Central Valley Regional Water Quality Control Board

16 December 2021

John Layous/Joe Lane
The Garlic Company
18602 Zerker Road
Shafter, CA 93263

CERTIFIED MAIL
7018 1830 0001 2774 7909

NOTICE OF APPLICABILITY

CENTRAL VALLEY WATER BOARD RESOLUTION R5-2018-0085; WAIVER OF REPORTS OF WASTE DISCHARGE AND WASTE DISCHARGE REQUIREMENTS FOR SPECIFIC TYPES OF DISCHARGE WITHIN THE CENTRAL VALLEY REGION; THE GARLIC COMPANY, SHAFTER GARLIC PROCESSING PLANT WATER TREATMENT SYSTEM BACKWASH; KERN COUNTY

On 3 December 2021, Michael Sowers with Valley Science and Engineering submitted a Report of Waste Discharge (RWD) on behalf of The Garlic Company (hereafter Discharger) for coverage under Resolution R5-2018-0085, *Approving Waiver of Reports of Waste Discharge and Waste Discharge Requirements for Specific Types of Discharge Within the Central Valley Region* (or Low Threat Waiver) for the discharge of backwash water from a wellhead treatment system used to remove 1,2,3-trichloropropane (or 1,2,3-TCP).

Based on the information provided in the RWD and additional information provided by Michael Sowers with Valley Science and Engineering, the discharge meets the required conditions for approval under the Low Threat Waiver. You are hereby assigned enrollee number **R5-2018-0085-0062.** Please include this number on all correspondence related to this discharge. A copy of the Low Threat Waiver is enclosed and available on the Central Valley Water Board's website at https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2018-0085.pdf.

Please familiarize yourself with the contents of the Low Threat Waiver, including the Conditions of Discharge (Attachment A of the Low Threat Waiver). The discharge must be managed in accordance with the requirements contained in the Conditions of Discharge and with the information submitted in the RWD and this Notice of Applicability (NOA). The Low Threat Waiver will expire on **7 December 2023.** Prior to this date, the Discharger shall

contact the Central Valley Water Board and either cease the discharge or submit a new RWD and application fee to continue the discharge under a renewed waiver, general order, or individual waste discharge requirements.

In accordance with the requirements in Attachment A of the Low Threat Waiver for filter backwash discharges (Table 1, Category 13), this NOA is accompanied by Monitoring and Reporting Program (MRP) R5-2018-0085-0062 to ensure compliance with the conditions in the Low Threat Waiver.

LOCATION

The Discharger owns and operates a garlic processing facility at 18602 Zerker Road in Shafter, Kern County, as shown in **Attachment A** (35º 29'00" N, 119º 08' 43" W). This portion of Kern County is within the Tulare Lake Basin. The operative Water Quality Control Plan for the Tulare Lake Basin (hereafter Basin Plan), designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve water quality objectives for all waters of the basin.

DISCHARGE DESCRIPTION

The discharge of garlic processing wastewater to land from the Shafter Garlic Processing Plant (Shafter Garlic or Facility) is regulated under existing Waste Discharge Requirements (WDRs) Order R5-2020-0025. The Facility is in the process of installing a wellhead water treatment system consisting of two granular activated carbon (GAC) vessels to remove 1,2,3-TCP from groundwater used in its processing operations. It is not used for drinking water consumption. The treatment system consists of one treatment train with an initial 250,000-gallon storage tank followed by two 10,000-gallon GAC vessels operated in series and a 3,000-gallon pressure tank. The treated source water is sent out for use in the garlic processing facility. A conceptual flow diagram of the backwash cycle is included in **Attachment B**.

Changing out the carbon in the vessels is required periodically due to sediment build up and accumulation of calcium and biofilm within the system. According to the December 2021 RWD, the GAC vessels will be backwashed to flush out entrapped air and fines when the carbon in the vessels is replaced. This is expected to occur about once every one to two years. Only one vessel will be serviced at a time.

The estimated volume of water generated during the backwash operation is 10,000 gallons, the volume of one GAC vessel. The backwash water will be discharged to an existing on-site stormwater retention basin located to the east of the 250,000-gallon storage tank (see Attachment B). The quality of the backwash water is projected to be similar to the raw source water entering the system with the addition of carbon fines flushed from the GAC vessel.

Information on water quality for the two onsite supply wells (Well #3 and Well #5) is provided in Table 1 below.

Table 1: Well Water Quality (Raw)

Constituent	Well #3 8/12/2020	Well #3 8/11/2021	Well #5 8/12/2020	Well #5 8/11/2021	MCL
EC	2,500	1,900	580	680	900 - 1,600
TDS	1,600	1,200	330	390	500-1,000
Nitrate (mg/L as N)	1.8	1.1	<0.23	<0.23	10
Alkalinity (mg/L as $CaCO_3$)	14	15	60	45	
pH	7.7	8.3	8.7	8.5	
Chloride (mg/L)	320	250	75	86	250-500
Hardness (mg/L as $CaCO_3$)	440	250	48	69	
Sodium (mg/L)	370	280	90	100	
Sulfate (mg/L)	730	540	110	150	250-500
Iron (µg/L)	1,300	670	<30	<30	300
Arsenic (µg/L)	<2.0	<2.0	3.0	2.2	10
1,2,3 TCP (µg/L)	0.085 (5/19/2021)	0.068 (8/4/2021)	<0.005 (5/19/2021)	<0.005 (8/4/2021)	0.005

Additional information on water quality for the supply wells at this Facility can be found on the Division of Drinking Water's Public Water Systems Database at:

(https://sdwis.waterboards.ca.gov/PDWW/JSP/WaterSystemDetail.jsp?tinwsys_is_number=1662&tinwsys_st_code=CA)

FACILITY-SPECIFIC REQUIREMENTS

The Low Threat Waiver and this NOA covers the discharge of filter backwash water from the water treatment system at Shafter Garlic Processing Plant. The Discharger shall comply with the requirements specified in the Low Threat Waiver and the facility-specific requirements listed below.

1. Discharge of filter backwash water shall be conducted as described in the RWD and in accordance with the requirements contained in the Low Threat Waiver.

2. Discharge of filtered backwash water at a location or in a manner different from that described in this NOA is prohibited.

3. The Discharger shall comply with the attached Monitoring and Reporting Program (MRP) R5-2018-0085-0062

4. Runoff or discharge of filter backwash water to a wetland, surface water (other than the Retention Basin specified above), surface water drainage course, or biologically or culturally sensitive area is prohibited.

5. Failure to comply with the requirements of this NOA, attached MRP R5-2018-0085-0062, and the Low Threat Waiver, could result in enforcement actions as authorized by provisions of the California Water Code.

6. The Discharger shall notify the Central Valley Water Board of any change in agreement or proposed use of the discharge of backwash water as described in the RWD and this NOA.

All monitoring reports and other correspondence should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50 MB should be emailed to: centralvalleyfresno@waterboards.ca.gov.

To ensure that your submittal is routed to the appropriate staff person, the following information should be included in the body of the email or any documentation submitted to the mailing address for this office:

Facility Name: The Garlic Company Water Treatment System Backwash
Program: NON-15.
Resolution: R5-2018-0085-0062
CIWQS Place ID: 878059

Documents that are 50 MB or larger should be transferred to a CD, DVD, or flash drive and mailed to:

Central Valley Regional Water Quality Control Board Fresno Office
1685 E Street
Fresno, CA 93706

All documents, including responses to inspections and written notifications, submitted to comply with this Waiver shall be directed, via the paperless office system, to the Compliance and Enforcement Unit, attention to Russell Walls. Mr. Walls can be reached at (559) 488-4392 or Russell.Walls@waterboards.ca.gov. Questions regarding the permitting aspects of the Wavier, and notification for termination of coverage under the Waiver, shall be directed, via the paperless office system, to the Waste Discharge Requirements Permitting Unit, attention Jeff Robins. Jeff Robins can be reached at (559) 445-5976 or by email at Jeff.Robins@waterboards.ca.gov.

If, in the opinion of the Executive Officer, the Discharger fails to comply with the NOA and the conditions specified in the Low Threat Waiver, the Executive Officer may refer this matter to the Attorney General for judicial enforcement, may issue a complaint for administrative civil liability, or may take other enforcement actions. Failure to comply with this Order may result in the assessment of Administrative Civil Liability of up to $10,000 per violation, per day, depending on the violation, pursuant to the Water Code, including sections 13268, 13350 and 13385. The Central Valley Water Board reserves its right to take any enforcement actions authorized by law.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Resources Control Board to review the action in accordance with California Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Resources Control Board must receive the petition by 5:00 p.m., 30 days after the date of this NOA, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Resources Control Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the internet or will be provided upon request. (http://www.waterboards.ca.gov/public_notices/petitions/water_quality).

Original Signed by Clay L. Rodgers for:
Patrick Pulupa,
Executive Officer

Attachments: Attachment A – Site Plan
Attachment B – Process Flow Diagram

Enclosures: Low Threat Waiver Resolution R5-2018-0085

Monitoring and Reporting Program R5-2018-0085-0062

cc w/o encs.: David Lancaster, State Water Resources Control Board, OCC (via email)
Russell Walls, Central Valley Water Board, (via email)
Chad Fisher, State Water Board Division of Drinking Water, (via email)
Kern County Environmental Health, Bakersfield
Michael Sowers, Valley Science and Engineering, (via email)

ATTACHMENT A – Site Plan

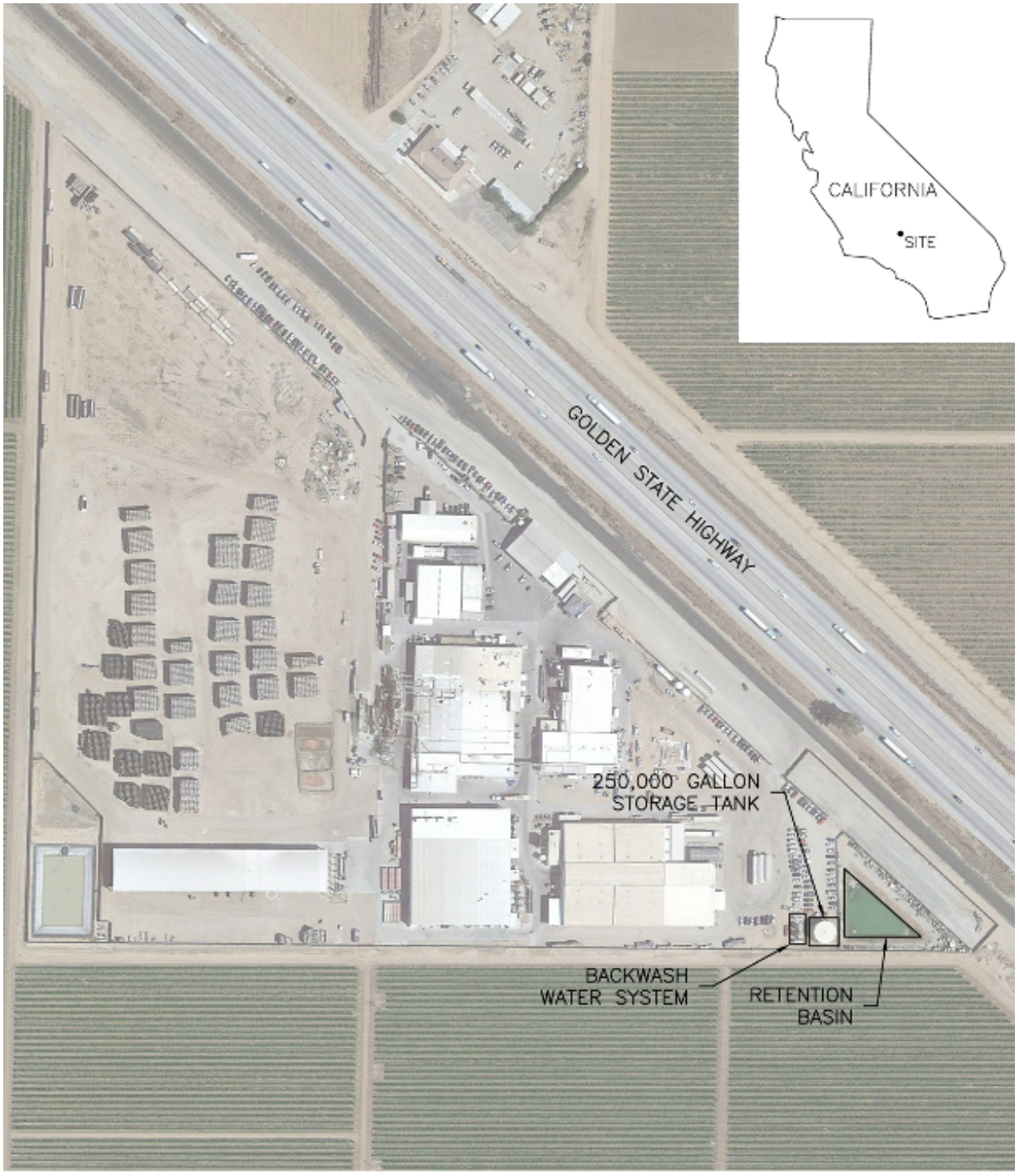

Figure Reference:
Valley Science and Engineering
(Report of Waste Discharge, 3 December 2021)

ATTACHMENT B – Process Flow Diagram

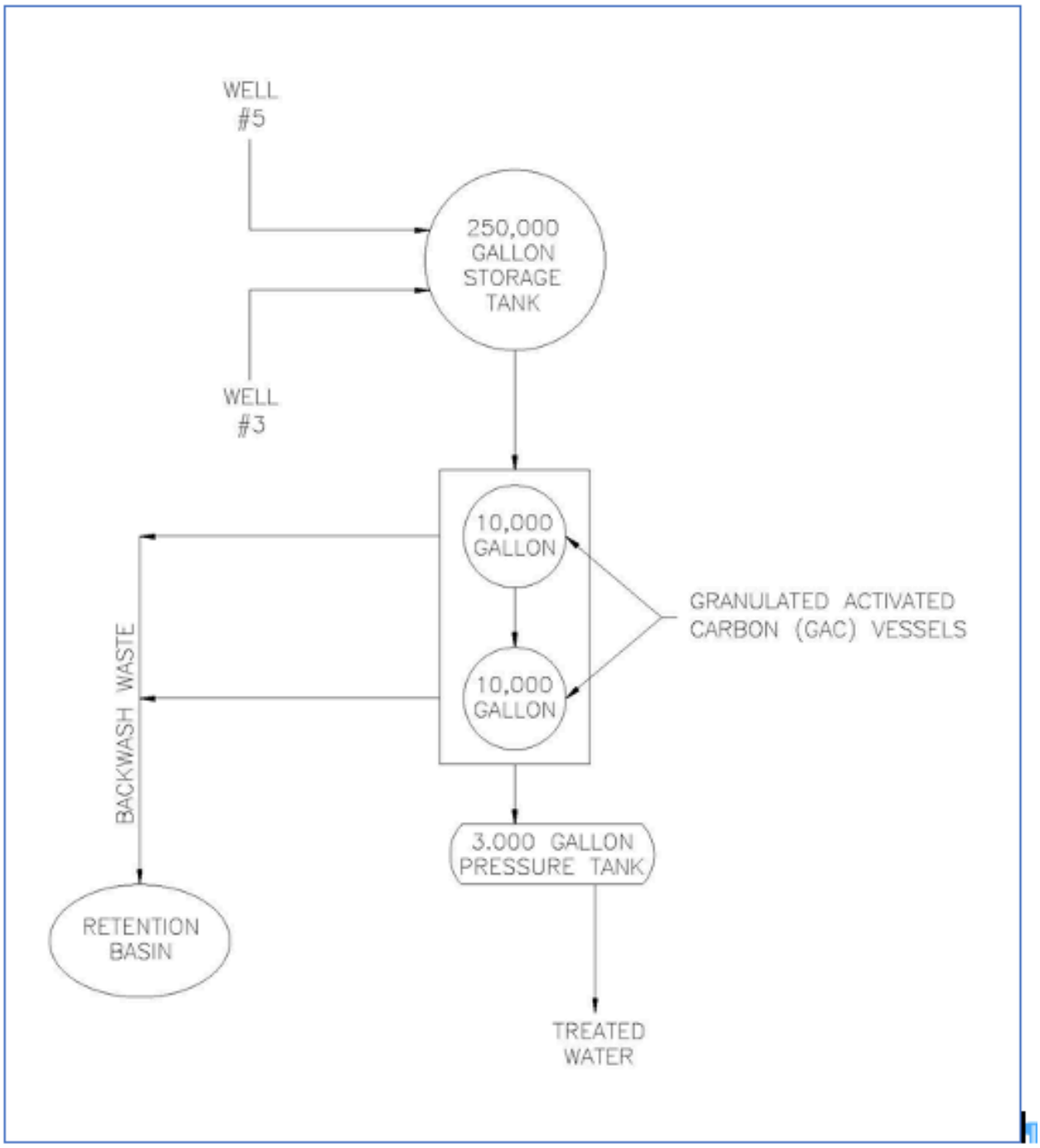

Figure Reference:
Valley Science and Engineering
(Report of Waste Discharge, 3 December 2021)

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM R5-2018-0085-0062
FOR
THE GARLIC COMPANY, INC.
SHAFTER GARLIC PROCESSING PLANT
WATER TREATMENT SYSTEM BACKWASH
KERN COUNTY

On 16 December 2021 the Central Valley Regional Water Quality Control Board (Central Valley Water Board) Executive Officer issued The Garlic Company, Inc. (Discharger) Notice of Applicability (NOA) R5-2018-0085-0062, for coverage under Resolution R5-2018-0085, *Approving Waiver of Reports of Waste Discharge and Waste Discharge Requirements for Specific Types of Discharge Within the Central Valley Region* (Low Threat Waiver or Waiver). The NOA regulates the discharge of filter backwash water to land from backwashing the granular activated carbon (GAC) vessels used in The Garlic Company, Inc.'s Shafter Garlic Processing Plant Water Treatment System for removal of 1,2,3-trichloropropane (1,2,3-TCP). This Monitoring and Reporting Program (MRP) is issued pursuant to California Water Code section 13267. The Discharger shall not implement any changes to this MRP unless and until the Central Valley Water Board adopts, or the Executive Officer issues, a revised MRP.

Section 13267, subsection (b)(1) of the California Water Code states:

> *"In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports."*

The Discharger owns the water system subject to NOA R5-2018-0085-0062, and the monitoring reports are necessary to ensure the Discharger complies with the NOA and the conditions specified in the Low Threat Waiver. Pursuant to Water Code section 13268, the Discharger shall implement this MRP and shall submit the monitoring reports described herein.

Section 13268 of the California Water Code states, in part:

"(a)(1) Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of Section 13267, failing or refusing to furnish a statement of compliance as required by subdivision (b) of Section 13399.2, or falsifying and information provided therein, is guilty of a misdemeanor and may be liable civilly in accordance with subdivision (b)

(b)(1) Civil liability may be administratively imposed by a regional board in accordance with Article 2.5 (commencing with section 13323) of Chapter 5 for a violation of subdivision (a) in an amount which shall not exceed one thousand dollars ($1,000) for each day in which the violation occurs."

A glossary of terms used in this MRP is included on the last page.

I. GENERAL MONITORING REQUIREMENTS

A. FLOW MONITORING

Hydraulic flow rates shall be measured at the monitoring points specified in this MRP. All flow monitoring systems shall be appropriate for the conveyance system (i.e., open channel flow or pressure pipeline) and liquid type. The measurements may be based on flow meter readings or pump run time estimate. The method of measurement must be specified. Unless otherwise specified, each flow meter shall be equipped with a flow totalizer to allow reporting of cumulative volume as well as instantaneous flow rate. Flow meters shall be calibrated at the frequency recommended by the manufacturer; typically, at least once per year and records of calibration shall be maintained for review upon request.

B. MONITORING AND SAMPLING LOCATIONS

Samples shall be obtained at the monitoring points specified in this MRP. The Central Valley Water Board Executive Officer shall approve any proposed changes to sampling locations prior to implementation of the change.

The Discharger shall monitor the following locations to demonstrate compliance with the requirements of this MRP:

Table 1. Monitoring Locations

Monitoring Location	Monitoring Location Description
EFF-001	Location where a sample of the backwash water can be collected prior to discharge to the Retention Basin.
Basin-01	Retention Basin used for discharge of backwash water.

C. SAMPLING AND SAMPLE ANALYSIS

All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. Except as specified otherwise in this MRP, grab samples will be considered representative of water, wastewater, soil, solids/sludges and groundwater. The time, date, and location of each sample shall be recorded on the sample chain of custody form.

Field test instruments (such as those used to measure pH, temperature, electrical conductivity, dissolved oxygen, wind speed, and precipitation) may be used provided that:

1. The operator is trained in proper use and maintenance of the instruments;
2. The instruments are field calibrated at the frequency recommended by the manufacturer;
3. The instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
4. Field calibration reports are submitted as described in the “Reporting” section of this MRP.

Laboratory analytical procedures shall comply with the methods and holding times specified in the following (as applicable to the medium to be analyzed):

- *Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater* (EPA);
- *Test Methods for Evaluating Solid Waste* (EPA);
- *Methods for Chemical Analysis of Water and Wastes* (EPA);
- *Methods for Determination of Inorganic Substances in Environmental Samples* (EPA);
- *Standard Methods for the Examination of Water and Wastewater* (APHA/AWWA/WEF); and
- *Soil, Plant and Water Reference Methods for the Western Region* (WREP 125).

Approved editions shall be those that are approved for use by the United States Environmental Protection Agency (US EPA) or the State Water Resources Control Board (State Water Board), Division of Drinking Water’s Environmental Laboratory Accreditation Program (ELAP). The Discharger may propose alternative methods for approval by the Executive Officer. Where technically feasible, laboratory reporting limits shall be lower than the applicable water quality objectives for the constituents to be analyzed.

II. SPECIFIC MONITORING REQUIREMENTS

A. WATER SYSTEM BACKWASH

Monitoring of the backwash water from the Garlic Company's Water Treatment System shall consist of the following:

Effluent Monitoring

The Discharger shall monitor the backwash water discharged to the onsite retention basin. Samples shall be taken of the backwash water at **EFF-001** before it enters the stormwater retention basin. At a minimum, effluent monitoring shall consist of the following:

Table 2. Influent Monitoring

Constituent/ Parameter	Units	Sample Type	Sample Frequency	Reporting Frequency
Flow	gallons	Meter	Continuous	Annually
pH	pH units	Grab	Once (see 1 below)	Annually
Electrical Conductivity	µmhos/cm	Grab	Once (see 1 below)	Annually
Total Suspended Solids	mg/L	Grab	Once (see 1 below)	Annually
1,2,3-TCP	µg/L	Grab	Once (see 1 below)	Annually
Iron	ug/L	Grab	Once (see 1 below)	Annually
General Minerals	various	Grab	Once/3 years (see 2 below)	Annually

1. Samples shall be collected once during each backwash event.
2. Samples shall be collected during the initial backwash event and then once every three years during a single backwash event.

B. BASIN MONITORING

The Discharger shall inspect the Retention Basin at **Basin-01** prior to and during each backwash event. The results of the inspection shall be included as part of the annual monitoring report. Basin monitoring shall include the following:

Table 3. Basin Monitoring

Constituent	Units	Sample Type	Reporting Frequency
Freeboard	Feet	Measurement	Annually
Nuisance Odors or Vectors	--	Observation	Annually
Berm Condition	--	Observation	Annually

C. SOLIDS DISPOSAL MONITORING

The Discharger shall report the handling and disposal of all solids associated with the water system and discharge of backwash water (e.g., filter material, sludge from the unlined basin, etc.). Records shall include the name/contact information for the hauling company, the type and amount of waste transported, the date removed, the disposal facility name and address, and copies of any analytical data required by the entity accepting the waste. These records shall be submitted as part of the annual monitoring report.

III. REPORTING REQUIREMENTS

All monitoring reports should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to: centralvalleyfresno@waterboards.ca.gov. Documents that are 50 MB or larger should be transferred to a CD, DVD, or flash drive and mailed to the following address:

Central Valley Regional Water Quality Control Board
Region 5 – Fresno Office
1685 “E” St.
Fresno, California 93706

To ensure that your submittal is routed to the appropriate staff person, the following information should be included in the body of the email or transmittal sheet:

Program: Non-15,
Facility: Shafter Garlic Processing Plant Water System Backwash
Order: R5-2018-0085-0062
County: Kern
Place ID: 878059

A transmittal letter shall accompany each monitoring report. The letter shall include a discussion of all violations of this MRP during the reporting period and actions taken or planned for correcting each violation. If the Discharger has

previously submitted a report describing corrective actions taken and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory. The transmittal letter shall contain a statement by the Discharger or the Discharger's authorized agent certifying under penalty of perjury that the report is true, accurate and complete to the best of the signer's knowledge.

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., effluent, groundwater, etc.), and reported analytical result for each sample are readily discernible. The data shall be summarized in such a manner to clearly illustrate compliance with waste discharge requirements and spatial or temporal trends, as applicable. The results of any monitoring done more frequently than required at the locations specified in the Monitoring and Reporting Program shall be reported in the next scheduled monitoring report.

Laboratory analysis reports shall be included in the monitoring reports. All laboratory reports must also be retained for a minimum of three years. For a discharger conducting any of its own analyses, reports must also be signed and certified by the chief of the laboratory.

Monitoring information shall include the method detection limit (MDL) and the Reporting limit (RL) or practical quantitation limit (PQL). If the regulatory limit for a given constituent is less than the RL (or PQL), then any analytical results for that constituent that are below the RL (or PQL) but above the MDL shall be reported and flagged as estimated.

All monitoring reports that involve planning, investigation, evaluation or design, or other work requiring interpretation and proper application of engineering or geologic sciences, shall be prepared by or under the direction of persons registered to practice in California pursuant to California Business and Professions Code sections 6735, 7835, and 7835.1.

A. ANNUAL MONITORING REPORTS

The Annual Monitoring Report shall be submitted to the Central Valley Water Board by **February 1st of each year**. The report shall bear the certification and signature of the Discharger or his/her authorized representative. At a minimum, the annual report shall include the following information.

1. Results of all required monitoring data shall be presented in tabular format. If no discharge occurred during the calendar year the annual report shall so state.
2. Copies of all laboratory analytical report(s) and chain of custody form(s) for in-house and contracted laboratory analyses.
3. The names and contact information for the operator(s) responsible for operation, maintenance, and monitoring of the treatment system and discharge of filter backwash water.

4. A discussion and summary of the compliance record for the reporting period identifying all corrective actions taken, as well as any planned or proposed actions needed to bring the discharge into compliance with the NOA and/or Low Threat Waiver.

5. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Resources Control Board to review the action in accordance with California Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Resources Control Board must receive the petition by 5:00 p.m., 30 days after the date of this MRP, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Resources Control Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the internet (http://www.waterboards.ca.gov/public_notices/petitions/water_quality) or will be provided on request.

The Discharger shall begin implementing the above monitoring program the date of this MRP.

Ordered by: *Original Signed by Clay L. Rodgers for:*

PATRICK PULUPA, Executive Officer

12/16/2021

(Date)

IV. GLOSSARY

BOD_5	Five-day biochemical oxygen demand
CaCO3	Calcium carbonate
DO	Dissolved oxygen
EC	Electrical conductivity at 25° C
FDS	Fixed dissolved solids
TDS	Total dissolved solids
TKN	Total Kjeldahl nitrogen
TSS	Total suspended solids
Continuous	The specified parameter shall be measured by a meter continuously.
24-hr Composite	Samples shall be a flow-proportioned composite consisting of at least eight aliquots over a 24-hour period.
Daily	Every day except weekends or holidays.
Twice Weekly	Twice per week on non-consecutive days.
Weekly	Once per week.
Twice Monthly	Twice per month during non-consecutive weeks.
Monthly	Once per calendar month.
Quarterly	Once per calendar quarter.
Semiannually	Once every six calendar months (i.e., two times per year) during non-consecutive quarters.
Annually	Once per year. Annual samples shall be collected in the third quarter between July and September.
mg/L	Milligrams per liter
mg/kg	Milligrams per kilogram
mL/L	Milliliters [of solids] per liter
µg/L	Micrograms per liter
µmhos/cm	Micromhos per centimeter
gpd	Gallons per day
mgd	Million gallons per day
General Minerals	Analysis shall include; alkalinity (as $CaCO_3$), bicarbonate (as$CaCO_3$), boron, calcium, carbonate (as $CaCO_3$), chloride, iron, magnesium, manganese, nitrate as N, phosphate, potassium, sodium, sulfate, total dissolved solids, and verification that the analysis is complete (i.e., cation/anion balance).