UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

SCHEDULE 14A

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

Filed by	y the Re	egistrant ⊠
Filed by	y a Part	y other than the Registrant □
Check	Prelin Confi Defin Defin	ropriate box: ninary Proxy Statement dential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2)) itive Proxy Statement itive Additional Materials ting Material under §240.14a-12
		MGP Ingredients, Inc.
		(Name of Registrant as Specified In Its Charter)
		(Name of Person(s) Filing Proxy Statement, if other than the Registrant)
		(realite of reison(s) rining rrowy statement, it offer than the registrant)
		ing Fee (Check the appropriate box):
		e required.
		omputed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
	(1)	Title of each class of securities to which transaction applies:
	(2)	Aggregate number of securities to which transaction applies:
	(3)	Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):
	(4)	Proposed maximum aggregate value of transaction:
	(5)	Total fee paid:
	Fee pa	aid previously with preliminary materials.
		s box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify
		evious filing by registration statement number, or the Form or Schedule and the date of its filing.
	(1)	Amount Previously Paid:
	(2)	Form, Schedule or Registration Statement No.:
	(3)	Filing Party:
	(4)	Date Filed:

EXPLANATORY NOTE

The following supplemental materials are filed to supplement the Schedule 14A filed on April 11, 2013 as amended by Amendment No. 1 filed on July 16, 2013, Amendment No. 2 filed on July 22, 2013 and Amendment No. 3 filed on July 30, 2013 (collectively, the "Original Filing") by MGP Ingredients, Inc. (the "Company"). These supplemental materials are being filed to disclose recent action regarding executive compensation taken after the end of fiscal 2012:

- · On August 8, 2013, the Company entered into new employment agreements with President and Chief Executive Officer Timothy W. Newkirk and Vice President of Finance and Chief Financial Officer Donald P. Tracy;
- · On August 8, 2013, the Company approved the First Amendment to the First Amended and Restated MGP Ingredients, Inc. Short-Term Incentive Plan;
- · In August 2013, the Human Resources and Compensation Committee of the Board of Directors modified certain provisions related to vesting for all restricted stock awards and restricted stock units, awarded under the MGP Ingredients, Inc. Stock Incentive Plan of 2004, as amended, and under the terms of all promulgated restricted stock and restricted stock units guidelines.

Except as specifically discussed in this Explanatory Note, these supplemental materials do not otherwise modify or update any other disclosures presented in the Original Filing. In addition, except as specifically discussed in this Explanatory Note, these supplemental materials do not reflect events occurring after the date of the Original Filing or modify or update disclosures that may have been affected by subsequent events.

1

FOR THE 2013 ANNUAL MEETING OF STOCKHOLDERS

EXECUTIVE COMPENSATION AND OTHER INFORMATION

Compensation Overview

Compensation Consultant

The Human Resources and Compensation Committee (the "Compensation Committee") has sole discretion, at Company expense, to retain and terminate independent advisors, including sole authority to approve the fees and retention terms for such advisors, if it shall determine the services of such advisors to be necessary or appropriate. This year, the Compensation Committee engaged Compdata Consulting ("Compdata") as its independent executive compensation consultant to provide an externally focused perspective and specialized executive compensation expertise. Compdata reports back to the Compensation Committee and does not perform any separate services for the management or the Company.

Competitive Market Pay Information and Philosophy

In determining total compensation levels and mix for our Chief Executive Officer ("CEO") and our Chief Financial Officer ("CFO"), the Compensation Committee reviewed a competitive analysis prepared by Compdata. The analysis prepared by Compdata compares the total compensation and each element of the compensation of our CEO and CFO with the median range of compensation for CEO and CFO positions at the peer group companies. The peer group was comprised of similar organizations in primary industry segments in which the Company operates. Compdata's analysis has confirmed that the CEO and CFO compensation is consistent with competitive market practice.

The Compensation Committee considers this peer group competitive pay analysis as a frame of reference in making its pay decisions. The pay decisions are not formulaic. The Compensation Committee exercises judgment in making them and ensures that compensation paid to the executive officers is aligned with the interests of stockholders.

Employment Agreements

As of August 8, 2013, the Company entered into Employment Agreements (the "Employment Agreements") with two of the named executive officers ("NEO"), Messrs. Newkirk and Tracy (each, an "Executive" and collectively, the "Executives"). The Employment Agreements provided that the Executives will serve the Company in the following capacities: Mr. Newkirk as President and Chief Executive Officer of the Company and Mr. Tracy as Vice President of Finance and Chief Financial Officer of the Company. The Company did not enter into an employment agreement with Mr. Schrick.

The term of each Employment Agreement began on August 8, 2013 and, unless terminated earlier pursuant to the terms of the respective Employment Agreement, will terminate on August 8, 2015. The initial base salaries of the Executives remain the same: Mr. Newkirk—\$402,000 and Mr. Tracy—\$229,750. Each Executive is entitled to participate in the Company's performance bonus

2

plan, retirement, disability, pension, savings, health, medical, dental, insurance and other fringe benefits or plans available to executive employees as well as any equity compensation program.

The Compensation Committee believes that its responsible approach to termination and change in control arrangements is reflected by the following provisions of the Employment Agreements:

- Severance Multiple. Executives are entitled to 1 times annual base and 1 times the 3-year mean of payments under the Company's short-term incentive bonus plan in a termination without Cause or Good Reason. This increases to 1.5 times annual base and 1.5 times the 3-year mean of payments under the Company's short-term incentive bonus plan if the without Cause or Good Reason termination occurs in connection with or during the 18 months following an Employment Agreement Change in Control (as defined below) (a double trigger mechanism).
- · Payment Triggers. Severance is only paid upon involuntary termination by the Company without Cause or by the Executive with Good Reason.
- · No Tax Gross Ups. The Employment Agreements contain no tax gross-up provisions, including with respect to potential executive compensation or golden parachute violations. In addition, the employment agreements reduce compensation in order to avoid golden parachute tax violations and preserve the Company's tax deduction for change in control related payments.
- · Non-Compete. The Employment Agreements contain a provision prohibiting competition against the Company that runs for the term of the Employment Agreement and the subsequent 18 months if following an Employment Agreement Change in Control (as defined below) (12 months all other employment termination situations).
- · Normal Agreement Term. The term of the Employment Agreement is two years, with one year extensions.
- · No Increase in Base Salary. Base salary remains the same.

A Change in Control (the "Employment Agreement Change in Control") is defined in the Employment Agreements as:

- a. The closing of an acquisition by any person, entity or "group" (as defined in the Employment Agreements) of at least 50% of the then outstanding shares of common stock of the Company or 50% of the then outstanding shares of preferred stock of the Company;
- b. Individuals who, as of July 15, 2013 (the "Incumbent Board") cease for any reason to constitute at least a majority of the Board, provided that any person becoming a director subsequent to July 15, 2013 whose election, or nomination for election by the Company's stockholders, was approved by a vote of at least a majority of the directors comprising the Incumbent Board (other than an election or nomination of an individual whose initial assumption of office occurs either eight months prior to or eight months following an actual or threatened election contest relating to the election of the directors of the Company), shall be considered as though such person were a member of the Incumbent Board;
- c. Approval by the Company of a reorganization, merger, consolidation, in each case, pursuant to which persons who were the stockholders of the Company immediately prior to such reorganization, merger or consolidation do not, immediately thereafter, own collectively as a group more than 50% of the combined voting power entitled to vote generally in the election of

d. The liquidation or dissolution of the Company or of the Company's approval of the sale of more than 50% of the assets of the Company over no greater than an 18 month period as of the effective date of the first such sale.

Annual Cash Incentive

2013 MEP Program — First Amendment to the First Amended and Restated MGP Ingredients, Inc. Short-Term Incentive Plan

On August 8, 2013, the Company adopted the First Amendment (the "Amendment") to the First Amended and Restated MGP Ingredients, Inc. Short-Term Incentive Plan (the "MEP Plan") related to annual cash incentives provided to employees that will apply to fiscal 2013 and in subsequent years. The Amendment provides a new change in control definition (which mirrors the Employment Agreement Change in Control) and that an employee's rights under the MEP Plan are not affected for the year in which the employee's participation in the MEP Plan is terminated by the Compensation Committee. It also provides a pro-rata payment to a participant for the fiscal year in which termination occurs in the event of his or her termination.

Long-Term Incentives

The Compensation Committee and the Company believe it is important to provide executive officers the payment of benefits in the event of a termination, resignation or retirement following a change in control. In August 2013, the Compensation Committee modified certain provisions related to vesting for all restricted stock awards and restricted stock units ("RSU"), awarded under the MGP Ingredients, Inc. Stock Incentive Plan of 2004, as amended, (the "2004 Plan") and under the terms of all promulgated restricted stock and RSU guidelines. This action was ratified by the Board of Directors on August 8, 2013.

The modification provides that a pro-rata portion of each restricted stock grant and RSU grant under the 2004 Plan shall, in addition to vesting in accordance with the terms previously provided therein, vest with respect to a pro-rata portion of such grant upon the occurrence of certain conditions, which mirror the Employment Agreement Change in Control. The modification also provided that all restricted stock awards and RSUs previously awarded to employees shall vest, to the maximum extent provided under the terms of the prior restricted stock awards and RSA Guidelines, upon the termination of employment by the Company without Cause.

Potential Payments Upon Termination or Change in Control

The employment agreements with each NEO provide that in the event of termination by the Company for Cause or voluntarily by an NEO, the NEO is not entitled to any further base salary or any applicable bonus, benefits or other compensation for that year except as provided in an applicable plan. The NEO is also not entitled to any severance compensation.

In the event an NEO is terminated by the Company without Cause or an NEO terminates his employment for Good Reason, the NEO is entitled to a severance payment in the amount equal to 12 months of his base salary and a lump sum payment equal to the mean of payments under any short-term incentive or annual bonus plan maintained by the Company during each of the three calendar years prior to the year in which such termination occurs. The NEO could also be entitled

4

to an after-tax employer payment of a portion of health continuation coverage premiums for post-termination coverage under the Consolidated Omnibus Budget Reconciliation Act ("COBRA") for a period equal to the duration of such COBRA coverage.

In the event of an Employment Agreement Change in Control and termination without Cause by the Company or its successor or by the NEO for Good Reason, the NEO is entitled to severance pay equal to 18 months of his base pay and a lump sum payment equal to one and one-half times the mean of payments under any short-term incentive or annual bonus plan maintained by the Company during each of the three calendar years prior to the year in which such termination occurs. The NEO could also be entitled to an after-tax employer payment of a portion of health continuation coverage premiums for post-termination coverage under COBRA for a period equal to the duration of such COBRA coverage.

A "change in control" (as defined in the 2004 Plan) would trigger vesting of all RSUs and restricted stock awards granted to NEOs under the 2004 Plan. The change in control and termination without cause values of RSUs and restricted stock awards granted to NEOs were provided as of December 31, 2012 in the Company's proxy statement in section "Potential Payments Upon Termination or Change in Control." In the event that the Employment Agreement Change in Control is triggered, then the RSUs and restricted stock awards granted to NEOs under the 2004 Plan will vest in a pro rata fashion reflecting the portion of the vesting period elapsed.

5

About MGP Ingredients

MGP is a leading independent supplier of premium spirits, offering flavor innovations and custom distillery blends to the beverage alcohol industry. The Company also produces high quality food grade industrial alcohol and formulates grain-based starches and proteins into nutritional, as well as highly functional, innovations for the branded consumer packaged goods industry. Distilled spirits are produced at facilities in the adjacent towns of Lawrenceburg and Greendale, Indiana. The Company is headquartered in Atchison, Kansas, where a variety of distilled alcohol products and food ingredients are manufactured. For more information, visit mgpingredients.com.

Forward-looking Statements Safe Harbor

This news release contains forward-looking statements as well as historical information. Forward-looking statements are usually identified by or are associated with such words as "intend," "plan," "believe," "estimate," "expect," "anticipate," "hopeful," "should," "may," "will," "could," "encouraged," "opportunities," "potential" and/or the negatives of these terms or variations of them or similar terminology. They reflect management's current beliefs and estimates of future economic circumstances, industry conditions, Company performance and financial results and are not guarantees of future performance. All such forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from those contemplated by the relevant forward-looking statement. Investors should not place undue reliance upon forward-looking statements and the Company undertakes no obligation to publicly update or revise any forward-looking statements. Important factors that could cause actual results to differ materially from our expectations include, among others: (i) disruptions in operations at our Atchison facility or Indiana Distillery, (ii) the availability and cost of grain and fluctuations in energy costs, (iii) the effectiveness of our hedging strategy, (iv) the competitive environment and related market conditions, (v) the ability to effectively pass raw material price increases on to customers, (vi) the viability of the Illinois Corn Processing, LLC ("ICP") joint venture and its ability to obtain financing, (vii) our ability to maintain compliance with all applicable loan agreement covenants, (viii) our ability to realize operating efficiencies, (ix) actions of governments, (x) and consumer tastes and preferences. For further information on these and other risks and uncertainties that may affect our business, including risks specific to our Distillery and Ingredient segments, see Item 1A. Risk Factors of our Annual Report on Form 10-K for the year ended December 31, 2012, as

Important Additional Information

MGP Ingredients, Inc., its directors, and certain of its officers are participants in the solicitation of proxies from MGP stockholders in connection with the Company's 2013 Annual Meeting of Stockholders. Important information concerning the identity and interests of these persons is available in the definitive proxy statement that MGP filed

with the SEC on April 11, 2013 as subsequently supplemented, including the proxy supplement dated July 12, 2013, as amended by Amendment No. 1 filed on July 16, 2013 and Amendment No. 2 filed on July 22, 2013.

The definitive proxy statement, any other relevant documents and other materials filed with the SEC concerning MGP are available free of charge at www.sec.gov. For a copy of final definitive materials with respect to 2013 Annual Meeting, including Amendment No. 3 of the Supplement to the proxy statement please see http://ir.mgpingredients.com/annuals.cfm. Stockholders should carefully read the definitive proxy statement, including supplements thereto, before making any voting decision.