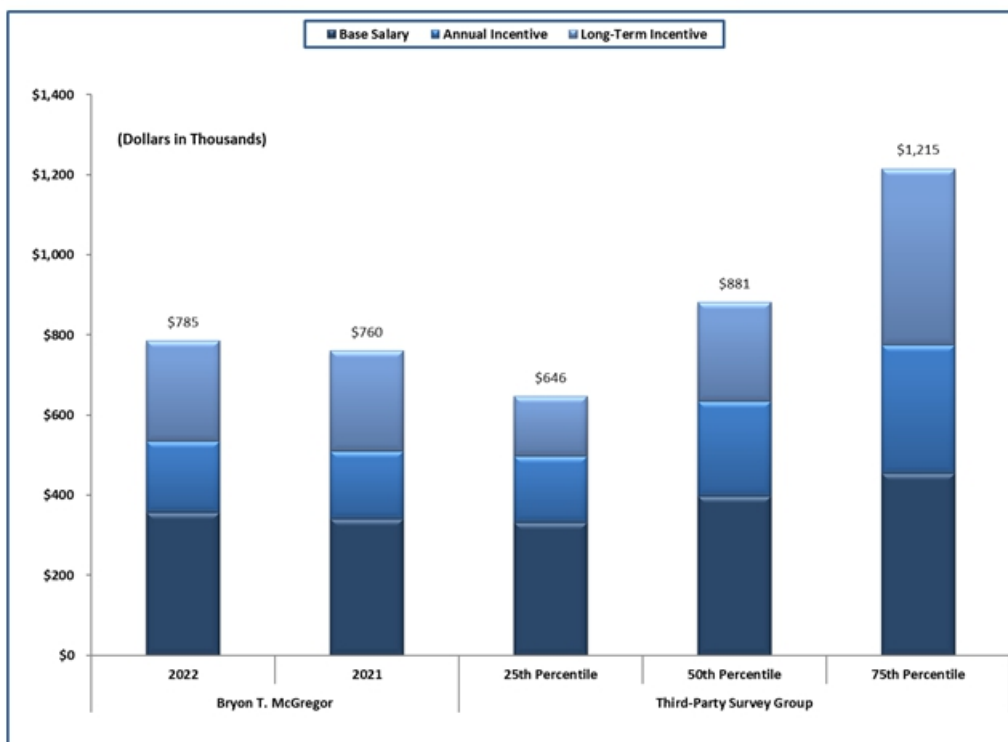
Our Compensation Committee increased Mr. Kandris’s target total direct compensation by 1.4% for 2022 as compared to 2021. The increase in Mr. Kandris’s target total direct compensation for 2022 resulted from a merit increase in Mr. Kandris’s base salary of 2.5% and a commensurate increase in his targeted annual cash incentive compensation.

Bryon T. McGregor, Chief Financial Officer

The following table shows Mr. McGregor’s direct target compensation for 2022 and 2021. The graph below shows the positioning of Mr. McGregor’s 2022 and 2021 direct target compensation relative to similarly situated personnel at our third-party survey group companies based on the market data provided by Korn Ferry:

Bryon T. McGregor	2022	2021	Change	
			Dollars	Percent
Base Salary*	\$ 356,855	\$ 339,862	\$ 16,993	5.0%
Annual Cash Incentive Compensation				
Target Percent of Base Salary	50.0%	50.0%	—	—
Target Dollars	\$ 178,428	\$ 169,931	\$ 8,497	5.0%
Long-Term Equity Incentive Compensation				
Target Percent of Base Salary	70.0%	73.6%		(4.9)%
Target Dollars	\$ 250,000	\$ 250,000	\$ —	—%
Target Total Direct Compensation	\$ 785,283	\$ 759,793	\$ 25,490	3.4%

* The base salary amounts represent Mr. McGregor’s final annual base salary rates for 2022 and 2021. In April 2022, we increased Mr. McGregor’s annual base salary rate to \$356,855, which remained in effect through December 31, 2022. In May 2021, we increased Mr. McGregor’s annual base salary rate to \$339,862, which remained in effect through December 31, 2021 and until its increase in April 2022. Mr. McGregor’s annual base salary rate was \$329,963 for the period in 2021 prior to its increase in May 2021.



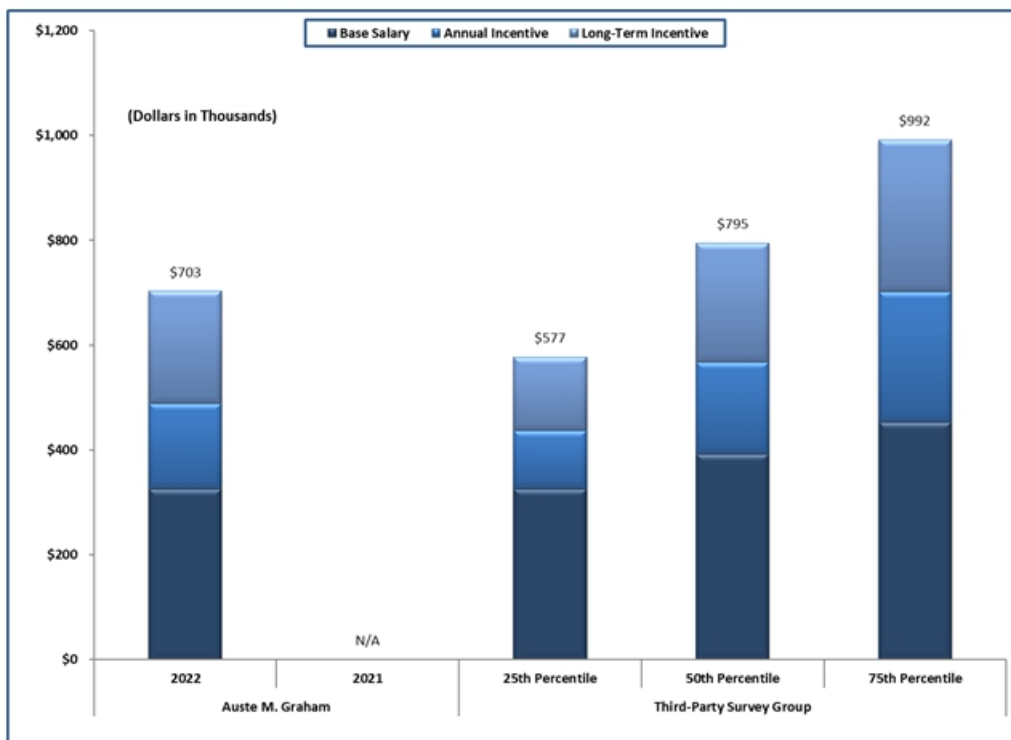
Our Compensation Committee increased Mr. McGregor’s target total direct compensation by 3.4% for 2022 as compared to 2021. The increase in Mr. McGregor’s target total direct compensation for 2022 resulted from a merit increase in Mr. McGregor’s base salary of 5.0% and a commensurate increase in his targeted annual cash incentive compensation.

Auste M. Graham, General Counsel, Vice President and Secretary

The following table shows Ms. Graham’s direct target compensation for 2022. Ms. Graham first joined us in early 2022 and thus no information is provided for 2021. The graph below shows the positioning of Ms. Graham’s 2022 direct target compensation relative to similarly situated personnel at our third-party survey group companies based on the market data provided by Korn Ferry:

Auste M. Graham	2022
Base Salary*	\$ 325,000
Annual Cash Incentive Compensation	
Target Percent of Base Salary	50.0%
Target Dollars	\$ 162,500
Long-Term Equity Incentive Compensation	
Target Percent of Base Salary	66.2%
Target Dollars	\$ 215,000
Target Total Direct Compensation	\$ 702,500

* The base salary amount represents Ms. Graham’s base salary rate for all of 2022. Ms. Graham first joined us in early 2022 and thus no information is provided for 2021.

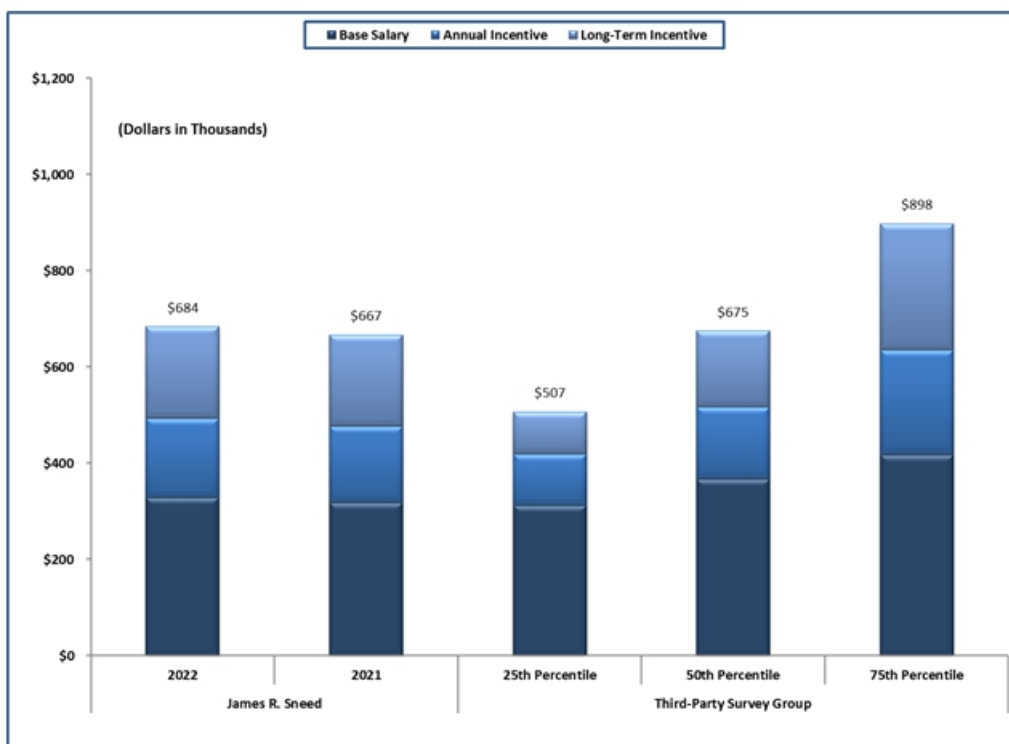


James R. Sneed, Vice President and Chief Commercial Officer

The following table shows Mr. Sneed’s direct target compensation for 2022 and 2021. The graph below shows the positioning of Mr. Sneed’s 2022 and 2021 direct target compensation relative to similarly situated personnel at our third-party survey group companies based on the market data provided by Korn Ferry:

James R. Sneed	2022	2021	Change	
			Dollars	Percent
Base Salary*	\$ 329,409	\$ 318,270	\$ 11,139	3.5%
Annual Cash Incentive Compensation				
Target Percent of Base Salary	50.0%	50.0%		—
Target Dollars	\$ 164,705	\$ 159,135	\$ 5,570	3.5%
Long-Term Equity Incentive Compensation				
Target Percent of Base Salary	57.7%	59.7%		(3.4)%
Target Dollars	\$ 190,000	\$ 190,000	\$ —	—%
Target Total Direct Compensation	\$ 684,114	\$ 667,405	\$ 16,709	2.5%

* The base salary amounts represent Mr. Sneed’s final annual base salary rates for 2022 and 2021. In April 2022, we increased Mr. Sneed’s annual base salary rate to \$329,409, which remained in effect through December 31, 2022. In May 2021, we increased Mr. Sneed’s annual base salary rate to \$318,270, which remained in effect through December 31, 2021 and until its increase in April 2022. Mr. Sneed’s annual base salary rate was \$309,000 for the period in 2021 prior to its increase in May 2021.



Our Compensation Committee increased Mr. Sneed’s target total direct compensation by 2.5% for 2022 as compared to 2021. The increase in Mr. Sneed’s target total direct compensation for 2022 resulted from a merit increase in Mr. Sneed’s base salary of 3.5% and a commensurate increase in his targeted annual cash incentive compensation.

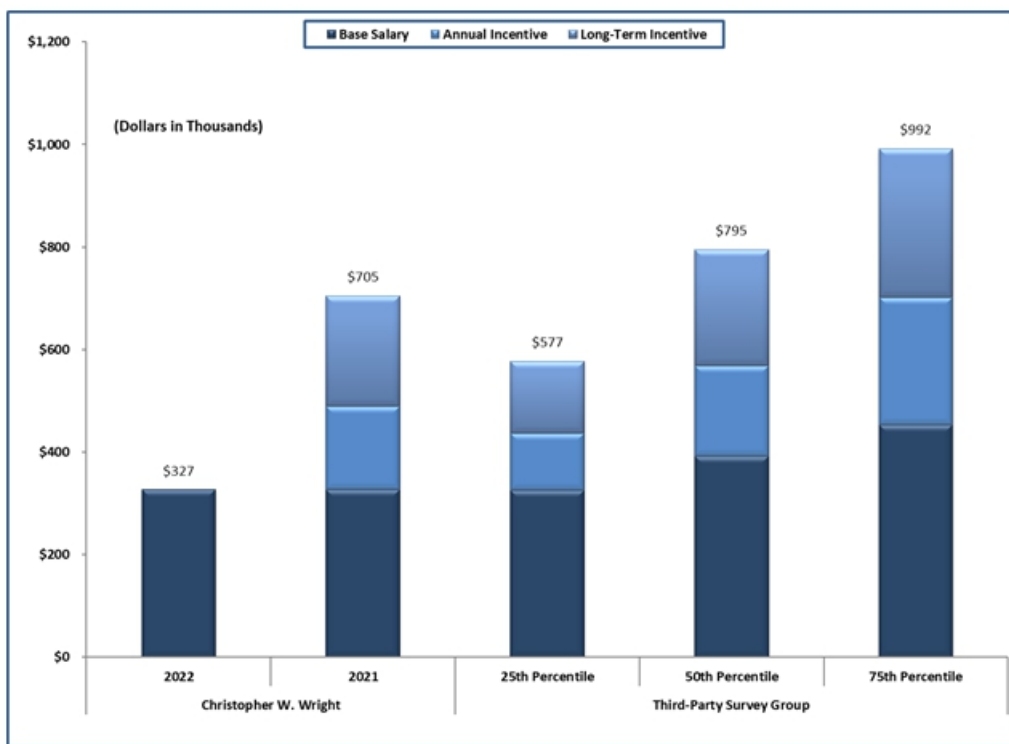
Christopher W. Wright, Former Senior Vice President, General Counsel and Secretary

The following table shows Mr. Wright’s direct target compensation for 2022 and 2021. Mr. Wright retired in May 2022. The graph below shows the positioning of Mr. Wright’s 2022 and 2021 direct target compensation relative to similarly situated personnel at our third-party survey group companies based on the market data provided by Korn Ferry:

Christopher W. Wright	2022	2021	Change	
			Dollars**	Percent**
Base Salary*	\$ 326,546	\$ 326,546	\$ —	—%
Annual Cash Incentive Compensation				
Target Percent of Base Salary	—%	50.0%		NM
Target Dollars	\$ —	\$ 163,273	\$ NM	NM
Long-Term Equity Incentive Compensation				
Target Percent of Base Salary	—%	65.8%		NM
Target Dollars	\$ —	\$ 215,000	\$ NM	NM
Target Total Direct Compensation	\$ 326,546	\$ 704,819	\$ NM	NM

* The base salary amounts represent Mr. Wright’s final annual base salary rate for 2022 upon his retirement in May 2022 and Mr. Wright’s final annual base salary rate for 2021. In May 2021, we increased Mr. Wright’s annual base salary rate to \$326,546, which remained in effect through his retirement in May 2022. Mr. Wright’s annual base salary rate was \$317,035 for the period in 2021 prior to its increase in May 2021.

** Not meaningful. The dollar and percentage changes are not meaningful due to Mr. Wright’s retirement in May 2022.



Due to Mr. Wright’s impending retirement, our Compensation Committee did not increase Mr. Wright’s target total direct compensation in 2022 as compared to 2021. As a result of his retirement, Mr. Wright was not eligible for annual cash incentive compensation or regular long-term equity incentive compensation for 2022; however, we made a discretionary grant of equity to Mr. Wright in consideration of his service to us in 2022 through his retirement in May 2022 and in anticipation of Mr. Wright’s post-separation consulting arrangement. The shares vested in June 2022 following Mr. Wright’s retirement. Mr. Wright did not otherwise receive any severance pay or benefits in connection with his retirement. See “Summary Compensation Table” below.

Compensation Committee Report

The following Compensation Committee Report is not deemed filed with the Securities and Exchange Commission. Notwithstanding anything to the contrary set forth in any of our previous filings made under the Securities Act, or under the Exchange Act that might incorporate future filings made by Alto Ingredients under those statutes, the Compensation Committee Report will not be incorporated by reference into any such prior filings or into any future filings made by Alto Ingredients under those statutes.

COMPENSATION COMMITTEE REPORT

The Compensation Committee has reviewed and discussed the foregoing Compensation Discussion and Analysis with management, and based on that review and discussion, the Compensation Committee recommended to the Board of Directors that the Compensation Discussion and Analysis be included in Alto Ingredients’ Annual Report on Form 10-K for the year ended December 31, 2022 (incorporated by reference) and in this Proxy Statement.

Respectfully submitted,
Compensation Committee

Gilbert E. Nathan, Chair
Terry L. Stone
Maria G. Gray

Compensation Risk Analysis

Our Compensation Committee, with the advice of its independent compensation consultant and input from management, reviewed the design of our employee compensation policies and practices and concluded that those policies and practices do not create risks that are reasonably likely to have a material adverse effect on us. Significant factors considered by our Compensation Committee in reaching its conclusion include:

- the mix and balance of base salary, annual cash incentive compensation and long-term equity incentive compensation, with an emphasis on long-term equity incentive compensation that increases along with our executives’ respective levels of responsibility;
- a long-term equity incentive compensation program under which grants of restricted stock are made, which is intended to mitigate the risk of actions intended to capture short-term stock appreciation gains at the expense of sustainable total stockholder return over the longer-term;
- vesting of long-term equity incentive awards over a number of years;

- a policy applicable to our executive officers requiring them to hold 100% of net shares (i.e., shares remaining after payment of taxes) of our common stock acquired pursuant to the exercise of stock options or vesting of restricted stock or other equity incentive compensation for a minimum of twelve months or until termination of the executive officer's employment;
- caps on annual cash incentive compensation;
- broad performance ranges for minimum, target and maximum financial performance goals with small-tiered increments for annual cash incentive compensation that reduce the risk of accelerating or delaying revenue or expense recognition in order to satisfy the threshold or next tier for larger incentive payouts; and
- the financial performance measure we utilize under our annual cash incentive compensation plan is Adjusted EBITDA, which accounts for controllable factors such as attaining higher margins through managing production volumes relative to both specialty alcohol and essential ingredient sales prices and production input costs, increasing production efficiencies, and controlling operating costs such as selling, general and administrative expenses.

Other features in our incentive programs are intended to mitigate risks from our compensation program, particularly the risk of short-term decision-making. These features include the potential recoupment under our clawback policy of incentive awards from our executive officers, including all named executive officers, in the event of material noncompliance with any financial reporting requirement under the federal securities laws, including as a result of misconduct; and the ability of our Compensation Committee to exercise discretion to reduce or eliminate payouts under the discretionary components of our compensation program, such as the individual performance element in our annual cash incentive compensation plan, if it deems appropriate.

Summary Compensation Table

The following table sets forth summary information concerning the compensation of our NEOs for all services rendered in all capacities to us for the years ended December 31, 2022, 2021 and 2020.

Name and Principal Position	Year	Salary (\$)	Bonus (\$) ⁽¹⁾	Stock Awards (\$) ⁽²⁾	Non-Equity Incentive Plan Compensation ⁽³⁾	All Other Compensation ⁽⁴⁾	Total (\$)
Michael D. Kandris	2022	\$ 524,437	\$ —	\$ 874,035	\$ 73,400	\$ 21,400	\$ 1,493,272
President, Chief Executive Officer and Chief Operating Officer ⁽⁵⁾	2021	\$ 509,856	\$ —	\$ 707,392	\$ 642,500	\$ 19,000	\$ 1,878,748
	2020	\$ 450,200	\$ 100,000	\$ 181,025	\$ —	\$ 18,700	\$ 749,925
Bryon T. McGregor	2022	\$ 351,626	\$ —	\$ 312,151	\$ 35,200	\$ 21,400	\$ 720,377
Chief Financial Officer	2021	\$ 336,130	\$ —	\$ 252,640	\$ 302,600	\$ 19,000	\$ 910,370
	2020	\$ 331,115	\$ 70,000	\$ 61,921	\$ —	\$ 18,700	\$ 481,736
Auste M. Graham	2022	\$ 298,750	\$ 100,000	\$ 423,953	\$ 29,900	\$ 9,750	\$ 862,353
General Counsel, Vice President and Secretary ⁽⁶⁾	2021	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
	2020	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
James R. Sneed	2022	\$ 325,982	\$ —	\$ 237,233	\$ 32,600	\$ 21,400	\$ 617,215
Vice President and Chief Commercial Officer	2021	\$ 314,776	\$ —	\$ 192,003	\$ 283,400	\$ 19,000	\$ 809,179
	2020	\$ 312,231	\$ 60,000	\$ 61,921	\$ —	\$ 18,700	\$ 452,852
Christopher W. Wright	2022	\$ 206,874	\$ —	\$ 102,450	\$ —	\$ 19,800	\$ 329,124
Former Senior Vice President, General Counsel and Secretary ⁽⁷⁾	2021	\$ 322,962	\$ —	\$ 217,270	\$ 290,800	\$ 19,000	\$ 850,032
	2020	\$ 319,614	\$ 65,000	\$ 61,921	\$ —	\$ 18,700	\$ 465,235

(1) Amounts represent discretionary cash bonuses.

(2) The amounts shown are the fair value of stock awards on the date of grant. The fair value of stock awards is calculated by multiplying the number of shares of stock granted by the closing price of our common stock on the date of grant. The shares of common stock were issued under our 2016 Plan. Information regarding the grants of restricted stock and vesting schedules for the named executive officers is included in the "Grants of Plan-Based Awards – 2022" and "Outstanding Equity Awards at Fiscal Year-End–2022" and "Option Exercises and Stock Vested" tables below and the footnotes to those tables.

(3) Amounts represent annual performance-based cash incentive compensation.

(4) Except as specifically noted, the amounts represent matching contributions under our 401(k) plan and contributions to the executive's health savings account. In addition, except as specifically noted, the value of perquisites and other personal benefits was less than \$10,000 in aggregate for each of the named executive officers.

(5) Mr. Kandris was appointed as our Co-President and Co-Chief Executive Officer in May 2020 and became our sole President and Chief Executive Officer in September 2020.

(6) Ms. Graham first became an employee and one of our executive officers in February 2022. We granted to Ms. Graham a special one-time cash bonus in the amount of \$100,000 and 25,000 shares of restricted common stock in consideration of her joining Alto Ingredients which resulted in her forfeiture of a significant cash bonus opportunity and unvested equity compensation to her former employer.

(7) In anticipation of his retirement, Mr. Wright stepped down as our General Counsel and Secretary in February 2022 upon the appointment of Auste M. Graham, our General Counsel, Vice President and Secretary. Mr. Wright served as Senior Vice President until his retirement in May 2022 and then continued on in a consulting capacity for the remainder of 2022. The reported amount of Mr. Wright's salary for 2022 includes \$75,000 in consulting fees for the year. We made a discretionary grant of equity to Mr. Wright in consideration of his service to us in 2022 through his retirement in May 2022 and in anticipation of Mr. Wright's post-separation consulting arrangement. The shares vested in June 2022 following Mr. Wright's retirement. Mr. Wright did not otherwise receive from us any severance pay or benefits in connection with his retirement.

Executive Employment Agreements

Michael D. Kandris

Our Second Amended and Restated Employment Agreement with Michael D. Kandris provides for at-will employment as our President and Chief Executive Officer. Mr. Kandris's annual base salary is \$528,403 as of April 24, 2022, was \$515,515 as of May 20, 2021, was \$500,500 as of December 6, 2020, was \$498,000 as of May 25, 2020 and was \$350,745 prior to that date for the balance of 2020. Mr. Kandris is eligible to participate in our short-term incentive plan with a pay-out target of 70% of his base salary, to be paid based upon performance criteria set by our Compensation Committee.

Upon termination by us without cause or resignation by Mr. Kandris for good reason, Mr. Kandris is entitled to receive (i) severance equal to eighteen months of his base salary, (ii) 150% of his total target short-term incentive plan award, (iii) continued health insurance coverage for eighteen months or until the earlier effective date of coverage under a subsequent employer's plan, and (iv) accelerated vesting of 25% of all shares or options subject to any equity awards granted to Mr. Kandris prior to Mr. Kandris's termination which are unvested as of the date of termination.

However, if Mr. Kandris is terminated without cause or resigns for good reason in anticipation of or twenty-four months after a change in control, Mr. Kandris is entitled to (i) severance equal to thirty-six months of base salary, (ii) 300% of his total target short-term incentive plan award, (iii) continued health insurance coverage for thirty-six months or until the earlier effective date of coverage under a subsequent employer's plan, and (iv) accelerated vesting of 100% of all shares or options subject to any equity awards granted to Mr. Kandris prior to Mr. Kandris's termination that are unvested as of the date of termination.

If we terminate Mr. Kandris's employment upon his disability, Mr. Kandris is entitled to severance equal to twelve months of base salary. In addition, in the event of Mr. Kandris's disability and if he or someone authorized to act on his behalf executes and delivers an agreed release agreement and allows the release to become effective, we have agreed to accelerate the vesting of any equity awards granted to Mr. Kandris prior to the termination of his employment such that 100% of all shares or options subject to such awards which are unvested as of termination shall be accelerated and deemed fully vested as of the effectiveness of the release.

If Mr. Kandris dies, we have agreed to accelerate the vesting of any equity awards granted to Mr. Kandris prior to his death such that 100% of all shares or options subject to such awards which are unvested as of his death will be accelerated and deemed fully vested.

The term "cause" is defined in the Second Amended and Restated Employment Agreement as (i) Mr. Kandris's indictment or conviction of any felony or of any crime involving dishonesty, (ii) Mr. Kandris's participation in any fraud or other act of willful misconduct against us, (iii) Mr. Kandris's refusal to comply with any of our lawful directives, (iv) Mr. Kandris's material breach of his fiduciary, statutory, contractual, or common law duties to us, or (v) conduct by Mr. Kandris which, in the good faith and reasonable determination of our board of directors, demonstrates gross unfitness to serve; provided, however, that in the event that any of the foregoing events is reasonably capable of being cured, we shall provide written notice to Mr. Kandris describing the nature of the event and Mr. Kandris shall thereafter have three business days to cure the event.

The term "for good reason" is defined in the Second Amended and Restated Employment Agreement as (i) the assignment to Mr. Kandris of any duties or responsibilities that result in the material diminution of Mr. Kandris's authority, duties or responsibility, (ii) a material reduction by us in Mr. Kandris's annual base salary, except to the extent the base salaries of all of our other executive officers are accordingly reduced, (iii) a relocation of Mr. Kandris's place of work, or our principal executive offices if Mr. Kandris's principal office is at these offices, to a location that increases Mr. Kandris's daily one-way commute by more than thirty-five miles, or (iv) any material breach by us of any material provision of Mr. Kandris's employment agreement.

A "change in control" is deemed to have occurred if, in a single transaction or series of related transactions (i) any person (as the term is used in Section 13(d) and 14(d) of the Exchange Act), or persons acting as a group, other than a trustee or fiduciary holding securities under an employee benefit program, is or becomes a "beneficial owner" (as defined in Rule 13-3 under the Exchange Act), directly or indirectly of our securities representing a majority of our combined voting power, (ii) we merge, consolidate or otherwise engage in a business combination with or into another corporation, entity or person, other than a transaction in which the holders of at least a majority of our shares of voting capital stock outstanding immediately prior to the transaction continue to hold (either by the shares remaining outstanding or by their being converted into shares of voting capital stock of the surviving entity) a majority of the total voting power represented by our shares of voting capital stock (or the surviving entity) outstanding immediately after the transaction, or (iii) all or substantially all of our assets are sold.

Bryon T. McGregor

Our Amended and Restated Employment Agreement with Bryon T. McGregor, as amended, provides for at-will employment as our Chief Financial Officer, Vice President and Assistant Secretary. Mr. McGregor's annual base salary is \$356,855 as of April 24, 2022, was \$339,862 as of May 20, 2021, was \$329,963 as of December 6, 2020 and was \$317,963 prior to that date for the balance of 2020. Mr. McGregor is eligible to participate in our short-term incentive plan with a pay-out target of 50% of his base salary, to be paid based upon performance criteria set by our Compensation Committee.

Upon termination by us without cause or resignation by Mr. McGregor for good reason, Mr. McGregor is entitled to receive (i) severance equal to twelve months of his base salary, (ii) 100% of his total target short-term incentive plan award, (iii) continued health insurance coverage for twelve months or until the earlier effective date of coverage under a subsequent employer's plan, and (iv) accelerated vesting of 25% of all shares or options subject to any equity awards granted to Mr. McGregor prior to Mr. McGregor's termination which are unvested as of the date of termination.

However, if Mr. McGregor is terminated without cause or resigns for good reason in anticipation of or twenty-four months after a change in control, Mr. McGregor is entitled to (i) severance equal to twenty-four months of base salary, (ii) 200% of his total target short-term incentive plan award, (iii) continued health insurance coverage for twenty-four months or until the earlier effective date of coverage under a subsequent employer's plan, and (iv) accelerated vesting of 100% of all shares or options subject to any equity awards granted to Mr. McGregor prior to Mr. McGregor's termination that are unvested as of the date of termination.

All other terms and conditions of Mr. McGregor's employment agreement are substantially the same as those contained in Mr. Kandris's employment agreement described above.

Auste M. Graham

Our Employment Agreement with Auste M. Graham provides for at-will employment as our General Counsel, Vice President and Secretary. Ms. Graham's annual base salary is \$350,000 as of February 26, 2023 and was \$325,000 as of February 1, 2022 upon beginning her employment with us. Ms. Graham is eligible to participate in our short-term incentive plan with a pay-out target of 50% of her base salary, to be paid based upon performance criteria set by our Compensation Committee.

All other terms and conditions of Ms. Graham's Employment Agreement are substantially the same as those contained in Mr. McGregor's Amended and Restated Employment Agreement described above.

James R. Sneed

Our Amended and Restated Employment Agreement with James R. Sneed provides for at-will employment as our Vice President of Supply & Trading, now retitled to Mr. Sneed's current position as Vice President and Chief Commercial Officer. Mr. Sneed's annual base salary is \$329,409 as of April 24, 2022, was \$318,270 as of May 20, 2021, was \$309,000 as of December 6, 2020 and was \$300,000 as of June 23, 2019. Mr. Sneed is eligible to participate in our short-term incentive plan with a pay-out target of 50% of his base salary, to be paid based upon performance criteria set by our Compensation Committee.

All other terms and conditions of Mr. Sneed's Amended and Restated Employment Agreement are substantially the same as those contained in Mr. McGregor's Amended and Restated Employment Agreement described above.

Christopher W. Wright

Our Amended and Restated Employment Agreement with Christopher W. Wright provided for at-will employment as our Vice President of Administration, General Counsel and Secretary. In February 2022, Mr. Wright stepped down from his position as General Counsel and Secretary in anticipation of his retirement. Mr. Wright continued on as our Senior Vice President until his retirement in May 2022.

Mr. Wright's annual base salary was \$326,546 as of May 20, 2021 and until his retirement. Mr. Wright's annual base salary was \$317,035 as of December 6, 2020 and was \$307,035 prior to that date for the balance of 2020. Mr. Wright was eligible to participate in our short-term incentive plan with a pay-out target of 50% of his base salary, to be paid based upon performance criteria set by our Compensation Committee. Upon his retirement, Mr. Wright was no longer eligible to participate in our short-term incentive plan.

All other terms and conditions of Mr. Wright's Amended and Restated Employment Agreement were substantially the same as those contained in Mr. McGregor's Amended and Restated Employment Agreement described above.

Upon his retirement in May 2022, we engaged Mr. Wright as a consultant under a one-year Consulting Agreement to provide advice and consultation on an as-needed basis at an annual rate of compensation of \$130,000.

Clawback Policy

On March 29, 2018, our Compensation Committee instituted a new "clawback" policy with respect to incentive compensation. Except as otherwise required by applicable law and regulations, the clawback policy applies to any incentive compensation, including any cash or equity incentive compensation, awarded or paid after March 29, 2018. The clawback policy is intended to mitigate the risks associated with our compensation policies because our executive officers, including all of our named executive officers, will be required to repay compensation as provided under the policy.

The clawback policy requires recoupment of all incentive compensation, including any cash or equity incentive compensation, awarded or paid to any of our executive officers, including all of our named executive officers, in the event our financial statements are required to be restated, regardless of cause, including, without limitation, due to: (i) material noncompliance with any financial reporting requirements under the federal securities laws, (ii) an error, miscalculation or omission, or (iii) the commission of an act of fraud or other misconduct, including dishonesty, unethical conduct or falsification of our records. The recoupment period is the three-year period commencing from the date of the financial statement required to be restated; and if more than one financial statement is required to be restated, the date of the earliest dated financial statement. The amount of incentive compensation subject to recoupment is the amount received that exceeds the amount that otherwise would have been received had it been determined based on the accounting restatement and is computed without regard to any taxes paid. We are prohibited under the policy from indemnifying or agreeing to indemnify any executive officer from the loss of any erroneously awarded incentive compensation.

Our clawback policy is a "no-fault" policy and applies even if the executive officer did not engage in any misconduct and even if the executive officer had no responsibility for the financial statement errors, miscalculations, omissions or other reasons requiring restatement.

We will also apply any amended or successor "clawback" or similar policy adopted by us, including any policy or policy changes mandated by or implemented pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act or the applicable listing requirements or rules and regulations of The Nasdaq Capital Market, if applicable, and any other stock exchange or other market on which our common stock is then quoted or listed for trading.

Grants of Plan-Based Awards – 2022

The following table sets forth summary information regarding all grants of plan-based awards made to our NEOs during the year ended December 31, 2022. The awards were made under our annual performance-based cash incentive compensation plan and, except as noted below, our long-term equity incentive compensation plan and are described in "Compensation Discussion and Analysis—Compensation Decisions for 2022" above.

Name	Grant Date	Estimated Possible Payouts Under Non-Equity Incentive Plan Awards ⁽¹⁾			All Other Stock Awards: Number of Shares of Stock or Units (#) ⁽²⁾	Grant Date Fair Value of Stock and Option Awards (\$) ⁽³⁾
		Threshold (\$)	Target (\$)	Maximum (\$)		
Michael D. Kandris	3/30/2022 3/30/2022	\$ 73,421	\$ 367,106	\$ 660,791	127,970	\$ 874,035
Bryon T. McGregor	3/30/2022 3/30/2022	\$ 35,163	\$ 175,813	\$ 316,463	45,703	\$ 312,151
Auste M. Graham	3/30/2022 3/23/2022 3/30/2022	\$ 29,875	\$ 149,375	\$ 268,875	25,000 ⁽⁴⁾ 39,305	\$ 155,500 \$ 268,453
James R. Sneed	3/30/2022 3/30/2022	\$ 32,609	\$ 163,045	\$ 293,481	34,734	\$ 237,233

Christopher W. Wright ⁽⁵⁾	N/A	\$	—	\$	—	\$	—	15,000	\$	102,450
	3/30/2022									

- The amounts represent the threshold, target and maximum annual incentive award payout for the January 1, 2022 to December 31, 2022 performance period under our annual performance-based cash incentive compensation plan and assume full achievement of the NEO's individual performance element. The actual 2022 payout is reported in the "Summary Compensation Table" above under the "Non-Equity Incentive Plan Compensation" column.
- The stock awards reported in the above table represent shares of stock granted under our 2016 Plan. Except as noted in this footnote, the grant vested as to 33% of the shares on April 1, 2023 and vests as to 33% and 34% of the shares on April 1, 2024 and 2025, respectively. The shares granted to Ms. Graham on March 23, 2022 vested as to 50% of the shares on each of April 1, 2022 and 2023. The shares granted to Mr. Wright on March 30, 2022 vested on June 7, 2022 following Mr. Wright's retirement.
- The dollar value of grants of common stock shown represents the grant date fair value calculated based on the fair market value of our common stock on the grant date. The actual value that an NEO will realize on the award will depend on the price per share of our common stock at the time shares are sold. There is no assurance that the actual value realized by an NEO will be at or near the grant date fair value of the shares awarded.
- We made a special one-time grant to Ms. Graham of 25,000 shares of restricted common stock in consideration of her joining Alto Ingredients which resulted in her forfeiture of a significant cash bonus opportunity and unvested equity compensation to her former employer.
- Mr. Wright retired and his employment relationship with us was terminated on May 27, 2022. We made a discretionary grant of equity to Mr. Wright in consideration of his service to us in 2022 through his retirement in May 2022 and in anticipation of Mr. Wright's post-separation consulting arrangement. The shares vested in June 2022 following Mr. Wright's retirement. Mr. Wright did not otherwise receive from us any severance pay or benefits in connection with his retirement.

73

Outstanding Equity Awards at Fiscal Year-End – 2022

The following table sets forth information about outstanding equity awards held by our named executive officers as of December 31, 2022.

Name	Option Awards			Stock Awards	
	Number of Securities Underlying Unexercised Options (#) Exercisable ⁽¹⁾	Option Exercise Price (\$)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested ⁽²⁾	Market Value of Shares or Units of Stock That Have Not Vested ⁽³⁾
Michael D. Kandris	31,746 ⁽⁴⁾	\$ 3.74	6/24/2023	82,570 ⁽⁵⁾ 127,970 ⁽⁶⁾	\$ 237,802 \$ 368,554
Bryon T. McGregor	31,746 ⁽⁴⁾	\$ 3.74	6/24/2023	29,489 ⁽⁵⁾ 45,703 ⁽⁶⁾	\$ 84,928 \$ 131,625
Auste M. Graham				12,500 ⁽⁷⁾ 39,305 ⁽⁶⁾	\$ 36,000 \$ 113,198
James R. Sneed	10,204 ⁽⁸⁾	\$ 3.74	6/24/2023	22,412 ⁽⁵⁾ 34,734 ⁽⁶⁾	\$ 64,547 \$ 100,034
Christopher W. Wright ⁽⁹⁾	—	\$ —		—	\$ —

- The option awards represent stock options granted under our 2006 Stock Incentive Plan.
- The stock awards represent shares of restricted stock granted under our 2016 Plan.
- Represents the fair market value per share of our common stock of \$2.88 on December 30, 2022, the last business day of the most recently completed fiscal year, multiplied by the number of shares that had not vested as of that date.
- Represents shares underlying a stock option granted on June 24, 2013. The option vested as to 33%, 33% and 34% of the 31,746 shares underlying the option on April 1, 2014, 2015 and 2016, respectively.
- Represents shares granted on March 23, 2021. The grant vested as to 33% of the shares on each of April 1, 2022 and 2023 and vests as to 34% of the shares on April 1, 2024.
- Represents shares granted on March 30, 2022. The grant vested as to 33% of the shares on April 1, 2023 and vests as to 33% and 34% of the shares on April 1, 2024 and 2025, respectively.
- Represents shares granted on March 23, 2022. The grant vested on April 1, 2023.
- Represents shares underlying a stock option granted on June 24, 2013. The option vested as to 33%, 33% and 34% of the 10,204 shares underlying the option on April 1, 2014, 2015 and 2016, respectively.
- Mr. Wright retired and his employment relationship with us was terminated in May 2022.

74

Option Exercises and Stock Vested

The following table summarizes the exercise of option awards and the vesting of stock awards for each of our NEOs for the year ended December 31, 2022:

Stock Awards

Name	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting (\$) ⁽¹⁾
Michael D. Kandris	165,669	\$ 1,148,086
Bryon T. McGregor	57,283	\$ 396,971
Auste M. Graham	12,500	\$ 86,625
James R. Sneed	53,797	\$ 372,813
Christopher W. Wright ⁽²⁾	95,610	\$ 465,621

(1) Represents the closing price of a share of our common stock on the date of vesting multiplied by the number of shares that vested on such date, including any shares that were withheld by us to satisfy minimum employment withholding taxes.

(2) Mr. Wright retired and his employment relationship with us was terminated in May 2022. In connection with his retirement, Mr. Wright's unvested shares of restricted stock vested in full.

Severance and Change in Control Arrangements with Named Executive Officers

Executive Employment Agreements. We have entered into agreements with our NEOs that provide certain benefits upon the termination of their employment under certain prescribed circumstances. Those agreements are described under "Executive Employment Agreements" above.

Stock Incentive Plans. Under our 2016 Plan, if a change in control occurs, but except as otherwise provided in the corresponding award or employment agreement, each outstanding equity award under the discretionary grant program will automatically accelerate in full, unless (i) that award is assumed by the successor corporation or otherwise continued in effect, (ii) the award is replaced with a cash retention program that preserves the spread existing on the unvested shares subject to that equity award (the excess of the fair market value of those shares over the exercise or base price in effect for the shares) and provides for subsequent payout of that spread in accordance with the same vesting schedule in effect for those shares, or (iii) the acceleration of the award is subject to other limitations imposed by the plan administrator. Each outstanding equity award under the stock issuance program will vest as to the number of shares of common stock subject to that award immediately prior to the change in control, unless that equity award is assumed by the successor corporation or otherwise continued in effect or replaced with a cash retention program similar to the program described in clause (ii) above or unless vesting is precluded by its terms. Immediately following a change in control, all outstanding awards under the discretionary grant program will terminate and cease to be outstanding except to the extent assumed by the successor corporation or its parent or otherwise expressly continued in full force and effect pursuant to the terms of the change in control transaction.

Except as provided in an award or employment agreement, the plan administrator does not have the discretion to structure one or more equity awards under the discretionary grant and stock issuance programs so that those equity awards will vest in full in the event of a specified termination of the individual's service with us or the successor entity (actually or constructively) following a change in control transaction.

The definition of "change in control" under our 2016 Plan is substantially the same as provided under "Executive Employment Agreements" above.

Calculation of Potential Payments upon Termination or Change in Control

In accordance with the rules of the Securities and Exchange Commission, the following table presents our estimate of the benefits payable to our NEOs under their executive employment agreements and our 2016 Plan assuming that for each of the NEOs (i) a "change in control" occurred on December 30, 2022, the last business day of 2022, and (a) there was a termination by the executive "for good reason," or by us without "cause" within three months before or twelve months after the change in control, or (b) none of the executives' equity awards were assumed by the successor corporation or replaced with a cash retention program, (ii) a qualifying termination occurred on December 30, 2022, which is a termination by the executive "for good reason," by us without "cause" or upon the executive's disability, or (iii) a non-qualifying termination occurred on December 30, 2022, which is a voluntary termination by the executive other than "for good reason" or by us for "cause." See "Executive Employment Agreements" above for the definitions of "for good reason," "cause" and "change in control."

Name	Trigger	Salary and Bonus ⁽¹⁾	Continuation of Benefits ⁽²⁾	Value of Stock Acceleration ⁽³⁾	Total Value ⁽⁴⁾
Michael D. Kandris	Change in Control	\$ 2,694,855	\$ 43,308	\$ 606,356	\$ 3,344,519
	Qualifying Termination	\$ 1,347,428	\$ 21,654	\$ 151,589	\$ 1,520,671
	Non-Qualifying Termination	\$ —	\$ —	\$ —	\$ —
Bryon T. McGregor	Change in Control	\$ 1,070,566	\$ 41,050	\$ 216,553	\$ 1,328,169
	Qualifying Termination	\$ 535,283	\$ 20,525	\$ 54,138	\$ 609,946
	Non-Qualifying Termination	\$ —	\$ —	\$ —	\$ —
Auste M. Graham	Change in Control	\$ 975,000	\$ —	\$ 149,198	\$ 1,124,198
	Qualifying Termination	\$ 487,500	\$ —	\$ 37,300	\$ 524,800
	Non-Qualifying Termination	\$ —	\$ —	\$ —	\$ —
James R. Sneed	Change in Control	\$ 988,228	\$ 28,872	\$ 164,581	\$ 1,181,681
	Qualifying Termination	\$ 494,114	\$ 14,436	\$ 41,145	\$ 549,695
	Non-Qualifying Termination	\$ —	\$ —	\$ —	\$ —
Christopher W. Wright ⁽⁵⁾	Change in Control	\$ —	\$ —	\$ —	\$ —
	Qualifying Termination	\$ —	\$ —	\$ —	\$ —
	Non-Qualifying Termination	\$ —	\$ —	\$ —	\$ —

(1) Amount represents twenty-four months additional salary plus 200% of the executive's total target short-term cash incentive compensation after the date of termination in the event of a change in control and twelve months additional salary plus 100% of the executive's total target short-term cash incentive compensation after the date of termination in the event of a qualifying termination, in each case based on the executive's salary as of December 30, 2022; provided, that Michael D. Kandris is entitled to thirty-six months additional salary plus 300% of his total target short-term cash incentive compensation after the date of termination in the event of a change in control and eighteen months additional salary plus 150% of his total target short-term cash incentive compensation after the date of termination in the event of a qualifying termination, in each case based on his salary as of December 30, 2022.

- (2) For those NEOs reported as eligible for benefits, the amount represents the aggregate value of the continuation of certain employee health benefits for up to twenty-four months after the date of termination in the event of a change in control and for up to twelve months after the date of termination in the event of a qualifying termination; provided, that Michael D. Kandris is entitled to thirty-six months of additional benefits after the date of termination in the event of a change in control and eighteen months of additional benefits after the date of termination in the event of a qualifying termination. Ms. Graham waived benefits for 2022, thus no amounts are included for her for the continuation of health benefits.
- (3) For those NEOs reported as eligible for acceleration of vesting benefits, the amount represents the aggregate value of the accelerated vesting of 100% of the executive's unvested restricted stock grants in the event of a change in control and 25% of the executive's unvested restricted stock grants in the event of a qualifying termination. The amounts shown as the value of the accelerated restricted stock grants are based solely on the intrinsic value of the restricted stock grants as of December 30, 2022, which was calculated by multiplying (i) the fair market value of our common stock on December 30, 2022, which was \$2.88 per share, by (ii) the assumed number of shares vesting on an accelerated basis on December 30, 2022.
- (4) Excludes the value to the executive of the continuing right to indemnification and continuing coverage under our directors' and officers' liability insurance, if applicable.
- (5) Mr. Wright retired and his employment relationship with us was terminated in May 2022.

Compensation Committee Interlocks and Insider Participation

Our Compensation Committee consists of Gilbert E. Nathan, Terry L. Stone and Maria G. Gray. None of these individuals were officers or employees of Alto Ingredients at any time during 2022 or at any other time. During 2022, none of our executive officers served as a member of the board of directors or compensation committee of any other entity whose executive officer(s) served on our Board or Compensation Committee.

CEO Pay Ratio

As required by Section 953(b) of the Dodd-Frank Wall Street Reform and Consumer Protection Act, and Item 402(u) of Regulation S-K under the Securities Act, we are providing the following information about the relationship of the annual total compensation of Michael D. Kandris, our Chief Executive Officer (our "CEO"), and who is also our President and Chief Operating Officer, and the annual total compensation of our employees. The pay ratio included in this information is a reasonable estimate calculated in a manner consistent with Item 402(u) of Regulation S-K under the Securities Act. The Securities and Exchange Commission's rules for identifying our median employee and calculating the pay ratio allow companies to use different methodologies, estimates and assumptions, therefore the pay ratio disclosure below may not be comparable to the pay ratio reported by other companies.

For 2022, our last completed fiscal year:

- the annual total compensation of our CEO, as reported in the Summary Compensation Table included above in this Proxy Statement, was \$1,493,272; and
- the median of the annual total compensation of all employees (other than our CEO) was \$82,011.

Based on this information, for 2022 the ratio of the annual total compensation of Michael D. Kandris, our CEO, to the median of the annual total compensation of all employees was 18.2 to 1.

To identify the median of the annual total compensation of all employees, as well as to determine the annual total compensation of our median employee and our CEO, we took the following steps:

1. We determined that as of October 20, 2022, our employee population consisted of approximately 456 individuals with all of those persons located in the United States. This employee population consisted of our full-time, part-time and temporary employees. We did not employ any seasonal workers in 2022. We selected October 20, 2022, which is within the last three months of 2022, as the date upon which we would identify the "median employee" because it enabled us to make such identification in a reasonably efficient and economical manner.
2. To identify the "median employee" from our employee population, we compared the amount of wages of our employees, as reflected in our payroll records as of the determination date and ultimately reported to the Internal Revenue Service on Forms W-2 for 2022. In making this determination, we annualized the compensation of employees who were hired in 2022 but did not work for us for the entire year.
3. We identified our median employee using this compensation measure, which was consistently applied to all employees included in the calculation. Since all employees are located in the United States, as is our CEO, we did not make any cost-of-living adjustments in identifying the "median employee."
4. Once we identified our median employee, who is a non-exempt, full-time employee, we combined all of the elements of the employee's compensation for 2022 in accordance with the requirements of Item 402(c)(2)(x) of Regulation S-K under the Securities Act, resulting in annual total compensation of \$82,011, which includes base pay, overtime pay, equity incentive compensation, any matching contributions to the employee's 401(k) plan and any employer contribution to the employee's health savings account.
5. With respect to the annual total compensation of our CEO, we used the amount reported for 2022 in the "Total" column of our Summary Compensation Table included in this Proxy Statement and incorporated by reference under Item 11 of Part III of our Annual Report.

Pay Versus Performance

As required by Section 953(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act, and Item 402(v) of Regulation S-K, we are providing the

following information about the relationship between executive compensation actually paid and certain financial performance of Alto Ingredients, Inc. For further information concerning our variable pay-for-performance philosophy and how we align executive compensation with our performance, refer to “Executive Compensation and Related Information – Compensation Discussion and Analysis” above.

Year	Summary Compensation Table Total for PEO (Michael D. Kandris) ¹	Summary Compensation Table Total for PEO (Neil M. Koehler) ¹	Compensation Actually Paid to PEO (Michael D. Kandris) ²	Compensation Actually Paid to PEO (Neil M. Koehler) ²	Average Summary Compensation Table Total for Non-PEO NEOs ³	Average Compensation Actually Paid to Non-PEO NEOs ⁴	Value of Initial Fixed \$100 Investment Based On:		Net Income (loss) (in thousands) ⁷	Adjusted EBITDA (in thousands) ⁸
	(b)	(b)	(c)	(c)	(d)	(e)	Total Shareholder Return ⁵	Peer Group Total Shareholder Return ⁶		
2022	\$ 1,493,272	N/A	\$ 1,179,649	N/A	\$ 632,267	\$ 561,946	\$ 343.08	\$ 193.70	\$ (42,862)	\$ (9,760)
2021	\$ 1,878,748	N/A	\$ 1,712,162	N/A	\$ 843,060	\$ 843,025	\$ 640.00	\$ 277.30	\$ 44,217	\$ 76,800
2020	\$ 749,925	\$ 531,297	\$ 2,119,851	\$ 1,054,049	\$ 473,486	\$ 740,464	\$ 735.38	\$ 284.83	\$ (16,384)	\$ 66,626

1 The dollar amounts reported in columns (b) are the amounts of total compensation reported for Michael D. Kandris and Neil M. Koehler, our Chief Executive Officers and Co-Chief Executive Officers for the periods stated below, for each corresponding year in the “Total” column of the applicable Summary Compensation Table for the year. Refer to “Executive Compensation and Related Information – Summary Compensation Table” above for information concerning Mr. Kandris and our prior filings with the Securities and Exchange Commission for information concerning Mr. Koehler. Mr. Kandris was appointed as our Co-Chief Executive Officer in May 2020 and became our sole Chief Executive Officer on September 30, 2020. Prior to Mr. Kandris’s appointment in May 2020, Mr. Koehler served as our sole Chief Executive Officer.

79

2 The dollar amounts reported in columns (c) represent the respective amounts of “compensation actually paid” to Mr. Kandris and Mr. Koehler, as computed in accordance with Item 402(v) of Regulation S-K. The dollar amounts do not reflect the actual amount of compensation earned by or paid to Mr. Kandris or Mr. Koehler during the applicable year.

In accordance with the requirements of Item 402(v) of Regulation S-K, the following adjustments were made to Mr. Kandris’s total compensation for each year to determine the compensation actually paid to him:

Year	Reported Summary Compensation Table Total for PEO (Michael D. Kandris)	Less Reported Value of Equity Awards ^(a)	Equity Award Adjustments ^(b)	Reported Change in the Actuarial Present Value of Pension Benefits ^(c)	Pension Benefit Adjustments ^(d)	Compensation Actually Paid to PEO (Michael D. Kandris)
2022	\$ 1,493,272	\$ (874,035)	\$ 560,412	\$ –	\$ –	\$ 1,179,649
2021	\$ 1,878,748	\$ (707,392)	\$ 540,806	\$ –	\$ –	\$ 1,712,162
2020	\$ 749,925	\$ (181,025)	\$ 1,550,951	\$ –	\$ –	\$ 2,119,851

In accordance with the requirements of Item 402(v) of Regulation S-K, the following adjustments were made to Mr. Koehler’s total compensation for each year to determine the compensation actually paid to him:

Year	Reported Summary Compensation Table Total for PEO (Neil M. Koehler)	Less Reported Value of Equity Awards ^(a)	Equity Award Adjustments ^(b)	Reported Change in the Actuarial Present Value of Pension Benefits ^(c)	Pension Benefit Adjustments ^(d)	Compensation Actually Paid to PEO (Neil M. Koehler)
2022	N/A	N/A	N/A	\$ –	\$ –	N/A
2021	N/A	N/A	N/A	\$ –	\$ –	N/A
2020	\$ 531,297	\$ –	\$ 522,752	\$ –	\$ –	\$ 1,054,049

(a) The reported values of equity awards in the tables above are the total grant date fair values of equity awards as reported in the “Stock Awards” column in the Summary Compensation Table for the applicable year.

(b) The equity award adjustments for each applicable year include the addition (or subtraction, as applicable) of the following: (i) the year-end fair value of any equity awards granted in the applicable year that are outstanding and unvested as of the end of the year; (ii) the amount of change as of the end of the applicable year (from the end of the prior fiscal year) in fair value of any awards granted in prior years that are outstanding and unvested as of the end of the applicable year; (iii) for awards that are granted and vest in the same applicable year, the fair value as of the vesting date; (iv) for awards granted in prior years that vest in the applicable year, the amount equal to the change as of the vesting date (from the end of the prior fiscal year) in fair value; (v) for awards granted in prior years that are determined to fail to meet the applicable vesting conditions during the applicable year, a deduction for the amount equal to the fair value at the end of the prior fiscal year; and (vi) the dollar value of any dividends or other earnings paid on stock or option awards in the applicable year prior to the vesting date that are not otherwise reflected in the fair value of such award or included in any other component of total compensation for the applicable year. The valuation assumptions used to calculate fair values did not materially differ from those disclosed at the time of grant.

80

The amounts deducted or added in calculating the equity award adjustments for Mr. Kandris are as follows:

Year	Year End Fair Value of Equity Awards (Michael D. Kandris)	Year over Year Change in Fair Value of Outstanding and Unvested Equity Awards	Fair Value as of Vesting Date of Equity Awards Granted and Vested in the Year	Year over Year Change in Fair Value of Equity Awards Granted in Prior Years that Vested in the Year	Fair Value at the End of the Prior Year of Equity Awards that Failed to Meet Vesting Conditions in the Year	Value of Dividends or other Earnings Paid on Stock or Option Awards not Otherwise Reflected in Fair Value or Total Compensation	Total Equity Award Adjustments (Michael D. Kandris)
2022	\$ 368,554	\$ (159,360)	\$ –	\$ 351,218	\$ –	\$ –	\$ 560,412
2021	\$ 592,780	\$ (77,500)	\$ –	\$ 25,526	\$ –	\$ –	\$ 540,806
2020	\$ 1,357,500	\$ 214,641	\$ –	\$ (21,190)	\$ –	\$ –	\$ 1,550,951

The amounts deducted or added in calculating the equity award adjustments for Mr. Koehler are as follows:

Year	Year End Fair Value of Equity Awards (Neil M. Koehler)	Year over Year Change in Fair Value of Outstanding and Unvested Equity Awards	Fair Value as of Vesting Date of Equity Awards Granted and Vested in the Year	Year over Year Change in Fair Value of Equity Awards Granted in Prior Years that Vested in the Year	Fair Value at the End of the Prior Year of Equity Awards that Failed to Meet Vesting Conditions in the Year	Value of Dividends or other Earnings Paid on Stock or Option Awards not Otherwise Reflected in Fair Value or Total Compensation	Total Equity Award Adjustments (Neil M. Koehler)
2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2020	\$ –	\$ –	\$ –	\$ 522,752	\$ –	\$ –	\$ 522,752

(c) The amounts included in this column are the amounts reported in “Change in Pension and Nonqualified Deferred Compensation” column of the Summary Compensation Table for each applicable year.

(d) The total pension benefit adjustments for each applicable year for each of Messrs. Kandris and Koehler was \$0.00. We do not presently have, nor have we had in the past for any of the periods covered, any pension plans for the benefit of our NEOs, including our PEOs.

3 The dollar amounts reported in column (d) represent the average of the amounts reported for our NEOs as a group (excluding Messrs. Kandris and Koehler, who served as Chief Executive Officers or Co-Chief Executive Officers during the periods covered) in the “Total” column of the Summary Compensation Table in each applicable year. The names of each of the NEOs (excluding Messrs. Kandris and Koehler) included for purposes of calculating the average amounts in each applicable year are as follows: (i) for 2022, Bryon T. McGregor, Auste M. Graham, James R. Sneed and Christopher W. Wright; (ii) for 2021, Bryon T. McGregor, Christopher W. Wright, James R. Sneed and Paul P. Koehler; and (iii) for 2020, Bryon T. McGregor and Christopher W. Wright. Mr. Wright retired in May 2022 and Paul P. Koehler retired in February 2021. The included averages are affected by the retirements of Messrs. Wright and Koehler in 2022 and 2021, respectively, resulting in compensation reported only for the periods through their respective dates of retirement, but in the case of Mr. Wright, also include his post-retirement compensation under a consulting arrangement for the remainder of 2022.

4 The dollar amounts reported in column (e) represent the average amount of “compensation actually paid” to the NEOs as a group (excluding Messrs. Kandris and Koehler), as computed in accordance with Item 402(v) of Regulation S-K. The dollar amounts do not reflect the actual average amount of compensation earned by or paid to the NEOs as a group (excluding Messrs. Kandris and Koehler) during the applicable year. In accordance with the requirements of Item 402(v) of Regulation S-K, the following adjustments were made to average total compensation for the NEOs as a group (excluding Messrs. Kandris and Koehler) for each year to determine the compensation actually paid to them, using the same methodology described above in Note 2:

Year	Average Reported Summary Compensation Table Total for Non-PEO NEOs	Less Average Reported Value of Equity Awards	Average Equity Award Adjustments ^(a)	Average Reported Change in the Actuarial Present Value of Pension Benefits	Average Pension Benefit Adjustments ^(b)	Average Compensation Actually Paid to Non-PEO NEOs
2022	\$ 632,267	\$ (268,947)	\$ 198,626	\$ –	\$ –	\$ 561,946
2021	\$ 843,060	\$ (165,478)	\$ 165,443	\$ –	\$ –	\$ 843,025
2020	\$ 473,486	\$ (61,921)	\$ 328,899	\$ –	\$ –	\$ 740,464

(a) The amounts deducted or added in calculating the total average equity award adjustments are as follows:

Year	Average Year End Fair Value of Equity Awards	Year over Year Average Change in Fair Value of Outstanding and Unvested Equity Awards	Average Fair Value as of Vesting Date of Equity Awards Granted and Vested in the Year	Year over Year Average Change in Fair Value of Equity Awards Granted in Prior Years that Vested in the Year	Average Fair Value at the End of the Prior Year of Equity Awards that Failed to Meet Vesting Conditions in the Year	Average Value of Dividends or other Earnings Paid on Stock or Option Awards not Otherwise Reflected in Fair Value or Total Compensation	Total Average Equity Award Adjustments
2022	\$ 95,214	\$ (25,042)	\$ 39,919	\$ 88,535	\$ –	\$ –	\$ 198,626
2021	\$ 138,343	\$ (19,883)	\$ –	\$ 46,983	\$ –	\$ –	\$ 165,443
2020	\$ 232,173	\$ 107,321	\$ –	\$ (10,595)	\$ –	\$ –	\$ 328,899

(b) The total pension benefit adjustments for each applicable year for each of our NEOs was \$0.00. We do not presently have, nor have we had in the past for any of the periods covered, any pension plans for the benefit of our NEOs.

5 Cumulative Total Shareholder Return, or TSR, is calculated by dividing (i) the sum of the cumulative amount of dividends for the measurement period, assuming dividend reinvestment, which dividends totaled \$0.00 for the period, and the difference between our share price at the end of the measurement period and the beginning of the measurement period, by (ii) our share price at the beginning of the measurement period.

82

6 The peer group used for this purpose is the following published industry index: The Nasdaq Clean Edge Green Energy Index.

7 The dollar amounts reported represent the amount of income (loss) available to common stockholders reflected in our audited financial statements for the applicable year.

8 Adjusted EBITDA is defined as unaudited consolidated net income (loss) before interest expense, interest income, provision/benefit for income taxes, asset impairments, loss on extinguishment of debt, acquisition-related expense, fair value adjustments, and depreciation and amortization expense. While we use various performance measures for the purpose of evaluating performance for our compensation programs, we have determined that Adjusted EBITDA is the financial performance measure that, in our assessment, represents the most important performance measure (that is not otherwise required to be disclosed in the table) used by us to link compensation actually paid to our NEOs, for the most recently completed fiscal year, to our performance.

Financial Performance Measure

As described in greater detail in “Executive Compensation – Compensation Discussion and Analysis,” our executive compensation program reflects a variable pay-for-performance philosophy. The measures we use for both our short- and long-term incentive awards are selected based on our objective to incentivize our NEOs to increase the value of our company over both the short- and long-term. Adjusted EBITDA is the key financial performance measure we use to link executive compensation actually paid to our NEOs for the most recently completed fiscal year to our performance. We do not use presently use any other financial performance measure to link executive compensation actually paid to our NEOs to our performance. See “Executive Compensation – Compensation Discussion and Analysis – Compensation Decisions for 2022 – Annual Cash Incentive Compensation.”

Analysis of the Information Presented in the Pay versus Performance Table

As described in more detail in the section “Executive Compensation – Compensation Discussion and Analysis,” our executive compensation program reflects a variable pay-for-performance philosophy. Although we use various subjective performance measures to align executive compensation with our performance, those measures are not presented in the Pay versus Performance table. The primary variables in year-over-year changes in executive compensation relative to our performance are:

- Cash payments under our short-term incentive plan driven mainly by annual fluctuations in our Adjusted EBITDA compared to our threshold, targeted and maximum Adjusted EBITDA amounts established from time to time by our Compensation Committee; and
- Grants of restricted stock under our long-term equity incentive plan, the value of which as of the grant date, upon vesting, and thereafter, is tied directly to the market price of our common stock.

In seeking to incentivize short-term performance, we directly align our compensation that is actually paid each year (as computed in accordance with Item 402(v) of Regulation S-K) with our Adjusted EBITDA performance measure. Compensation that is actually paid each year can vary significantly year-over-year due to fluctuations in our annual Adjusted EBITDA.

In seeking to incentivize long-term performance we do not directly align our financial performance measure with compensation that is actually paid for a particular year, which can vary significantly year-over-year due to the change in the market value of our stock and the corresponding impact on the value of prior years’ equity awards.

In accordance with Item 402(v) of Regulation S-K, we are providing the following descriptions of the relationships between information presented in the Pay versus Performance table.

Compensation Actually Paid and Cumulative TSR

As demonstrated by the following graph, the amount of compensation actually paid to Mr. Kandris is aligned with our cumulative TSR over the three years presented in the table. Since Mr. Koehler’s compensation is included for only one year, notably the year in which he departed our company, we are unable to provide an analysis of the alignment of his compensation with our cumulative TSR over the period.

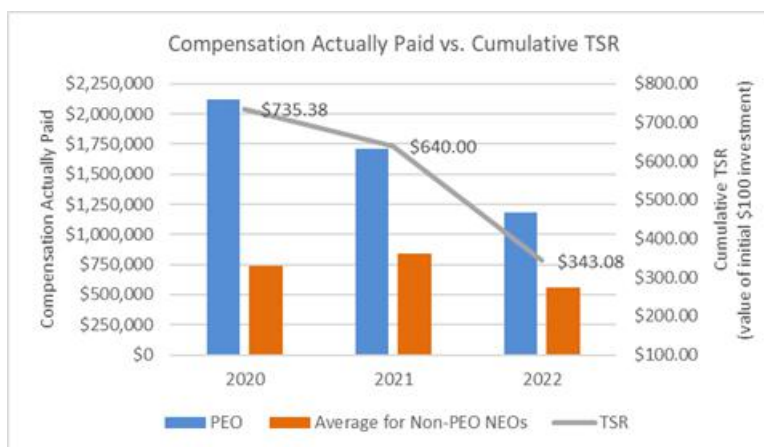
83

The average amount of compensation actually paid to our NEOs as a group (excluding Messrs. Kandris and Koehler) is not closely aligned with our cumulative TSR over the three years presented in the table. Average compensation actually paid to those NEOs increased in 2021 despite a year-over-year decline in cumulative TSR from 2020 to 2021. Average compensation actually paid to those NEOs increased in 2021 due to our substantial Adjusted EBITDA for the year, resulting in high payouts under our

annual short-term cash incentive compensation plan for 2021; however, the market value of our stock did not keep pace as industry challenges began to emerge toward the end of 2021 and were reflected in the market price of our common stock at year-end.

The overall alignment of compensation actually paid with our cumulative TSR over the period presented is because a significant portion of the compensation actually paid to Mr. Kandris and the other NEOs (other than Mr. Koehler) is comprised of short-term cash incentive awards linked to our Adjusted EBITDA which we believe itself is directly and positively correlated with our stock price and therefore to our TSR, and also because a significant portion of the compensation actually paid to those persons is through equity awards the value of which are directly linked to our stock price and therefore to our TSR.

As described in more detail in the section “Executive Compensation – Compensation Discussion and Analysis,” the targeted value of our short-term cash incentive compensation is between 50% and 70%, and the targeted value of our equity awards in the form of restricted stock is between approximately 60% and 130%, in each case depending on the particular NEO, of base compensation awarded to our NEOs.



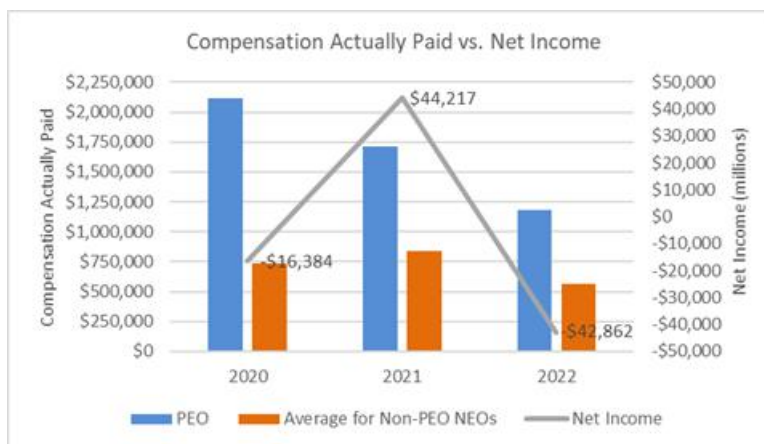
Compensation Actually Paid and Net Income

As demonstrated by the following graph, the amount of compensation actually paid to Mr. Kandris is not closely aligned with our income (loss) available to common stockholders over the three years presented in the table. Since Mr. Koehler’s compensation is included for only one year, notably the year in which he departed our company, we are unable to provide an analysis of the alignment of his compensation with our income (loss) available to common stockholders over the period.

The average amount of compensation actually paid to our NEOs as a group (excluding Messrs. Kandris and Koehler) is somewhat aligned with our income (loss) available to common stockholders over the three years presented in the table.

Mr. Kandris differs from our other NEOs in this regard primarily due to a substantial grant of equity in mid-2020 to Mr. Kandris and the subsequent large increase in the market price of our common stock through year-end, neither of which recurred in similar magnitude in subsequent years. The substantial grant of equity in 2020 to Mr. Kandris was made in respect of his elevation to the position of Co-Chief Executive Officer and in anticipation of his impending status as our sole Chief Executive Officer, which occurred in the succeeding months, as well as Mr. Kandris’s key efforts in furtherance of the successful and timely pivot of our business focus away from fuel-grade ethanol toward specialty alcohols during the coronavirus pandemic in the midst of a bleak market for transportation fuels.

Although we do not use income (loss) available to common stockholders as a performance measure in our overall executive compensation program, that metric is correlated to our primary financial performance measure, Adjusted EBITDA, which we do use when setting goals in our short-term incentive compensation program and making cash awards to our NEOs. As described in more detail in “Executive Compensation – Compensation Discussion and Analysis,” the targeted value of our short-term incentive compensation is between approximately 50% and 70%, depending on the particular NEO, of base compensation awarded to our NEOs.



Compensation Actually Paid and Adjusted EBITDA

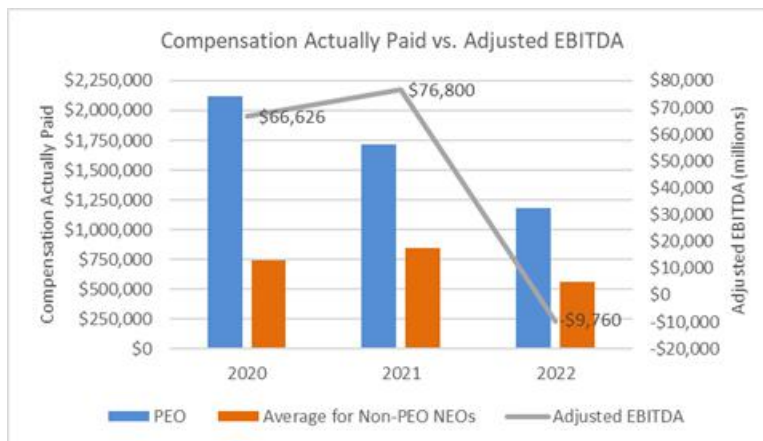
As demonstrated by the following graph, the amount of compensation actually paid to Mr. Kandris and the average amount of compensation actually paid to our NEOs as a group (excluding Messrs. Kandris and Koehler) is generally aligned with our Adjusted EBITDA over the three years presented in the table. Since Mr. Koehler’s compensation is included for only one year, notably the year in which he departed our company, we are unable to provide an analysis of the alignment of his compensation with our Adjusted EBITDA over the period.

As noted above, Adjusted EBITDA is defined as unaudited consolidated net income (loss) before interest expense, interest income, provision/benefit for income

taxes, asset impairments, loss on extinguishment of debt, acquisition-related expense, fair value adjustments, and depreciation and amortization expense.

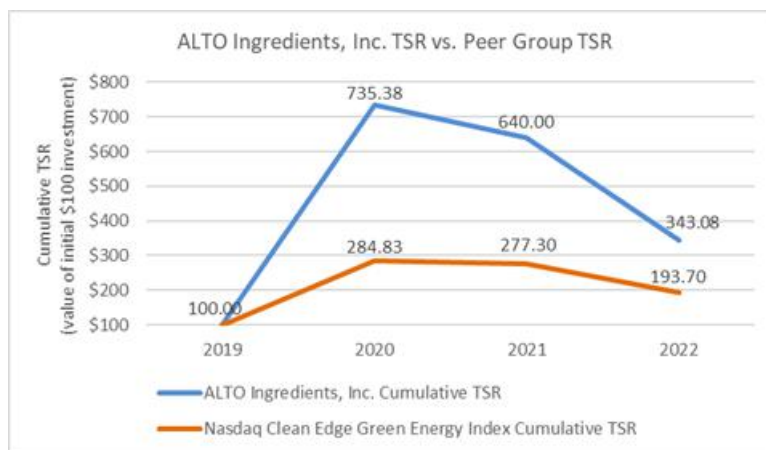
While we use various financial and non-financial performance measures to evaluate performance for our compensation programs, we have determined that Adjusted EBITDA is the financial performance measure that, in our assessment, represents the most important performance measure (that is not otherwise required to be disclosed in the table) used by us to link compensation actually paid to our NEOs, for the most recently completed fiscal year, to our performance. We use Adjusted EBITDA when setting goals in our short-term incentive compensation program and in determining cash awards to our NEOs.

As described in more detail in “Executive Compensation – Compensation Discussion and Analysis,” the targeted value of our short-term incentive compensation is between approximately 50% and 70%, depending on the particular NEO, of base compensation awarded to our NEOs.



Our Cumulative TSR and Peer Group Cumulative TSR

As demonstrated by the following graph, our cumulative TSR over the three-year period presented in the table was 343%, while the cumulative TSR of the peer group presented for this purpose, The Nasdaq Clean Edge Green Energy Index, was 194% over the three years presented in the table. Our TSR significantly outperformed The Nasdaq Clean Edge Green Energy Index during the first year but underperformed The Nasdaq Clean Edge Green Energy Index during the succeeding two years presented in the table. However, our cumulative TSR significantly outperformed The Nasdaq Clean Edge Green Energy Index over the full three-year period, which we believe represents our superior overall financial performance, particularly as to our Adjusted EBITDA, for the period as compared to the companies comprising The Nasdaq Clean Edge Green Energy Index. For more information regarding our performance and the companies that the Compensation Committee considers when determining compensation, refer to “Executive Compensation – Compensation Discussion and Analysis.”



CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Policies and Procedures for Approval of Related Party Transactions

Our Board has the responsibility to review and discuss with management and approve, and has adopted written policies and procedures relating to approval or ratification of, interested transactions with related parties. During this process, the material facts as to the related party’s interest in a transaction are disclosed to all members of our Board or the members of an appropriate independent committee of our Board. Under our written policies and procedures, the Board, or an appropriate independent committee of our Board, is to review each interested transaction with a related party that requires approval and either approve or disapprove of the entry into the interested transaction. An interested transaction is any transaction in which we are a participant and in which any related party has or will have a direct or indirect interest. Transactions that are in the ordinary course of business and would not require either disclosure required by Item 404(a) of Regulation S-K under the Securities Act or approval of the Board or an independent committee of the Board as required by applicable Nasdaq rules would not be deemed interested transactions. No director may participate in any approval of an interested transaction with respect to which he or she is a related party. Our Board intends to approve only those related party transactions that are in the best interests of Alto Ingredients and our stockholders.

Other than as described below or elsewhere in this Proxy Statement, since January 1, 2022, there has not been a transaction or series of related transactions to which Alto Ingredients was or is a party involving an amount in excess of \$120,000 and in which any director, executive officer, holder of more than 5% of any class of our voting securities, or any member of the immediate family of any of the foregoing persons, had or will have a direct or indirect material interest. All of the below transactions were separately ratified and/or approved by our Board or an appropriate independent committee of our Board.

Certain Relationships and Related Transactions

Miscellaneous

We are or have been a party to employment and compensation arrangements with related parties, as more particularly described above in “Executive Compensation and Related Information.” In addition, we have entered into an indemnification agreement with each of our directors and executive officers. The indemnification agreements and our certificate of incorporation and bylaws require us to indemnify our directors and officers to the fullest extent permitted by Delaware law.

87

Executive Officers

On March 31, 2023, we made the following grants of restricted common stock to our executive officers in consideration of services to be provided, which shares vest 33% on April 1, 2024, 33% on April 1, 2025 and 34% on April 1, 2026, and which shares had the grant date fair value stated below:

- Michael D. Kandris was granted 350,000 shares having a value of \$525,000.
- Bryon T. McGregor was granted 125,000 shares having a value of \$187,500.
- Auste M. Graham was granted 107,500 shares having a value of \$161,250.
- James R. Sneed was granted 107,500 shares having a value of \$161,250.

William L. Jones

On May 20, 2008, we sold to William L. Jones, who is our Chairman of the Board and one of our directors, 12,820 shares of our Series B Preferred Stock, all of which were initially convertible into an aggregate of 366 shares of our common stock based on an initial preferred-to-common conversion ratio of approximately 1-for-0.03, and warrants to purchase an aggregate of 184 shares of our common stock at a split-adjusted exercise price of \$735 per share, for an aggregate purchase price of \$250,000. As a result of various anti-dilution adjustments, the preferred-to-common conversion ratio of the Series B Preferred Stock has increased to approximately 1-for-1.06.

For the year ended December 31, 2022, we accrued and paid cash dividends in the amount of \$17,500 in respect of shares of Series B Preferred Stock held by Mr. Jones.

Lyles United, LLC

On March 27, 2008, we sold to Lyles United, LLC an aggregate of 2,051,282 shares of our Series B Preferred Stock, all of which were initially convertible into an aggregate of 58,608 shares of our common stock based on an initial preferred-to-common conversion ratio of approximately 1-for-0.03, and warrants to purchase an aggregate of 29,304 shares of our common stock at a split-adjusted exercise price of \$735 per share, for an aggregate purchase price of \$40,000,000. As a result of various anti-dilution adjustments, the preferred-to-common conversion ratio of the Series B Preferred Stock has increased to approximately 1-for-1.06.

For the year ended December 31, 2022, we accrued and paid cash dividends in the amount of \$700,000 in respect of shares of Series B Preferred Stock held by Lyles United, LLC.

SCF Investments LLC and the Greinke Trust

The Greinke Personal Living Trust Dated April 20, 1999 (the “Greinke Trust”) acquired shares of Series B Preferred Stock from Lyles United, LLC in December 2009. SCF Investments LLC acquired shares of Series B Preferred Stock from the Greinke Trust in January 2021. The preferred-to-common conversion ratio of the Series B Preferred Stock is approximately 1-for-1.06.

For the year ended December 31, 2022, we accrued and paid cash dividends in the amount of \$116,271 in respect of shares of Series B Preferred Stock held by SCF Investments LLC.

88

Maria G. Gray

On June 1, 2021, we entered into a Board Advisor Agreement with Maria G. Gray, one of our current directors and a director nominee, for the provision of strategic consulting services prior to becoming a director. Ms. Gray was compensated at a rate of \$50,000 per year under this arrangement through her election to our Board on June 22, 2022.

Neil M. Koehler

On May 20, 2008, we sold to Neil M. Koehler, our former Chief Executive Officer and President, and one of our former directors, 256,410 shares of our Series B Preferred Stock, all of which were initially convertible into an aggregate of 7,326 shares of our common stock based on an initial preferred-to-common stock conversion ratio of approximately 1-for-0.03, and warrants to purchase an aggregate of 3,663 shares of our common stock at a split-adjusted exercise price of \$735 per share, for an aggregate purchase price of \$5,000,000. As a result of various anti-dilution adjustments, the preferred-to-common conversion ratio of the Series B Preferred Stock has increased to approximately 1-for-1.06.

For the year ended December 31, 2022, we accrued and paid cash dividends in the amount of \$350,000 in respect of shares of Series B Preferred Stock held by Mr. Koehler.

Stockholder Proposals

Pursuant to Rule 14a-8 under the Exchange Act, proposals by stockholders (other than a proposal for director nomination) that are intended for inclusion in our Proxy Statement and proxy card and to be presented at our next annual meeting must be received by us no later than January 6, 2024 to be considered for inclusion in our proxy materials relating to our next annual meeting. Such proposals shall be addressed to our corporate Secretary at Alto Ingredients, Inc., 1300 South Second Street, Pekin, Illinois 61554 and may be included in next year's annual meeting proxy materials if they comply with rules and regulations of the Securities and Exchange Commission governing stockholder proposals.

Stockholder nominations of persons for election to our Board, or proposals by stockholders that are not intended for inclusion in our proxy materials, may be made by any stockholder who timely and completely complies with the notice procedures contained in our bylaws, was a stockholder of record at the time of giving of notice and is entitled to vote at the meeting, so long as the proposal is a proper matter for stockholder action and the stockholder otherwise complies with the provisions of our bylaws and applicable law. However, stockholder nominations of persons for election to our Board at a special meeting may only be made if our Board has determined that directors are to be elected at the special meeting.

To be timely, stockholder nominations of persons for election to our Board, or proposals not intended for inclusion in our proxy materials, must be delivered to our Secretary at our Pekin, Illinois corporate headquarters not later than:

- In the case of an annual meeting, the close of business on March 21, 2024. However, if the date of the meeting has changed more than 30 days from the date of the prior year's meeting, then for the stockholder's notice to be timely it must be delivered to our corporate Secretary a reasonable time before we mail our proxy materials for the current year's meeting. For purposes of the preceding sentence, a "reasonable time" coincides with any adjusted deadline we publicly announce.
- In the case of a special meeting, the close of business on the 7th day following the day on which we first publicly announce the date of the special meeting.

Except as otherwise provided by law, if the chairperson of the meeting determines that a nomination or any business proposed to be brought before a meeting was not made or proposed in accordance with the procedures set forth in our bylaws and summarized above, the chairperson may prohibit the nomination or proposal from being presented at the meeting.

89

Available Information

We are subject to the informational requirements of the Exchange Act. In accordance with the Exchange Act, we file reports, proxy statements and other information with the Securities and Exchange Commission. These materials can be inspected and copied at the Public Reference Room maintained by the Securities and Exchange Commission at 100 F Street, N.E., Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the Securities and Exchange Commission at 1-800-SEC-0330. Our common stock trades on The Nasdaq Capital Market under the symbol "ALTO."

Annual Report

A copy of our Annual Report on Form 10-K for the year ended December 31, 2022 has been provided or made available concurrently with this Proxy Statement to all stockholders entitled to notice of and to vote at the Annual Meeting. The Annual Report is not incorporated into this Proxy Statement and is not deemed to be a part of our proxy solicitation materials. Copies of our Annual Report on Form 10-K (without exhibits) for the year ended December 31, 2022 will be furnished by first class mail, without charge, to any person from whom the accompanying proxy is solicited upon written or oral request to Alto Ingredients, Inc., 1300 South Second Street, Pekin, Illinois 61554, Attention: Investor Relations, telephone (916) 403-2123. If exhibit copies are requested, a copying charge of \$0.20 per page applies. In addition, all of our public filings, including our Annual Report, can be found free of charge on the website of the Securities and Exchange Commission at <http://www.sec.gov>.

ALL STOCKHOLDERS ARE URGED TO COMPLETE, SIGN AND RETURN PROMPTLY THE ACCOMPANYING PROXY CARD IN THE ENCLOSED ENVELOPE.

Forward-Looking Statements

All statements included or incorporated by reference in this Proxy Statement other than statements or characterizations of historical fact, are forward-looking statements, within the meaning of the federal securities laws, including the Private Securities Litigation Reform Act of 1995. These forward-looking statements are based on our current expectations, estimates and projections about our business and industry, management's beliefs, and certain assumptions made by us, all of which are subject to change. Forward-looking statements can often be identified by words such as "anticipates," "expects," "intends," "plans," "predicts," "believes," "seeks," "estimates," "may," "will," "should," "would," "could," "potential," "continue," "ongoing," similar expressions, and variations or negatives of these words. These forward-looking statements are not guarantees of future results and are subject to risks, uncertainties and assumptions that could cause our actual results to differ materially and adversely from those expressed in any forward-looking statement. Important risk factors that could contribute to such differences are discussed in our Annual Report on Form 10-K for the year ended December 31, 2022, subsequent Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and other Securities and Exchange Commission filings. The forward-looking statements in this Proxy Statement speak only as of this date. We undertake no obligation to revise or update publicly any forward-looking statement for any reason, except as required by law.

90

APPENDIX A

**ALTO INGREDIENTS, INC.
2016 STOCK INCENTIVE PLAN**

**(Adopted March 25, 2016, and ratified by Stockholders June 16, 2016;
Amended March 29, 2018, and ratified by Stockholders June 14, 2018;
Amended August 6, 2019, and ratified by Stockholders November 7, 2019;
Amended September 2, 2020, and ratified by Stockholders November 18, 2020;
Amended March 30, 2022, and ratified by Stockholders June 22, 2022;
Amended April 20, 2023, and ratified by Stockholders June 22, 2023)**

ARTICLE ONE

GENERAL PROVISIONS

I. Purpose of the Plan

This 2016 Stock Incentive Plan is intended to promote the interests of Alto Ingredients, Inc. by providing eligible persons in the Corporation's service with the opportunity to acquire a proprietary or economic interest, or otherwise increase their proprietary or economic interest, in the Corporation as an incentive for them to remain in such service and render superior performance during such service. Capitalized terms not otherwise defined herein shall have the meanings assigned to such terms in the attached Appendix.

II. Structure of the Plan

A. The Plan is divided into two equity-based incentive programs:

- the Discretionary Grant Program, under which eligible persons may, at the discretion of the Plan Administrator, be granted options to purchase shares of common stock or stock appreciation rights tied to the value of such common stock; and
- the Stock Issuance Program, under which eligible persons may be issued shares of common stock pursuant to restricted stock or restricted stock unit awards or other stock-based awards, made by and at the discretion of the Plan Administrator, that vest upon the completion of a designated service period and/or the attainment of pre-established performance milestones, or under which shares of common stock may be issued through direct purchase or as a bonus for services rendered to the Corporation (or any Parent or Subsidiary).

B. The provisions of Articles One and Four shall apply to all equity programs under the Plan and shall govern the interests of all persons under the Plan.

III. Administration of the Plan

A. The Compensation Committee shall have sole and exclusive authority to administer the Discretionary Grant and Stock Issuance Programs, provided, however, that the Board may retain, reassume or exercise from time to time the power to administer those programs with respect to all persons. However, any discretionary Awards to members of the Compensation Committee must be authorized and approved by a disinterested majority of the Board.

B. The Plan Administrator shall, within the scope of its administrative functions under the Plan, have full power and authority (subject to the provisions of the Plan) to establish such rules and regulations as it may deem appropriate for proper administration of the Discretionary Grant and Stock Issuance Programs and to make such determinations under, and issue such interpretations of, the provisions of those programs and any outstanding Awards thereunder as it may deem necessary or advisable. Decisions of the Plan Administrator within the scope of its administrative functions under the Plan shall be final and binding on all parties who have an interest in the Discretionary Grant and Stock Issuance Programs under its jurisdiction or any Award thereunder.

C. Service on the Compensation Committee shall constitute service as a Board member, and members of each such committee shall accordingly be entitled to full indemnification and reimbursement as Board members for their service on such committee. No member of the Compensation Committee shall be liable for any act or omission made in good faith with respect to the Plan or any Award under the Plan.

A-1

IV. Eligibility

A. The persons eligible to participate in the Discretionary Grant and Stock Issuance Programs are as follows:

- (i) Employees;
- (ii) non-employee members of the Board or the board of directors of any Parent or Subsidiary; and
- (iii) Consultants.

B. The Plan Administrator shall, within the scope of its administrative jurisdiction under the Plan, have full authority to determine (i) with respect to Awards made under the Discretionary Grant Program, which eligible persons are to receive such Awards, the time or times when those Awards are to be made, the number of shares to be covered by each such Award, the status of any awarded option as either an Incentive Option or a Non-Statutory Option, the exercise price per share in effect for each Award (subject to the limitations set forth in Article Two), the time or times when each Award is to vest and become exercisable, subject to a minimum initial vesting period of one (1) year, and the maximum term for which the Award is to remain outstanding, and (ii) with respect to Awards under the Stock Issuance Program, which eligible persons are to receive such Awards, the time or times when the Awards are to be made, the number of shares subject to each such Award, the vesting schedule (if any) applicable to the shares subject to such Award, subject to a minimum initial vesting period of one (1) year, and the cash consideration (if any) payable for such shares.

C. The Plan Administrator shall have the absolute discretion to grant options or stock appreciation rights in accordance with the Discretionary Grant Program and to effect stock issuances or other stock-based awards in accordance with the Stock Issuance Program.

V. Stock Subject to the Plan

A. The stock issuable under the Plan shall be shares of authorized but unissued or reacquired common stock, including shares repurchased by the Corporation on the open market. Subject to any additional shares authorized by the vote of the Board and approved by the stockholders, the number of shares of common stock reserved for issuance over the term of the Plan shall not exceed 11,400,000 shares. Any or all of the shares of common stock reserved for issuance under the Plan shall be authorized for issuance pursuant to Incentive Options or other Awards.

B. No one person participating in the Plan may be granted Awards of common stock having a Fair Market Value on the applicable grant date(s) of more than One Million Dollars (\$1,000,000) in the aggregate per calendar year.

C. Shares of common stock subject to outstanding Awards under the Plan shall in no event become eligible for reissuance under the Plan, whether as a result of expiration or termination of an Award, cancellation or repurchase of unvested shares, tender of shares in connection with a net/cashless exercise program, withholding of shares to cover withholding taxes, or otherwise.

D. If any change is made to the common stock by reason of any stock split, stock dividend, recapitalization, combination of shares, exchange of shares or other change affecting the outstanding common stock as a class without the Corporation's receipt of consideration, appropriate adjustments shall be made by the Plan Administrator to (i) the maximum number and/or class of securities issuable under the Plan, (ii) the maximum number and/or class of securities for which any one person may be granted Awards under the Plan per calendar year, (iii) the number and/or class of securities and the exercise or base price per share (or any other cash consideration payable per share) in effect under each outstanding Award under the Discretionary Grant Program, and (iv) the number and/or class of securities subject to each outstanding Award under the

Stock Issuance Program and the cash consideration (if any) payable per share thereunder. To the extent such adjustments are to be made to outstanding Awards, those adjustments shall be effected in a manner that shall preclude the enlargement or dilution of rights and benefits under those Awards. The adjustments determined by the Plan Administrator shall be final, binding and conclusive.

VI. Clawback Policy.

The Plan Administrator shall, notwithstanding anything to the contrary contained in any Award document or in any employment or other agreement, have full power and authority, and is required, to terminate any vested or unvested Award or require repayment to the Corporation of the proceeds received by a participant arising from any Award, to apply the Corporation's Policy for Recoupment of Incentive Compensation dated March 29, 2018, as such policy may be amended by the Corporation from time to time, or any successor "clawback" or similar policy adopted by the Corporation, including any such policy or policy changes mandated by or implemented pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act or the applicable listing requirements or rules and regulations of The Nasdaq Capital Market, if applicable, and any other stock exchange or other market on which common stock is then quoted or listed for trading.

ARTICLE TWO DISCRETIONARY GRANT PROGRAM

I. Option Terms.

Each option shall be evidenced by one or more documents in the form approved by the Plan Administrator; provided, however, that each such document shall comply with the terms specified below. Each document evidencing an Incentive Option shall, in addition, be subject to the provisions of the Plan applicable to such options.

A. Exercise Price.

1. The exercise price per share shall be fixed by the Plan Administrator but shall not be less than 85% of the Fair Market Value per share of common stock on the option grant date.

2. The exercise price shall become immediately due upon exercise of the option and shall be payable in one or more of the following forms that the Plan Administrator may deem appropriate in each individual instance:

(i) cash or check made payable to the Corporation;

(ii) shares of common stock valued at Fair Market Value on the Exercise Date and held for the period (if any) necessary to avoid any additional charges to the Corporation's earnings for financial reporting purposes; or

(iii) to the extent the option is exercised for vested shares, through a special sale and remittance procedure pursuant to which the Optionee shall concurrently provide irrevocable instructions to (a) a brokerage firm to effect the immediate sale of the purchased shares and remit to the Corporation, out of the sale proceeds available on the settlement date, sufficient funds to cover the aggregate exercise price payable for the purchased shares plus all applicable federal, state and local income and employment taxes required to be withheld by the Corporation by reason of such exercise and (b) the Corporation to deliver the certificates for the purchased shares directly to such brokerage firm to complete the sale.

Except to the extent such sale and remittance procedure is utilized, payment of the exercise price for the purchased shares must be made on the Exercise Date.

B. Exercise and Term of Options. Each option shall be exercisable at such time or times, during such period and for such number of shares as shall be determined by the Plan Administrator and set forth in the documents evidencing the option. However, no option shall have a term in excess of ten years measured from the option grant date.

C. Effect of Termination of Service

1. The following provisions shall govern the exercise of any options held by the Optionee at the time of cessation of Service or death:

(i) Any option outstanding at the time of the Optionee's cessation of Service for any reason shall remain exercisable for such period of time thereafter as shall be determined by the Plan Administrator and set forth in the documents evidencing the option or as otherwise specifically authorized by the Plan Administrator in its sole discretion pursuant to an express written agreement with Optionee, but no such option shall be exercisable after the expiration of the option term.

(ii) Any option held by the Optionee at the time of death and exercisable in whole or in part at that time may be subsequently exercised by the personal representative of the Optionee's estate or by the person or persons to whom the option is transferred pursuant to the Optionee's will or the laws of inheritance or by the Optionee's designated beneficiary or beneficiaries of that option.

(iii) During the applicable post-Service exercise period, the option may not be exercised in the aggregate for more than the number of vested shares for which that option is at the time exercisable. No additional shares shall vest under the option following the Optionee's cessation of Service, except to the extent (if any) specifically authorized by the Plan Administrator in its sole discretion pursuant to an express written agreement with Optionee. Upon the expiration of the applicable exercise period or (if earlier) upon the expiration of the option term, the option shall terminate and cease to be outstanding for any shares for which the option has not been exercised.

2. The Plan Administrator shall have complete discretion, exercisable either at the time an option is granted or at any time while the option remains outstanding, to:

(i) extend the period of time for which the option is to remain exercisable following the Optionee's cessation of Service from the limited exercise period otherwise in effect for that option to such greater period of time as the Plan Administrator shall deem appropriate, but in no event beyond the expiration of the option term, and/or

(ii) permit the option to be exercised, during the applicable post-Service exercise period, not only with respect to the number of vested shares of common stock for which such option is exercisable at the time of the Optionee's cessation of Service but also with respect to one or more additional installments in which the

Optionee would have vested had the Optionee continued in Service.

D. **Stockholder Rights.** The holder of an option shall have no stockholder rights with respect to the shares subject to the option until such person shall have exercised the option, paid the exercise price and become a holder of record of the purchased shares.

A-4

E. **Repurchase Rights.**

(i) **Options for Unvested Shares.** The Plan Administrator shall have the discretion to grant options that are exercisable for unvested shares of common stock. Should the Optionee cease Service while holding such unvested shares, the Corporation shall have the right to repurchase, at the exercise price paid per share, any or all of those unvested shares. The other terms upon which such repurchase right shall be exercisable (including the period and procedure for exercise and the appropriate vesting schedule for the purchased shares) shall be established by the Plan Administrator and set forth in the document evidencing such repurchase right.

(ii) **Options with Exercise Price below Fair Market Value.** The Corporation shall not repurchase any option the exercise price of which is in excess of the Fair Market Value of the underlying shares at the time of any such repurchase.

F. **Transferability of Options.** The transferability of options granted under the Plan shall be governed by the following provisions:

(i) **Incentive Options.** During the lifetime of the Optionee, Incentive Options shall be exercisable only by the Optionee and shall not be assignable or transferable other than by will or the laws of inheritance following the Optionee's death.

(ii) **Non-Statutory Options.** Non-Statutory Options shall be subject to the same limitation on transfer as Incentive Options, except that the Plan Administrator may structure one or more Non-Statutory Options so that the option may be assigned in whole or in part during the Optionee's lifetime to one or more Family Members of the Optionee or to a trust established exclusively for the Optionee and/or one or more such Family Members, to the extent such assignment is in connection with the Optionee's estate plan or pursuant to a domestic relations order. The assigned portion may only be exercised by the person or persons who acquire a proprietary interest in the option pursuant to the assignment. The terms applicable to the assigned portion shall be the same as those in effect for the option immediately prior to such assignment and shall be set forth in such documents issued to the assignee as the Plan Administrator may deem appropriate.

(iii) **Beneficiary Designations.** Notwithstanding the foregoing, the Optionee may designate one or more persons as the beneficiary or beneficiaries of his or her outstanding options under this Article Two (whether Incentive Options or Non-Statutory Options), and those options shall, in accordance with such designation, automatically be transferred to such beneficiary or beneficiaries upon the Optionee's death while holding those options. Such beneficiary or beneficiaries shall take the transferred options subject to all the terms and conditions of the applicable agreement evidencing each such transferred option, including (without limitation) the limited time period during which the option may be exercised following the Optionee's death.

II. **Incentive Options.**

The terms specified below, together with any additions, deletions or changes thereto imposed from time to time pursuant to the provisions of the Code governing Incentive Options, shall be applicable to all Incentive Options. Except as modified by the provisions of this Section II, all the provisions of Articles One, Two and Four shall be applicable to Incentive Options. Options that are specifically designated as Non-Statutory Options when issued under the Plan shall not be subject to the terms of this Section II.

A-5

A. **Eligibility.** Incentive Options may only be granted to Employees.

B. **Exercise Price.** The exercise price per share shall not be less than 100% of the Fair Market Value per share of common stock on the option grant date.

C. **Dollar Limitation.** The aggregate Fair Market Value of the shares of common stock (determined as of the respective date or dates of grant) for which one or more options granted to any Employee under the Plan (or any other option plan of the Corporation or any Parent or Subsidiary) may for the first time become exercisable as Incentive Options during any one calendar year shall not exceed the sum of One Hundred Thousand Dollars (\$100,000). To the extent the Employee holds two or more such options which become exercisable for the first time in the same calendar year, then for purposes of the foregoing limitation on the exercisability of those options as Incentive Options, such options shall be deemed to become first exercisable in that calendar year based on the chronological order in which they were granted, except to the extent otherwise provided under applicable law or regulation.

D. **10% Stockholder.** If any Employee to whom an Incentive Option is granted is a 10% Stockholder, then the exercise price per share shall not be less than 110% of the Fair Market Value per share of common stock on the option grant date, and the option term shall not exceed five years measured from the option grant date.

III. **Stock Appreciation Rights.**

A. **Authority.** The Plan Administrator shall have full power and authority, exercisable in its sole discretion, to grant stock appreciation rights in accordance with this Section III to selected Optionees or other individuals eligible to receive option grants under the Discretionary Grant Program.

B. **Types.** Three types of stock appreciation rights shall be authorized for issuance under this Section III: (i) tandem stock appreciation rights ("Tandem Rights"), (ii) standalone stock appreciation rights ("Standalone Rights") and (iii) limited stock appreciation rights ("Limited Rights").

C. **Tandem Rights.** The following terms and conditions shall govern the grant and exercise of Tandem Rights.

1. One or more Optionees may be granted a Tandem Right, exercisable upon such terms and conditions as the Plan Administrator may establish, to elect between the exercise of the underlying stock option for shares of common stock or the surrender of that option in exchange for a distribution from the Corporation in an amount equal to the excess of (i) the Fair Market Value (on the option surrender date) of the number of shares in which the Optionee is at the time vested under the surrendered option (or surrendered portion thereof) over (ii) the aggregate exercise price payable for such vested shares.

2. No such option surrender shall be effective unless it is approved by the Plan Administrator, either at the time of the actual option surrender or at any earlier time. If the surrender is so approved, then the distribution to which the Optionee shall accordingly become entitled under this Section III may be made in shares of common stock valued at Fair Market Value on the option surrender date, in cash, or partly in shares and partly in cash, as the Plan Administrator shall in its sole discretion deem appropriate.

3. If the surrender of an option is not approved by the Plan Administrator, then the Optionee shall retain whatever rights the Optionee had under the surrendered option (or surrendered portion thereof) on the option surrender date and may exercise such rights at any time prior to the later of (i) five business days after the receipt of the rejection notice or (ii) the last day on which the option is otherwise exercisable in accordance with the terms of the instrument evidencing such option, but in no event may such rights be exercised more than ten years after the date of the option grant.

D. **Standalone Rights.** The following terms and conditions shall govern the grant and exercise of Standalone Rights under this Article Two:

1. One or more individuals eligible to participate in the Discretionary Grant Program may be granted a Standalone Right not tied to any underlying option under this Discretionary Grant Program. The Standalone Right shall relate to a specified number of shares of common stock and shall be exercisable upon such terms and conditions as the Plan Administrator may establish. In no event, however, may the Standalone Right have a maximum term in excess of ten years measured from the grant date. Upon exercise of the Standalone Right, the holder shall be entitled to receive a distribution from the Corporation in an amount equal to the excess of (i) the aggregate Fair Market Value (on the exercise date) of the shares of common stock underlying the exercised right over (ii) the aggregate base price in effect for those shares.

2. The number of shares of common stock underlying each Standalone Right and the base price in effect for those shares shall be determined by the Plan Administrator in its sole discretion at the time the Standalone Right is granted. In no event, however, may the base price per share be less than the Fair Market Value per underlying share of common stock on the grant date.

3. Standalone Rights shall be subject to the same transferability restrictions applicable to Non-Statutory Options and may not be transferred during the holder's lifetime, except to one or more Family Members of the holder or to a trust established exclusively for the holder and/or such Family Members, to the extent such assignment is in connection with the holder's estate plan or pursuant to a domestic relations order covering the Standalone Right as marital property. In addition, one or more beneficiaries may be designated for an outstanding Standalone Right in accordance with substantially the same terms and provisions as set forth in Section I.F of this Article Two.

4. The distribution with respect to an exercised Standalone Right may be made in shares of common stock valued at Fair Market Value on the exercise date, in cash, or partly in shares and partly in cash, as the Plan Administrator shall in its sole discretion deem appropriate.

5. The holder of a Standalone Right shall have no stockholder rights with respect to the shares subject to the Standalone Right unless and until such person shall have exercised the Standalone Right and become a holder of record of shares of common stock issued upon the exercise of such Standalone Right.

E. **Limited Rights.** The following terms and conditions shall govern the grant and exercise of Limited Rights under this Article Two:

1. One or more Section 16 Insiders may, in the Plan Administrator's sole discretion, be granted Limited Rights with respect to their outstanding options under this Article Two.

2. Upon the occurrence of a Hostile Take-Over, the Section 16 Insider shall have the unconditional right (exercisable for a 30-day period following such Hostile Take-Over) to surrender each option with such a Limited Right to the Corporation. The Section 16 Insider shall in return be entitled to a cash distribution from the Corporation in an amount equal to the excess of (i) the Take-Over Price of the number of shares in which the Optionee is at the time vested under the surrendered option (or surrendered portion thereof) over (ii) the aggregate exercise price payable for those vested shares. Such cash distribution shall be made within five days following the option surrender date.

3. The Plan Administrator shall pre-approve, at the time such Limited Right is granted, the subsequent exercise of that right in accordance with the terms of the grant and the provisions of this Section III. No additional approval of the Plan Administrator or the Board shall be required at the time of the actual option surrender and cash distribution. Any unsurrendered portion of the option shall continue to remain outstanding and become exercisable in accordance with the terms of the instrument evidencing such grant.

F. **Post-Service Exercise.** The provisions governing the exercise of Tandem, Standalone and Limited Stock Appreciation Rights following the cessation of the recipient's Service or the recipient's death shall be substantially the same as those set forth in Section I.C of this Article Two for the options granted under the Discretionary Grant Program.

G. **Repurchase Rights.** The provisions governing the repurchase of Tandem, Standalone and Limited Stock Appreciation Rights shall be substantially the same as those set forth in Section I.E of this Article Two for the options granted under the Discretionary Grant Program.

IV. Change in Control/Hostile Take-Over.

A. Except as otherwise provided in an Optionee's or other recipient's Award or employment agreement, no Award outstanding under the Discretionary Grant Program at the time of a Change in Control shall vest and become exercisable on an accelerated basis if and to the extent that: (i) such Award is, in connection with the Change in Control, assumed by the successor corporation (or parent thereof) or otherwise continued in full force and effect pursuant to the terms of the Change in Control transaction, (ii) such Award is replaced with a cash retention program of the successor corporation (or parent thereof) that preserves the spread existing at the time of the Change in Control on the shares of common stock as to which the Award is not otherwise at that time vested and exercisable and provides for subsequent payout of that spread in accordance with the same exercise/vesting schedule applicable to those shares, or (iii) the acceleration of such Award is subject to other limitations imposed by the Plan Administrator. However, if none of the foregoing conditions are satisfied, each Award outstanding under the Discretionary Grant Program at the time of the Change in Control but not otherwise vested and exercisable as to all the shares at the time subject to that Award shall automatically accelerate so that each such Award shall, immediately prior to the effective date of the Change in Control, vest and become exercisable as to all the shares of common stock at the time subject to that Award and may be exercised as to any or all of those shares as fully vested shares of common stock; provided, however, that any Award that would vest upon the attainment of designated performance goals or pre-established performance milestones, or the satisfaction of specified Service requirements other than time-based vesting, shall accelerate and vest at the greater of (i) the actual amount based upon actual performance or the Service requirements attained, and (ii) the target amount (and, for the avoidance of doubt, in cases where this proviso applies, no such Award shall accelerate and vest at the minimum amount or the maximum amount unless, in the case of the maximum amount, the actual performance or Service requirement attained results in achievement of the maximum amount).

B. All outstanding repurchase rights under the Discretionary Grant Program shall also terminate automatically, and the shares of common stock subject to those terminated rights shall immediately vest in full, in the event of any Change in Control, except to the extent: (i) those repurchase rights are assigned to the successor

corporation (or parent thereof) or otherwise continue in full force and effect pursuant to the terms of the Change in Control transaction or (ii) such accelerated vesting is precluded by other limitations imposed by the Plan Administrator.

C. Immediately following the consummation of the Change in Control, all outstanding Awards under the Discretionary Grant Program shall terminate and cease to be outstanding, except to the extent assumed by the successor corporation (or parent thereof) or otherwise expressly continued in full force and effect pursuant to the terms of the Change in Control transaction.

D. Each option that is assumed in connection with a Change in Control or otherwise continued in effect shall be appropriately adjusted, immediately after such Change in Control, to apply to the number and class of securities that would have been issuable to the Optionee in consummation of such Change in Control had the option been exercised immediately prior to such Change in Control. In the event outstanding Standalone Rights are to be assumed in connection with a Change in Control transaction or otherwise continued in effect, the shares of common stock underlying each such Standalone Right shall be adjusted immediately after such Change in Control to apply to the number and class of securities into which those shares of common stock would have been converted in consummation of such Change in Control had those shares actually been outstanding at that time. Appropriate adjustments to reflect such Change in Control shall also be made to (i) the exercise price payable per share under each outstanding option, provided the aggregate exercise price payable for such securities shall remain the same, (ii) the base price per share in effect under each outstanding Standalone Right, provided the aggregate base price shall remain the same, (iii) the maximum number and/or class of securities available for issuance over the remaining term of the Plan, and (iv) the maximum number and/or class of securities for which any one person may be granted Awards under the Plan per calendar year. To the extent the actual holders of the Corporation's outstanding common stock receive cash consideration for their common stock in consummation of the Change in Control, the successor corporation may, in connection with the assumption or continuation of the outstanding Awards under the Discretionary Grant Program, substitute, for the securities underlying those assumed Awards, one or more shares of its own common stock with a fair market value equivalent to the cash consideration paid per share of common stock in such Change in Control transaction.

A-8

E. Except as otherwise provided in an Optionee's or other recipient's Award or employment agreement, no Award under the Discretionary Grant Program shall vest and become exercisable as to any shares at the time subject to that Award in the event the Optionee's Service is subsequently terminated by reason of an Involuntary Termination following the effective date of any Change in Control or a Hostile Take-Over in which that Award does not otherwise vest on an accelerated basis.

F. The portion of any Incentive Option accelerated in connection with a Change in Control shall remain exercisable as an Incentive Option only to the extent the applicable One Hundred Thousand Dollar (\$100,000) limitation is not exceeded. To the extent such dollar limitation is exceeded, the accelerated portion of such option shall be exercisable as a Non-Statutory Option under the federal tax laws.

G. Awards outstanding under the Discretionary Grant Program shall in no way affect the right of the Corporation to adjust, reclassify, reorganize or otherwise change its capital or business structure or to merge, consolidate, dissolve, liquidate or sell or transfer all or any part of its business or assets.

ARTICLE THREE **STOCK ISSUANCE PROGRAM**

I. Stock Issuance Terms.

A. **Issuances.** Shares of common stock may be issued under the Stock Issuance Program through direct and immediate issuances without any intervening option grants. Each such stock issuance shall be evidenced by a Stock Issuance Agreement that complies with the terms specified below. Shares of common stock may also be issued under the Stock Issuance Program pursuant to restricted stock awards or restricted stock units, awarded by and at the discretion of the Plan Administrator, that entitle the recipients to receive the shares underlying those awards or units upon the attainment of designated performance goals and/or the satisfaction of specified Service requirements or upon the expiration of a designated time period following the vesting, subject to a minimum initial vesting period of one (1) year, of those awards or units.

B. Issue Price.

1. The price per share at which shares of common stock may be issued under the Stock Issuance Program shall be fixed by the Plan Administrator but shall not be less than 100% of the Fair Market Value per share of common stock on the issuance date.

2. Shares of common stock may be issued under the Stock Issuance Program for any of the following items of consideration that the Plan Administrator may deem appropriate in each individual instance:

- (i) cash or check made payable to the Corporation;
- (ii) past services rendered to the Corporation (or any Parent or Subsidiary); or
- (iii) any other valid form of consideration permissible under the Delaware Corporations Code at the time such shares are issued.

A-9

C. Vesting Provisions.

1. Shares of common stock issued under the Stock Issuance Program may, in the discretion of the Plan Administrator, vest in one or more installments over the Participant's period of Service, subject to a minimum initial vesting period of one (1) year, and/or upon attainment of specified performance objectives. The elements of the vesting schedule applicable to any unvested shares of common stock issued under the Stock Issuance Program shall be determined by the Plan Administrator and incorporated into the Stock Issuance Agreement. Shares of common stock may also be issued under the Stock Issuance Program pursuant to restricted stock awards or restricted stock units that entitle the recipients to receive the shares underlying those awards and/or units upon the attainment of designated performance goals or the satisfaction of specified Service requirements or upon the expiration of a designated time period, subject to a minimum initial vesting period of one (1) year, following the vesting of those awards or units, including (without limitation) a deferred distribution date following the termination of the Participant's Service.

2. The Plan Administrator shall also have the discretionary authority, consistent with Code Section 162(m), to structure one or more Awards under the Stock Issuance Program so that the shares of common stock subject to those Awards shall vest (or vest and become issuable) upon the achievement of certain pre-established corporate performance goals based on one or more of the following criteria: (i) return on total stockholders' equity; (ii) net income per share of common stock; (iii) net income or operating income; (iv) earnings before interest, taxes, depreciation, amortization and stock-compensation costs, or operating income before depreciation and amortization; (v) sales or revenue targets; (vi) return on assets, capital or investment; (vii) cash flow; (viii) market share; (ix) cost reduction goals; (x) budget comparisons; (xi) implementation or completion of projects or processes strategic or critical to the Corporation's business operations; (xii) measures of customer

satisfaction; (xiii) any combination of, or a specified increase in, any of the foregoing; and (xiv) the formation of joint ventures, research and development collaborations, marketing or customer service collaborations, or the completion of other corporate transactions intended to enhance the Corporation's revenue or profitability or expand its customer base; provided, however, that for purposes of items (ii), (iii) and (vii) above, the Plan Administrator may, at the time the Awards are made, specify certain adjustments to such items as reported in accordance with generally accepted accounting principles in the U.S. ("GAAP"), which will exclude from the calculation of those performance goals one or more of the following: certain charges related to acquisitions, stock-based compensation, employer payroll tax expense on certain stock option exercises, settlement costs, restructuring costs, gains or losses on strategic investments, non-operating gains or losses, certain other non-cash charges, valuation allowance on deferred tax assets, and the related income tax effects, purchases of property and equipment, and any extraordinary non-recurring items as described in Accounting Principles Board Opinion No. 30 or its successor, provided that such adjustments are in conformity with those reported by the Corporation on a non-GAAP basis. In addition, such performance goals may be based upon the attainment of specified levels of the Corporation's performance under one or more of the measures described above relative to the performance of other entities and may also be based on the performance of any of the Corporation's business groups or divisions thereof or any Parent or Subsidiary. Performance goals may include a minimum threshold level of performance below which no award will be earned, levels of performance at which specified portions of an award will be earned, and a maximum level of performance at which an award will be fully earned. The Plan Administrator may provide that, if the actual level of attainment for any performance objective is between two specified levels, the amount of the award attributable to that performance objective shall be interpolated on a straight-line basis.

3. Any new, substituted or additional securities or other property (including money paid other than as a regular cash dividend) that the Participant may have the right to receive with respect to the Participant's unvested shares of common stock by reason of any stock dividend, stock split, recapitalization, combination of shares, exchange of shares or other change affecting the outstanding common stock as a class without the Corporation's receipt of consideration shall be issued subject to (i) the same vesting requirements applicable to the Participant's unvested shares of common stock and (ii) such escrow arrangements as the Plan Administrator shall deem appropriate.

A-10

4. The Participant shall have full stockholder rights with respect to any shares of common stock issued to the Participant under the Stock Issuance Program, whether or not the Participant's interest in those shares is vested; provided, however, that the Corporation shall withhold and retain any dividends on unvested shares until such time as the shares vest, if at all, and shall thereafter promptly pay to the Participant any such dividends withheld and retained or, if the shares do not vest, return any such dividends to the corporate treasury. Accordingly, the Participant shall have the right to vote all such shares but shall not receive any cash dividends paid on any unvested shares unless and until the shares vest. The Participant shall not have any stockholder rights with respect to the shares of common stock subject to a restricted stock unit award until that award vests and the shares of common stock are actually issued thereunder. However, dividend-equivalent units may be paid or credited, either in cash or in actual or phantom shares of common stock, on outstanding restricted stock unit or restricted stock awards, subject to such terms and conditions as the Plan Administrator may deem appropriate and subject to the withholding and retention of dividends with respect to any unvested awards on the same terms as set forth above.

5. Should the Participant cease to remain in Service while holding one or more unvested shares of common stock issued under the Stock Issuance Program or should the performance objectives not be attained with respect to one or more such unvested shares of common stock, then except as set forth in Section I.C.6 of this Article Three, those shares shall be immediately surrendered to the Corporation for cancellation, and the Participant shall have no further stockholder rights with respect to those shares. To the extent the surrendered shares were previously issued to the Participant for consideration paid in cash, cash equivalent or otherwise, the Corporation shall repay to the Participant the same amount and form of consideration as the Participant paid for the surrendered shares.

6. In the event of the Participant's retirement, the Plan Administrator may in its discretion waive the surrender and cancellation of one or more unvested shares of common stock that would otherwise occur upon the cessation of the Participant's Service. Any such waiver shall result in the immediate vesting of the Participant's interest in the shares of common stock as to which the waiver applies. Such waiver may be effected at any time, whether before or after the Participant's cessation of Service as a result of the Participant's retirement. No vesting requirements tied to the attainment of performance objectives may be waived with respect to shares that were intended at the time of issuance to qualify as performance-based compensation under Code Section 162(m), except in the event of the Participant's Involuntary Termination or as otherwise provided in Section II.D of this Article Three.

7. Outstanding restricted stock awards or restricted stock units under the Stock Issuance Program shall automatically terminate, and no shares of common stock shall actually be issued in satisfaction of those awards or units, if the performance goals or Service requirements established for such awards or units are not attained or satisfied.

II. Change in Control/Hostile Take-Over.

A. Except as otherwise provided in a Participant's Award or employment agreement, no Award outstanding under the Stock Issuance Program at the time of a Change in Control shall vest on an accelerated basis if and to the extent that: (i) such Award is, in connection with the Change in Control, assumed by the successor corporation (or parent thereof) or otherwise continued in full force and effect pursuant to the terms of the Change in Control transaction, (ii) such Award is replaced with a cash retention program of the successor corporation (or parent thereof) that preserves the value of the Award existing at the time of the Change in Control on the shares of common stock as to which the Award is not otherwise at that time vested and provides for subsequent payout of that value in accordance with the same vesting schedule applicable to those shares, or (iii) the acceleration of such Award is subject to other limitations imposed by the Plan Administrator. However, if none of the foregoing conditions are satisfied, each Award outstanding under the Stock Issuance Program at the time of the Change in Control but not otherwise vested as to all the shares at the time subject to that Award shall automatically accelerate so that each such Award shall, immediately prior to the effective date of the Change in Control, vest as to all the shares of common stock at the time subject to that Award; provided, however, that any Award that would vest upon the attainment of designated performance goals or pre-established performance milestones, or the satisfaction of specified Service requirements other than time-based vesting, shall accelerate and vest at the greater of (i) the actual amount based upon actual performance or the Service requirements attained, and (ii) the target amount (and, for the avoidance of doubt, in cases where this proviso applies, no such Award shall accelerate and vest at the minimum amount or the maximum amount unless, in the case of the maximum amount, the actual performance or Service requirement attained results in achievement of the maximum amount).

A-11

B. Each outstanding Award under the Stock Issuance Program that is assumed in connection with a Change in Control or otherwise continued in effect shall be adjusted immediately after the consummation of that Change in Control to apply to the number and class of securities into which the shares of common stock subject to the Award immediately prior to the Change in Control would have been converted in consummation of such Change in Control had those shares actually been outstanding at that time, and appropriate adjustments shall also be made to the cash consideration (if any) payable per share thereunder, provided the aggregate amount of such consideration shall remain the same. If any such Award is not so assumed or otherwise continued in effect or replaced with a cash retention program which preserves the Fair Market Value of the shares underlying the Award at the time of the Change in Control and provides for the subsequent payout of that value in accordance with the vesting schedule in effect for the Award at the time of such Change in Control, such Award shall vest, and the shares of common stock subject to that Award shall be issued as fully-vested shares, immediately prior to the consummation of the Change in Control.

C. Except as otherwise provided in a Participant's Award or employment agreement, no Award under the Stock Issuance Program shall vest (or vest and become issuable) as to any shares at the time subject to that Award in the event the Participant's Service is subsequently terminated by reason of an Involuntary Termination following the effective date of any Change in Control or a Hostile Take-Over in which that Award does not otherwise vest on an accelerated basis.

D. The Plan Administrator's authority under Paragraph C of this Section II shall also extend to any Award intended to qualify as performance-based compensation under Code Section 162(m), even though the automatic vesting of those Awards pursuant to Paragraph C of this Section II may result in their loss of performance-based status under Code Section 162(m).

E. Awards outstanding under the Stock Issuance Program shall in no way affect the right of the Corporation to adjust, reclassify, reorganize or otherwise change its capital or business structure or to merge, consolidate, dissolve, liquidate or sell or transfer all or any part of its business or assets.

ARTICLE FOUR MISCELLANEOUS

I. Tax Withholding.

A. The Corporation's obligation to deliver shares of common stock upon the issuance, exercise or vesting of Awards under the Plan shall be subject to the satisfaction of all applicable federal, state and local income and employment tax withholding requirements.

B. Subject to applicable laws, rules and regulations and policies of the Corporation, the Plan Administrator may, in its discretion, provide any or all Optionees or Participants to whom Awards are made under the Plan with the right to utilize any or all of the following methods to satisfy all or part of the Withholding Taxes to which those holders may become subject in connection with the issuance, exercise or vesting of those Awards.

(i) *Stock Withholding*: The election to have the Corporation withhold, from the shares of common stock otherwise issuable upon the issuance, exercise or vesting of those Awards a portion of those shares with an aggregate Fair Market Value equal to the percentage of the Withholding Taxes (not to exceed 100%) designated by the Optionee or Participant and make a cash payment equal to such Fair Market Value directly to the appropriate taxing authorities on such individual's behalf.

(ii) *Stock Delivery*: The election to deliver to the Corporation, at the time the Award is issued, exercised or vests, one or more shares of common stock previously acquired by such the Optionee or Participant (other than in connection with the issuance, exercise or vesting triggering the Withholding Taxes) with an aggregate Fair Market Value equal to the percentage of the Withholding Taxes (not to exceed 100%) designated by such holder. The shares of common stock so delivered shall not be added to the shares of common stock authorized for issuance under the Plan.

A-12

(iii) *Sale and Remittance*: The election to deliver to the Corporation, to the extent the Award is issued or exercised for vested shares, through a special sale and remittance procedure pursuant to which the Optionee or Participant shall concurrently provide irrevocable instructions to a brokerage firm to effect the immediate sale of the purchased or issued shares and remit to the Corporation, out of the sale proceeds available on the settlement date, sufficient funds to cover the Withholding Taxes required to be withheld by the Corporation by reason of such issuance, exercise or vesting.

II. Share Escrow/Legends.

Invested shares issued under the Plan may, in the Plan Administrator's discretion, be held in escrow by the Corporation until the Participant's interest in such shares vests or may be issued directly to the Participant with restrictive legends on the certificates evidencing those unvested shares.

III. Effective Date and Term of the Plan

A. The Plan was initially adopted by the Board on March 25, 2016 and ratified and approved by the Corporation's stockholders on June 16, 2016. The Plan was amended by the Board on March 29, 2018, which was ratified and approved by the Corporation's stockholders on June 14, 2018, to increase the number of shares authorized for issuance under the Plan from 1,150,000 shares to 3,650,000 shares and to implement other updates. The Plan was further amended by the Board on August 6, 2019, which was ratified and approved by the Corporation's stockholders on November 7, 2019, to increase the number of shares authorized for issuance under the Plan from 3,650,000 shares to 5,650,000 shares and to implement other updates. The Plan was further amended by the Board on September 2, 2020, which was ratified and approved by the Corporation's stockholders on November 18, 2020, to increase the number of shares authorized for issuance under the Plan from 5,650,000 shares to 7,400,000 shares. The Plan was further amended by the Board on March 30, 2022, which was ratified and approved by the Corporation's stockholders on June 22, 2022, to increase the number of shares authorized for issuance under the Plan from 7,400,000 shares to 8,900,000 shares. The Plan was further amended by the Board on April 20, 2023, which was ratified and approved by the Corporation's stockholders on June 22, 2023, to increase the number of shares authorized for issuance under the Plan from 8,900,000 shares to 11,400,000 shares.

B. The Plan shall become effective on the Plan Effective Date. Awards may be granted under the Discretionary Grant Program and the Stock Issuance Program at any time on or after the Plan Effective Date.

C. The Plan shall terminate upon the earliest to occur of (i) March 25, 2026, (ii) the date on which all shares available for issuance under the Plan shall have been issued as fully-vested shares, (iii) the termination of all outstanding Awards in connection with a Change in Control, or (iv) such other date as the Board in its sole discretion terminates the Plan. If the Plan terminates on March 25, 2026 or on such other date as the Board terminates the Plan, then all Awards outstanding at that time shall continue to have force and effect in accordance with the provisions of the documents evidencing such Awards.

IV. Amendment, Suspension or Termination of the Plan

The Board may suspend or terminate the Plan at any time, without notice, and in its sole discretion. The Board shall have complete and exclusive power and authority to amend or modify the Plan in any or all respects. However, no such amendment or modification shall materially impair the rights and obligations with respect to Awards at the time outstanding under the Plan unless the Optionee or the Participant consents to such amendment or modification. In addition, stockholder approval will be required for any amendment to the Plan that (i) materially increases the number of shares of common stock available for issuance under the Plan, (ii) materially expands the class of individuals eligible to receive option grants or other awards under the Plan, (iii) materially increases the benefits accruing to the Optionees and Participants under the Plan or materially reduces the price at which shares of common stock may be issued or purchased under the Plan, (iv) materially extends the term of the Plan, (v) expands the types of awards available for issuance under the Plan, or (vi) is required under applicable laws, rules or regulations to be approved by stockholders.

A-13

V. Use of Proceeds.

Any cash proceeds received by the Corporation from the sale of shares of common stock under the Plan shall be used for general corporate purposes.

VI. Regulatory Approvals.

A. The implementation of the Plan, the grant of any Award and the issuance of shares of common stock in connection with the issuance, exercise or vesting of any Award made under the Plan shall be subject to the Corporation's procurement of all approvals and permits required by regulatory authorities having jurisdiction over the Plan, the Awards made under the Plan and the shares of common stock issuable pursuant to those Awards.

B. No shares of common stock or other assets shall be issued or delivered under the Plan unless and until there shall have been compliance with all applicable requirements of federal and state securities laws, including the filing and effectiveness of the Form S-8 registration statement for the shares of common stock issuable under the Plan, and all applicable listing requirements of The Nasdaq Capital Market, if applicable, and any other stock exchange or other market on which common stock is then quoted or listed for trading.

VII. No Employment/Service Rights

Nothing in the Plan shall confer upon the Optionee or the Participant any right to continue in Service for any period of specific duration or interfere with or otherwise restrict in any way the rights of the Corporation (or any Parent or Subsidiary employing or retaining such person) or of the Optionee or the Participant, which rights are hereby expressly reserved by each, to terminate such person's Service at any time for any reason, with or without cause.

VIII. Non-Exclusivity of the Plan

Nothing contained in the Plan is intended to amend, modify, or rescind any previously approved compensation plans, programs or options entered into by the Corporation. This Plan shall be construed to be in addition to and independent of any and all other arrangements. Neither the adoption of the Plan by the Board nor the submission of the Plan to the stockholders of the Corporation for approval shall be construed as creating any limitations on the power or authority of the Board to adopt, with or without stockholder approval, such additional or other compensation arrangements as the Board may from time to time deem desirable.

IX. Governing Law.

All questions and obligations under the Plan and agreements issued pursuant to the Plan shall be construed and enforced in accordance with the laws of the State of Delaware.

X. Information to Optionees and Participants.

Optionees and Participants under the Plan who do not otherwise have access to financial statements of the Corporation will receive the Corporation's financial statements at least annually.

A-14

APPENDIX

The following definitions shall be in effect under the Plan:

A. "Award" means any of the following stock or stock-based awards authorized for issuance or grant under the Plan: stock option, stock appreciation right, direct stock issuance, restricted stock or restricted stock unit award or other stock-based award.

B. "Board" means the Corporation's board of directors.

C. "Change in Control" shall be deemed to have occurred if, in a single transaction or series of related transactions:

(i) any person (as such term is used in Section 13(d) and 14(d) of the 1934 Act, or persons acting as a group, other than a trustee or fiduciary holding securities under an employment benefit program, is or becomes a "beneficial owner" (as defined in Rule 13-3 under the 1934 Act), directly or indirectly of securities of the Corporation representing 51% or more of the combined voting power of the Corporation, or

(ii) there is a merger, consolidation, or other business combination transaction of the Corporation with or into another corporation, entity or person, other than a transaction in which the holders of at least a majority of the shares of voting capital stock of the Corporation outstanding immediately prior to such transaction continue to hold (either by such shares remaining outstanding or by their being converted into shares of voting capital stock of the surviving entity) a majority of the total voting power represented by the shares of voting capital stock of the Corporation (or surviving entity) outstanding immediately after such transaction, or

(iii) all or substantially all of the Corporation's assets are sold.

D. "Code" means the Internal Revenue Code of 1986, as amended.

E. "common stock" means the Corporation's common stock, \$0.001 par value per share.

F. "Compensation Committee" means a committee of the Board comprised solely of two or more Eligible Directors who are appointed by the Board to administer the Discretionary Grant and Stock Issuance Programs, who are "outside directors" within the meaning of Section 162(m) of the Code and who are "non-employee directors" within the meaning of Rule 16b-3(b)(3)(i).

G. "Consultant" means a consultant or other independent advisor who is under written contract with the Corporation (or any Parent or Subsidiary) to provide consulting or advisory services to the Corporation (or any Parent or Subsidiary) and whose securities issued pursuant to the Plan could be registered on Form S-8.

H. "Corporation" means Alto Ingredients, Inc., a Delaware corporation, and any corporate successor to all or substantially all of the assets or voting stock of Alto Ingredients, Inc. that shall by appropriate action adopt the Plan.

I. "Discretionary Grant Program" means the discretionary grant program in effect under Article Two of the Plan pursuant to which stock options and stock appreciation rights may be granted to one or more eligible individuals.

K. "Employee" means an individual who is in the employ of the Corporation (or any Parent or Subsidiary), subject to the control and direction of the employer entity as to both the work to be performed and the manner and method of performance.

L. "Exercise Date" means the date on which the Corporation shall have received written notice of the option exercise.

M. "Fair Market Value" per share of common stock on any relevant date shall be determined in accordance with the following provisions:

(i) If the common stock is at the time traded on The Nasdaq Capital Market, then the Fair Market Value shall be the closing selling price per share of common stock at the close of regular hours trading (i.e., before after-hours trading begins) on The Nasdaq Capital Market on the date in question, as such price is reported by the National Association of Securities Dealers. If there is no closing selling price for the common stock on the date in question, then the Fair Market Value shall be the closing selling price on the last preceding date for which such quotation exists.

(ii) If the common stock is not traded on The Nasdaq Capital Market but is at the time listed or quoted on any other market or exchange, then the Fair Market Value shall be the closing selling price per share of common stock at the close of regular hours trading (i.e., before after-hours trading begins) on the date in question on the market or exchange determined by the Plan Administrator to be the primary market for the common stock, as such price is officially quoted in the composite tape of transactions on such exchange. If there is no closing selling price for the common stock on the date in question, then the Fair Market Value shall be the closing selling price on the last preceding date for which such quotation exists.

(iii) In the absence of an established market for the common stock, the Fair Market Value shall be determined in good faith by the Plan Administrator.

In addition, with respect to any Incentive Option, the Fair Market Value shall be determined in a manner consistent with any regulations issued by the Secretary of the Treasury for the purpose of determining fair market value of securities subject to an Incentive Option plan under the Code.

N. "Family Member" means, with respect to a particular Optionee or Participant, any child, stepchild, grandchild, parent, stepparent, grandparent, spouse, former spouse, sibling, niece, nephew, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law or sister-in-law, including adoptive relationships.

O. "Hostile Take-Over" means either of the following events effecting a change in control or ownership of the Corporation:

(i) the acquisition, directly or indirectly, by any person or related group of persons (other than the Corporation or a person that directly or indirectly controls, is controlled by, or is under common control with, the Corporation) of beneficial ownership (within the meaning of Rule 13d-3 of the 1934 Act) of securities possessing more than 50% of the total combined voting power of the Corporation's outstanding securities pursuant to a tender or exchange offer made directly to the Corporation's stockholders that the Board does not recommend such stockholders to accept, or

(ii) a change in the composition of the Board over a period of 36 consecutive months or less such that a majority of the Board members ceases, by reason of one or more contested elections for Board membership, to be composed of individuals who either (A) have been Board members continuously since the beginning of such period or (B) have been elected or nominated for election as Board members during such period by at least a majority of the Board members described in clause (A) who were still in office at the time the Board approved such election or nomination.

P. "Incentive Option" means an option that satisfies the requirements of Code Section 422.

Q. "Involuntary Termination" means the termination of the Service of any individual that occurs by reason of:

(i) if such individual is providing services to the Corporation pursuant to a written contract that defines "cause" or "misconduct" or similar reasons such individual could be dismissed or discharged by the Corporation, then such individual's involuntary dismissal or discharge by the Corporation other than for any of such reasons and other than for Misconduct shall be an Involuntary Termination;

(ii) if such individual is not providing services to the Corporation pursuant to a written contract that defines "cause" or "misconduct" or similar reasons such individual could be dismissed or discharged by the Corporation, then such individual's involuntary dismissal or discharge by the Corporation for reasons other than Misconduct shall be an Involuntary Termination;

(iii) if such individual is providing services to the Corporation pursuant to a written contract that defines "good reason" or similar reasons such individual could voluntarily resign, then such individual's voluntary resignation for any of such reasons shall be an Involuntary Termination; or

(iv) if such individual is providing services to the Corporation pursuant to a written contract that does not define "good reason" or similar reasons such individual could voluntarily resign, then such individual's voluntary resignation following (A) a change in his or her position with the Corporation that materially reduces his or her duties and responsibilities or the level of management to which he or she reports, (B) a reduction in his or her level of compensation (including base salary, fringe benefits and target bonus under any corporate-performance based bonus or incentive programs) by more than 15% or (C) a relocation of such individual's place of employment by more than 50 miles, provided and only if such change, reduction or relocation is effected by the Corporation without the individual's consent, shall be an Involuntary Termination.

R. "Misconduct" means the commission of: any act of fraud, embezzlement or dishonesty by the Optionee or Participant; any unauthorized use or disclosure by such person of confidential information or trade secrets of the Corporation (or any Parent or Subsidiary); any illegal or improper conduct or intentional misconduct, gross negligence or recklessness by such person that has adversely affected or, in the determination of the Plan Administrator, is likely to adversely affect, the business, reputation, goodwill or affairs of the Corporation (or any Parent or Subsidiary) in a material manner; any conduct that provides a basis for the Corporation to terminate for "cause," "misconduct" or similar reasons the written contract pursuant to which the Optionee or Participant is providing Services to the Corporation; resignation by the Optionee or Participant on fewer than 30 days' prior written notice and in violation of an agreement to remain in Service of the Corporation, in anticipation of a termination for "cause," "misconduct" or similar reasons under the agreement, or in lieu of a formal discharge for "cause," "misconduct" or similar reasons. The foregoing definition shall not in any way preclude or restrict the right of the Corporation (or any Parent or Subsidiary) to discharge or dismiss any Optionee, Participant or other person in the Service of the Corporation (or any Parent or Subsidiary) for any other acts or omissions, but such other acts or omissions shall not be deemed, for purposes of the Plan, to constitute grounds for termination for Misconduct.

S. “1934 Act” means the Securities Exchange Act of 1934, as amended.

A-17

T. “Non-Statutory Option” means an option not intended to satisfy the requirements of Code Section 422.

U. “Optionee” means any person to whom an option is granted under the Discretionary Grant Program.

V. “Parent” means any corporation (other than the Corporation) in an unbroken chain of corporations ending with the Corporation, provided each corporation in the unbroken chain (other than the Corporation) owns, at the time of the determination, stock possessing 50% or more of the total combined voting power of all classes of stock in one of the other corporations in such chain.

W. “Participant” means any person who is issued shares of common stock or restricted stock units or other stock-based awards under the Stock Issuance Program.

X. “Permanent Disability” or “Permanently Disabled” means the inability of the Optionee or the Participant to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment expected to result in death or to be of continuous duration of twelve months or more.

Y. “Plan” means the Corporation’s 2016 Stock Incentive Plan, as set forth in this document.

Z. “Plan Administrator” means the particular entity, whether the Compensation Committee or the Board, which is authorized to administer the Discretionary Grant and Stock Issuance Programs with respect to one or more classes of eligible persons, to the extent such entity is carrying out its administrative functions under those programs with respect to the persons then subject to its jurisdiction.

AA. “Plan Effective Date” means the date that stockholder approval of the Plan is obtained in accordance with Section III.A. of Article Four.

BB. “Section 16 Insider” means an officer or director of the Corporation subject to the short-swing profit liability provisions of Section 16 of the 1934 Act.

CC. “Service” means the performance of services for the Corporation (or any Parent or Subsidiary) by a person in the capacity of an Employee, an Eligible Director or a Consultant, except to the extent otherwise specifically provided in the documents evidencing the Award made to such person. For purposes of the Plan, an Optionee or Participant shall be deemed to cease Service immediately upon the occurrence of either of the following events: (i) the Optionee or Participant no longer performs services in any of the foregoing capacities for the Corporation or any Parent or Subsidiary or (ii) the entity for which the Optionee or Participant is performing such services ceases to remain a Parent or Subsidiary of the Corporation, even though the Optionee or Participant may subsequently continue to perform services for that entity.

DD. “Stock Issuance Agreement” means the agreement entered into by the Corporation and the Participant at the time of issuance of shares of common stock under the Stock Issuance Program.

EE. “Stock Issuance Program” means the stock issuance program in effect under Article Three of the Plan.

FF. “Subsidiary” means any corporation (other than the Corporation) in an unbroken chain of corporations beginning with the Corporation, provided each corporation (other than the last corporation) in the unbroken chain owns, at the time of the determination, stock possessing 50% or more of the total combined voting power of all classes of stock in one of the other corporations in such chain.

GG. “Take-Over Price” means the greater of (i) the Fair Market Value per share of common stock on the date the option is surrendered to the Corporation in connection with a Hostile Take-Over or, if applicable, (ii) the highest reported price per share of common stock paid by the tender offeror in effecting such Hostile Take-Over through the acquisition of such common stock. However, if the surrendered option is an Incentive Option, the Take-Over Price shall not exceed the clause (i) price per share.

HH. “10% Stockholder” means the owner of stock (as determined under Code Section 424(d)) possessing more than 10% of the total combined voting power of all classes of stock of the Corporation (or any Parent or Subsidiary).

II. “Withholding Taxes” means the federal, state and local income and employment taxes to which the Optionee or Participant may become subject in connection with the issuance, exercise or vesting of the Award made to him or her under the Plan.

A-18

APPENDIX B

LIST OF COMPANIES INCLUDED IN THIRD-PARTY SURVEY DATA

Korn Ferry Benchmark Database Executive Compensation Survey

Company

3M Company
ABBYY
Acerinox SA
AdvanSix
Agrana
Air Products & Chemicals
Albaugh
Albemarle Corporation
Amcort Limited - Rigid Plastics
Amsted Industries, Inc. - Amsted Rail
Amsted Industries, Inc. - Baltimore Aircoil
Amsted Industries, Inc. - Burgess Norton
Amsted Industries, Inc. - Consolidated Metco Inc.
Amsted Industries, Inc. - Corporate

Amsted Industries, Inc. - Means Industries, Inc.
AOC Aliancys
Apple, Inc.
Arcor
Ardent Mills LLC
Arkema
Armacell
AutoZone - ALLDATA
AVX Corporation
Bacardi Limited -- Bacardi USA
Barilla Pasta US
BASF SE
Beam Suntory
Beneo
BICS
Bostik
Boston Beer Company, The
Bourns, Inc.
Brake Parts, Inc.
Cabot
Calgon Carbon
Campari America
Carus Chemical
Caterpillar
Clayton Homes
Coca-Cola
Colgate-Palmolive Company
Comet
Compass Mineral Group
Constellation Brands
Coty Inc.
Covestro
CSW Industrials
Daikin America
Danfoss US
Dart Container
Dawn Food Products, Inc.
Deere & Company
Delicato Family Vineyards
Diageo North America
Distell Ltd
dorma+kaba Holding AG
DSM Dyneema LLC

B-1

DSM Inc -- Desotech
DSM Nutritional Products, Inc.
DuPont
Dymax
Dyno Nobel
Eastman Chemical
Eaton
Edrington Group USA
ELG Utica Alloys, Inc.
Elkem Silicones USA Corporation
Elliott Company
Emerald Performance Materials
EnerSys Inc.
Evonik Degussa Corporation
Fannie May Confections Brand
Ferrara Candy
Ferrero USA
FICOSA INTERNATIONAL
Fitesa Simpsonville
Flint Hills Resources
FN America, LLC
Fortune Brands -- Future Brands
Franklin International
Fritz Egger GmbH & Co. OG
Gentherm
Gerdau AmeriSteel Corporation
Ghirardelli Chocolate
Gibraltar Industries, Inc.
Gibraltar Industries, Inc. - AMICO
Gibraltar Industries, Inc. - Rough Brothers Inc.
Griffith Foods
H.B. Fuller Company
Hain Celestial Group, The
Heaven Hill Distilleries

Heineken International
Hendrix Genetics
Herr Foods Inc.
Hilti - US
Hormel Foods
HP Hood
Huhtamaki
Huntsman -- Advanced Materials
Huntsman -- Performance Products
Huntsman -- Polyurethanes
Huntsman -- Textile Effects
Huntsman Corporation
Illinois Tool Works Inc.
Iluka Resources
Imdex
Ingevity Corporation
Innophos, Inc.
Inolex Chemicals
itext software
Japan Tobacco - JT International USA
John I. Haas
Johnson Matthey
Kelvion Holding GmbH
Kemin

B-2

Kimberly-Clark
Kloeckner Pentaplast GmbH
Knorr-Bremse AG - Bendix
Komatsu Mining Corp. Group
Koninklijke Vopak
L'Oreal USA -- SalonCentric
Lafarge Corporation
Lantmannen
Lavazza Premium Coffees
Lhoist North America
Linde Plc
Lindt and Sprungli
LiquidPower Specialty Products Inc.
Little Potato Company, The
Louis Dreyfus Company LLC
Lubrizol
LVMH Moet Hennessy Louis Vuitton - Moet Hennessy USA
LyondellBasell North America - Lyondell
Mars, Incorporated
Mast-Jagermeister US
Maxim Integrated Products
McCormick & Company
Merisant
Mitsubishi International
Momentive Performance Materials
MonoSol
Moog
Mosaic Company, The
N.S. International, Ltd.
Nature Works
Neapco Holdings LLC
Nevada Gold Mines
NewMarket Corporation -- Afton Chemical
Nitto Americas Inc
NKT Photonics
NOVA Chemicals
Nutreco Holding -- Trouw Nutrition USA
Occidental Petroleum -- Occidental Chemical
OCI Alabama LLC
OCI Enterprises Inc.
Olin Corporation
Ornua USA
Outokumpu Stainless
Packsize LLC
Performance Contracting Group
Pernod Ricard SA - Pernod Ricard USA
Peroxychem LLC
Peugeot Citroen
Philip Morris United States of America
Plastic Omnium
Prayon, Inc.
Procter & Gamble Company, The
R&T GERS Holding Germany GmbH

Recticel - Flexible Foams - US - Deer Park
Recticel - Flexible Foams - US - Irvine
Remy Cointreau USA
RING Container Technologies
Ring Container Technologies - Rapac

B-3

Royal DSM N.V.
Samuel, Son & Co., Limited
Santen Pharmaceutical
Saudi Basic Industries Corporation (SABIC)
Sazerac Company
Schweitzer Engineering Laboratories
Shiseido Co., Ltd
SHV Holdings -- Eriks
Siegwerk
Siemens Corporation
Sierra Nevada Brewing Co.
Sika AG
Sojitz Corporation of America
Solvay America
Sonoco Products
Spartan Light Metal Products
Stepan Company
Stork B.V.
Stryker
Subaru of Indiana Automotive Inc
Sumitomo SHI FW
T. Marzetti Company
Tech Data Corporation
Tekni-Plex
Tessenderlo
Toray Advanced Composites
Toyota Motor Engineering & Manufacturing North America
Toyota Motor North America - TABC
Toyota Motor North America - Toyota Logistics Service
Toyota Motor North America --Toyota Manufacturing Company
Toyota Motor Sales North America
Treasury Wine Estates
Trinseo
TSRC Corporation
Tumalum Lumber
Tyson Foods, Inc.
Umicore
Unifrax
Vaisala
Valvoline
Venator Materials
Verallia
W R Grace & Co
Wacker Chemie
WD-40 Company
Weber Metals, Inc.
WEG Electric Corp
WEG Group -- Bluffton Motor Works
Westlake Chemical Corporation
Wika Instrument Corporation
William Grant & Sons
YCI Methanol
Zeon Chemicals
Zoltek Companies, Inc.

B-4
