



Central Valley Regional Water Quality Control Board

23 October 2017

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NOTICE OF APPLICABILITY (NOA); GENERAL WASTE DISCHARGE REQUIREMENTS ORDER R5-2016-0076 (NPDES CAG995002) FOR LIMITED THREAT DISCHARGES TO SURFACE WATER; DAIKIN APPLIED AMERICAS INC.; GROUNDWATER REMEDIATION SYSTEM; TULARE COUNTY

The California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) adopted General Order R5-2016-0076 for Limited Threat Discharges to Surface Water (Limited Threat General Order) on 14 October 2016. Section II.B.2. of the Limited Threat General Order states that existing dischargers enrolled under previous Limited Threat General Order R5-2013-0073-01 are automatically authorized under the Limited Threat General Order to continue discharging; however, to maintain coverage, existing dischargers must have submitted a complete Notice of Intent (NOI) by 31 July 2017.

Daikin Applied Americas Inc.'s (hereinafter Discharger) groundwater remediation system at Goshen Avenue and Shirk Road in Visalia (hereinafter Facility) was enrolled under the previous Limited Threat General Order on 22 July 2015 (enrollee number R5-2013-0073-01-043). The Discharger submitted a NOI application for the Facility on 18 July 2017 for continued coverage under the Limited Threat General Order. Based on the application packet, Central Valley Water Board staff has determined that the project meets the required conditions for continued coverage under the Limited Threat General Order, as a Tier 2 discharge. Beginning **1 January 2018**, this NOA will become effective and the Facility will be assigned Limited Threat General Order R5-2016-0076-020. Please reference your Limited Threat General Order number, **R5-2016-0076-020**, in your correspondences and submitted documents.

The enclosed Limited Threat General Order may also be viewed at the following web address:

http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/ r5-2016-0076_mod.pdf

A copy of this NOA can be viewed at the following web address:

http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/ r5-2016-0076_noas/index.shtml

You are urged to familiarize yourself with the contents of the entire Limited Threat General Order. The Limited Threat General Order prescribes mandatory discharge monitoring and reporting requirements. The project activities shall be operated in accordance with the requirements contained in this NOA and the Limited Threat General Order.

PROJECT DESCRIPTION

Industrial activities on two parcels ("east" and "west') northeast of the Facility resulted in the remediation activities at the site. The remediation activities at the site are proceeding under California Environmental Protection Agency, Department of Toxic Substances Control's (DTSC) Imminent and Substantial Endangerment Determination and Order No. I&S 90/91-011. On the "west" parcel (6941 West Goshen Avenue), Bostitch Division of Textron, Inc. manufactured nail and staple products from 1966 to 1982. In 1986, the Stanley Works purchased the property and began manufacturing coiled nail products and discharged rinse waters containing residual solution from acid and alkaline baths into dry wells. Stanley Bostitch, Inc. discontinued operations on the "west" parcel in 2001.

On the "east parcel" (6707 West Goshen Avenue), the McQuay Perfex Corporation manufactured heating, ventilation, and air conditioning equipment from 1961 to 1974. From 1976 to 1982, SSP Agricultural Equipment, Inc. manufactured wind machine parts at the facility. From 1982 to 1996, SunStar Plastics Engineering Corporation and Pepco Water Conservation Products, Inc. used the plant to manufacture extruded plastic products.

SnyderGeneral Corporation assumed the assets and liabilities of McQuay Perfex Corporation in 1984. In 1994, the O.Y.L. Group acquired SnyderGeneral Corporation in a stock purchase. The acquisition resulted in a name change from SnyderGeneral to AAF-McQuay, Inc. In 2013, AAF-McQuay, Inc. changed its name to Daikin Applied Americas, Inc.

The Discharger owns and operates the groundwater remediation system located southwest of the intersection of Goshen Avenue and Shirk Road in Visalia, California. The Facility is located on multiple properties owned by various owners. The Facility consists of two dual-vessel granular activated carbon (GAC) treatment systems and up to 11 extraction wells. GAC Unit No. 28E3 treats groundwater pumped from extraction wells E8D, E10D, E11E, E9C-C', and 28E3. GAC Unit No. 28G1 treats groundwater pumped from extraction wells 28B5, 28G1, E7C, E6C'-D, E12C', and E13D. The GAC treatment systems are designed to handle up to 1.44 million gallons per day (mgd) each when operated in series and the expected average daily discharges at Discharge Points 001 and 002 are 0.95 mgd and 0.65 mgd, respectively.

The discharge of treated groundwater from GAC Unit Nos. 28G1 and 28E3 to Mill Creek Ditch occurs at two separate locations. Discharge of treated groundwater to Mill Creek Ditch from GAC Unit No. 28G1 (Discharge Point 001) is in Section 28, T18S, R24E, MDB&M, at a point latitude of 36° 20' 1.84" north and longitude of 119° 22' 19.7" west. Discharge of treated groundwater to Mill Creek Ditch from GAC Unit No. 28E3 (Discharge Point 002) is in Section 28, T18S, R24E, MDB&M, at a point latitude of 36° 20' 4.19" north and longitude of 119° 22' 52.11" west.

In February 2014, the Discharger received approval from DTSC to conduct a Monitored Natural Attenuation (MNA) pilot test. During the MNA pilot test, the Facility did not operate except when needed to provide irrigation water to surrounding cropland or to collect samples for monitoring. Groundwater was treated at the Facility prior to being discharged to the cropland. As of the date of this NOA, the Discharger is waiting for DTSC to review the pilot-test technical report. The Discharger has reportedly received approval from DTSC to keep the Facility non-operational while DTSC reviews the pilot-test technical report. According to the Discharger, it did not discharge treated groundwater to Mill Creek Ditch during the MNA pilot test.

The discharge of treated groundwater to surrounding cropland is not covered by this NOA or Order R5-2016-0076. Central Valley Water Board staff determined, in a letter dated 30 July 2015, the discharge of treated groundwater to surrounding cropland, as described by the Discharger in its 24 November 2014 Report of Waste Discharge, should not affect the quality of waters of the state. Therefore, waste discharge requirements for the discharge of treated groundwater from the Facility to surrounding croplands are not required at this time.

CALIFORNIA TOXICS RULE / STATE IMPLEMENTATION POLICY MONITORING

The Limited Threat General Order incorporates the requirements of the California Toxics Rule (CTR) and the State Water Resources Control Board's (State Water Board) *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California*, 2005, also known as the State Implementation Policy (SIP). Screening levels for CTR constituents and other constituents of concern are found in Attachment I of the Limited Threat General Order. Attachment I lists the most stringent objective/criteria (i.e., screening level) for receiving waters with and without the municipal and domestic (MUN) beneficial use.

The Central Valley Water Board's *Water Quality Control Plan for the Tulare Lake Basin, Second Edition (Revised July 2016)* (Tulare Lake Basin Plan) does not specifically identify beneficial uses for Mill Creek Ditch, but does identify present and potential beneficial uses for Valley Floor Waters. Mill Creek Ditch is a Valley Floor Water. The Tulare Lake Basin Plan does not designate the MUN beneficial use as a beneficial use for Valley Floor Waters. Therefore, the screening levels based on "No Mun" are applicable to the Facility's discharge. Central Valley Water Board staff compared the representative data reported for the Facility to the applicable screening levels listed in Attachment I of the Limited Threat General Order. Review of the representative water quality data for the Facility showed there were no constituents detected in the effluent above the applicable screening levels. However, Technology-Based Effluent Limitations have been established for 1,1-dichloroethylene, chloroform, tetrachloroethylene, and trichloroethylene due to the presence of these constituents in groundwater and based on the expected performance of the treatment system.

EFFLUENT LIMITATIONS

Effluent limitations are specified in Section V. of the Limited Threat General Order. The following effluent limitations are applicable to the Facility's discharge to Mill Creek Ditch at Discharge Points 001 and 002 and are contained in Sections V.A and V.B of the Limited Threat General Order:

Parameter	Units	Effluent Limitations		Section
		Average Monthly	Maximum Daily	Reference
1,1-Dichloroethylene	µg/L		0.5	V.B.2
Chloroform	µg/L		0.5	V.B.2
Tetrachloroethylene	µg/L		0.5	V.B.2
Trichloroethylene	µg/L		0.5	V.B.2

Table 1.Effluent Limitations

- 1. Flow (Section V.A.1.a.). The maximum daily discharge flow shall not exceed 1.44 million gallons per day from GAC Unit No. 28G1.
- 2. Flow (Section V.A.1.a.). The maximum daily discharge flow shall not exceed 1.44 million gallons per day from GAC Unit No. 28E3.

- **3. pH (Section V.A.1.b.iii.).** The pH of all discharges within the Tulare Lake Basin shall at all times be within the range of 6.5 and 8.3.
- 4. Whole Effluent Toxicity, Chronic (Section V.A.2.a). There shall be no chronic toxicity in the discharge.
- 5. Whole Effluent Toxicity, Acute (Section V.A.3.a). Survival of aquatic organisms in 96-hour bioassays of undiluted waste shall be no less than:
 - i. 70%, minimum for any one bioassay; and
 - ii. 90%, median for any three consecutive bioassays.

The receiving water, Mill Creek Ditch, is not listed under the Clean Water Act 303(d) List of impaired water bodies. Therefore, no additional 303(d) based effluent limitations or monitoring requirements will be added to this Limited Threat General Order.

MONITORING AND REPORTING

Monitoring and reporting requirements are contained in Attachment C of the Limited Threat General Order. The Discharger is required to comply with the following specific monitoring and reporting requirements in accordance with Attachment C of the Limited Threat General Order.

Monitoring Locations – The Discharger shall monitor the effluent and the receiving water at the specified locations as follows:

Discharge Point Name	Monitoring Location Name	Monitoring Location Description	
001	EFF-001	A location representative of the final effluent from GAC Unit No. 28G1 when discharging to Mill Creek Ditch.	
002	EFF-002	A location representative of the final effluent from GAC Unit No. 28E3 when discharging to Mill Creek Ditch.	
	RSW-001	Mill Creek Ditch, approximately 100 feet <u>upstream</u> of Discharg Point 001.	
	RSW-002	Mill Creek Ditch, approximately 100 feet <u>downstream</u> of Discharge Point 001.	
	RSW-003	Mill Creek Ditch, approximately 100 feet <u>downstream</u> of Discharge Point 002.	
	LND-001	A location representative of the final effluent from GAC Unit No. 28G1 when discharging to the surrounding cropland.	
	LND-002	A location representative of the final effluent from GAC Unit No. 28E3 when discharging to the surrounding cropland.	

Table 2. Monitoring Station Locations

Effluent Monitoring – When discharging to Mill Creek Ditch, the Discharger shall monitor the effluent at Monitoring Locations EFF-001 and EFF-002 as follows:

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	mgd	Meter	1/Two Weeks	
рН	standard units	Grab	1/Quarter	1,2
Temperature	°F	Grab	1/Quarter	1,2
Electrical Conductivity @ 25°C	µmhos/cm	Grab	1/Quarter	1,2
Volatile Organic Compounds ⁴	μg/L	Grab	1/Quarter	2,3
Hardness, Total (as CaCO ₃)	mg/L	Grab	2/Year⁵	1,2
Acute Whole Effluent Toxicity (WET)	% Survival	Grab	6	2,7,8
Chronic WET	TUc	Grab	6	2,7
Standard Minerals9	mg/L	Grab	1/Year	2

Table 3.	Effluent Monitoring	g at Monitoring	Locations EFF-001 and EFF-002
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¹ A hand-held field meter may be used, provided the meter utilizes a USEPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained at the Facility.

² Pollutants shall be analyzed using the analytical methods described in 40 CFR part 136 or by methods approved by the Central Valley Water Board or the State Water Board.

- ³ For priority pollutant constituents the reporting level shall be consistent with Sections 2.4.2 and 2.4.3 of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California.
- ⁴ Volatile Organic Compounds shall include the following: 1,1-Dichloroethane, 1,1-Dichloroethylene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, 1,2,2-Tetrachloroethane, 1,2-Dichlorobenzene, 1,2-Dichloroethane, 1,2-Dichloropropane, 1,3-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Acrolein, Acrylonitrile, Benzene, Bromoform, Methyl Bromide, Carbon Tetrachloride, Chlorobenzene, Chlorodibromomethane, Chloroethane, Chloroform, Methyl Chloride, Methylene Chloride, Dichlorobromomethane, Ethylbenzene, Tetrachloroethylene, Toluene, 1,2-trans-Dichloroethylene, Trichloroethylene, and Vinyl Chloride.
- ⁵ Samples shall be collected once between 1 January 30 June and once between 1 July 31 December each year.
- ⁶ Acute and chronic toxicity testing shall be conducted at least once between January 2018 and December 2018. If treated groundwater is not discharged from either GAC Unit to Mill Creek Ditch during 2018, the Discharger shall conduct acute and chronic toxicity testing the next time treated groundwater is discharged from the GAC Unit(s) to Mill Creek Ditch. See Section V of Attachment E Monitoring and Reporting Program in the Limited Threat General Order for additional details regarding toxicity monitoring requirements.
- ⁷ See the Limited Threat General Order MRP (Attachment C, section V) for toxicity monitoring requirements.
- ⁸ The test species for acute toxicity testing shall be fathead minnows (*Pimephales promelas*).
- ⁹ Standard Minerals shall include the following: boron, calcium, iron, magnesium, potassium, sodium, chloride, manganese, phosphorus, and total alkalinity (including alkalinity series) and include verification that the analysis is complete (i.e., cation/anion balance).

Land Discharge Monitoring – For calendar quarters where the Facility only discharges treated groundwater to cropland, the Discharger shall monitor treated groundwater at Monitoring Locations LND-001 and LND-002 for flow, electrical conductivity, and volatile organic compounds as specified in Table 3 above.

Receiving Water Monitoring – When discharging to the Mill Creek Ditch, the Discharger shall monitor the receiving water at RSW-001, RSW-002, and RSW-003 as follows:

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Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
pH	standard units	Grab	1/Quarter	1,2
Temperature	°F	Grab	1/Quarter	1,2
Dissolved Oxygen	mg/L	Grab	1/Quarter	1,2
Turbidity	NTU	Grab	1/Quarter	1,2
Electrical Conductivity @ 25°C	µmhos/cm	Grab	1/Quarter	1,2
Hardness, Total (as CaCO ₃)	mg/L	Grab	2/Year ³	1,2

Table 4. Receiving Water Monitoring Requirements

¹ A hand-held field meter may be used, provided the meter utilizes a USEPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained at the Facility.

² Pollutants shall be analyzed using the analytical methods described in 40 CFR part 136 or by methods approved by the Central Valley Water Board or the State Water Board.

³ Samples shall be collected once between 1 January - 30 June and once between 1 July – 31 December.

In conducting receiving water sampling, a log shall be kept of the receiving water conditions throughout the reach bounded by RSW-001 and RSW-003. Attention shall be given to the presence or absence of:

- a. Floating or suspended matter
- **b.** Discoloration
- c. Bottom deposits
- d. Aquatic Life
- e. Visible films, sheens, or coatings
- f. Fungi, slimes, or objectionable growths
- g. Potential nuisance conditions

Notes on receiving water conditions shall be summarized in the monitoring reports.

Monitoring Report Submittals - Monitoring in accordance with the Limited Threat General Order as specified in this NOA shall begin **1 January 2018**. Monitoring reports shall be submitted to the Central Valley Water Board on a quarterly basis, beginning with the **1**st **Quarter 2018**. This report shall be submitted on **1 May 2018**. If no discharge occurs during the quarter, the monitoring report must be submitted stating that there has been no discharge. Table 5, below, summarizes the monitoring report due dates required under the Limited Threat General Order. Quarterly monitoring reports must be submitted until your coverage is formally terminated in accordance with the Limited Threat General Order, even if there is no discharge during the reporting quarter.

Sampling Frequency	Monitoring Period Begins On	Monitoring Period	Quarterly Report Due Date
Continuous	NOA Effective Date (1 January 2018)	All	1 May 1 August 1 November 1 February, of the following year
1/Two Week	NOA Effective Date (1 January 2018)	Sunday through Saturday of the following week	1 May 1 August 1 November 1 February, of the following year

 Table 5.
 Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On…	Monitoring Period	Quarterly Report Due Date
1/Quarter	NOA Effective Date (1 January 2018)	 January through 31 March April through 30 June July through 30 September October through 31 December 	1 May 1 August 1 November 1 February, of the following year
2/Year	NOA Effective Date (1 January 2018)	1 January through 30 June 1 July through 31 December	1 August 1 February, of the following year
1/Year	NOA Effective Date (1 January 2018)	1 January through 31 December	1 February, of the following year

The Discharger shall continue to electronically submit self-monitoring reports (SMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) Program website http://www.waterboards.ca.gov/water_issues/programs/ciwqs/. The CIWQS website will provide additional information for SMR submittal in the event there will be a planned service interruption for electronic submittal.

TOXICITY REDUCTION EVALUATION REQUIREMENTS

For compliance with the Basin Plan's narrative toxicity objective, the Limited Threat General Order requires all Dischargers of Tier 2 and Tier 3 discharges to conduct chronic whole effluent toxicity (WET) testing, as specified in the Monitoring and Reporting Program (Attachment C, section V). Furthermore, the Toxicity Reduction Evaluation Requirements provision (Section IX.C.2.a) requires the Discharger to investigate the causes of, and identify corrective actions to reduce or eliminate effluent toxicity. The Provision includes a numeric monitoring trigger and accelerated monitoring specifications. This NOA includes a site-specific numeric toxicity monitoring trigger as shown below:

Numeric Toxicity Monitoring Trigger – The numeric toxicity monitoring trigger to initiate accelerated monitoring is >1 TUc (where TUc = 100/NOEC) for all chronic toxicity end points. The monitoring trigger is not an effluent limitation; it is the toxicity threshold at which the Discharger is required to begin the accelerated monitoring, as specified in Section IX.C.2.a.ii.

EFFLUENT CHARACTERIZATION MONITORING

The Limited Threat General Order requires effluent characterization monitoring every 5 years from the date of the NOA. Effluent samples shall be collected at Monitoring Locations EFF-001 and EFF-002 (or Monitoring Locations LND-001 and LND-002 if the Facility has not discharged to Mill Creek Ditch) and analyzed for the constituents specified in Table I-1 of Attachment I of the Limited Threat General Order by **22 November 2018**. Results must be submitted to the Central Valley Water Board by **1 February 2019**. In accordance with Table I-1, the Discharger shall monitor for constituents for Tier 2 discharges of groundwater (not related to mines).

GENERAL INFORMATION AND REQUIREMENTS

The Discharger must notify Central Valley Water Board staff within 24 hours of having knowledge of noncompliance.

Discharge of material other than what is described in the application is prohibited. The required annual fee (as specified in the annual billing you will receive from the State Water Resources Control Board) shall be submitted until this NOA is officially terminated. You must notify this office in writing when the discharge regulated by the Limited Threat General Order is no longer necessary by submitting the Request for Termination of Coverage (Attachment E of the Limited Threat General

Daikin Applied Americas Inc. Groundwater Remediation System R5-2016-0076-020

Order). If a timely written request is not received, the Discharger will be required to pay additional annual fees as determined by the State Water Resources Control Board.

ENFORCEMENT

Failure to comply with the Limited Threat General Order may result in enforcement actions, which could include civil liability. Effluent limitation violations are subject to a Mandatory Minimum Penalty (MMP) of \$3,000 per violation. In addition, late monitoring reports may be subject to MMPs or discretionary penalties of up to \$1,000 per day late. When discharges do not occur during a quarterly report monitoring period, the Discharger must still submit a quarterly monitoring report indicating that no discharge occurred to avoid being subject to enforcement actions.

COMMUNICATION

The Central Valley Regional Water Quality Control Board has transitioned to a paperless office system, therefore, please convert all documents to a searchable Portable Document Format (pdf) and email them to <u>CentralValleyFresno@waterboards.ca.gov</u>. Please include the following information in the body of the email: Discharger's name, Facility name, County name, CIWQS Place ID 270646, and Order number R5-2016-0076-020. Documents that are 50 megabytes or larger shall be transferred to a CD, DVD, or flash drive and mailed to our office at 1685 "E" Street, Fresno, California 93706.

All documents, including response to inspections and written notifications, submitted to comply with this NOA and the Limited Threat General Order shall be directed, via the paperless office system, to the Compliance and Enforcement Unit, attention Warren Gross. Mr. Gross can also be reached at (559) 445-5128 or at Warren.Gross@waterboards.ca.gov.

All questions regarding the permitting aspects of the Limited Threat General Order, and notification for termination of coverage under the Limited Threat General Order, shall be directed, via the paperless office system, to the NPDES Permitting Unit, attention Alexander Mushegan. Mr. Mushegan can also be reached at (559) 488-4397 or at <u>Alexander.Mushegan@waterboards.ca.gov</u>.

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 at:

http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

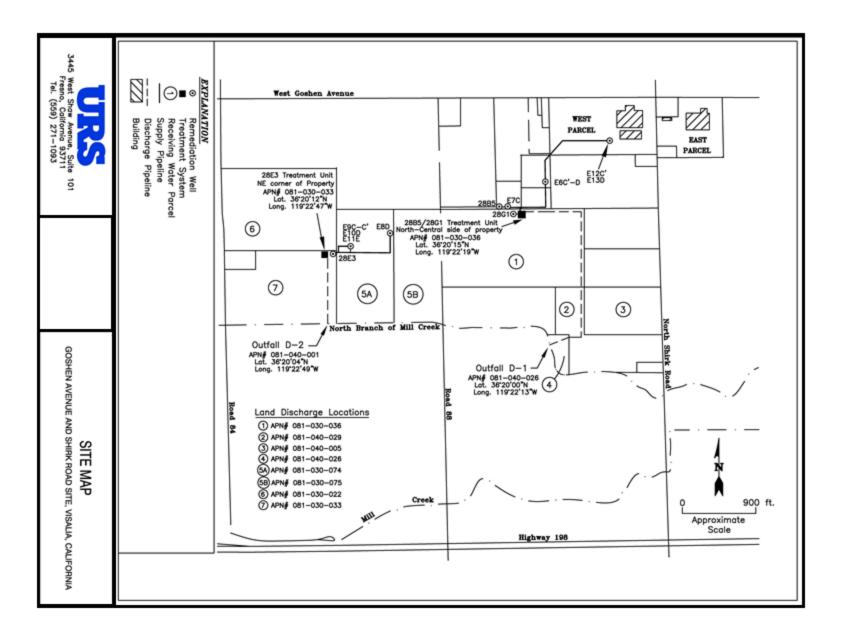
L. Jedgers

Pamela C. Creedon Executive Officer

> Attachments: Attachment A - Site Map Attachment B – Flow Schematic

Enclosure: Limited Threat General Order R5-2016-0076 (Discharger only)

cc: David Smith, U.S. EPA, Region IX, San Francisco (via email) NPDES Wastewater, State Water Resources Control Board, DWQ, Sacramento (via email) Kevin L. Shaddy, Department of Toxic Substances Control, Clovis Kaweah Delta Water Conservation District, Visalia Stuart St. Clair, AECOM, Fresno, CA 93720 (via email) Bill Jennings, California Sportfishing Protection Alliance, Stockton Danny S. Freitas & Jeannette Freitas, 983 East Levin Avenue, Tulare, CA 93274 Ron Gruber, Fewer Ranch, 30050 Road 88, Visalia, CA 93231 Clifton G. Harris III & Charmaine L. Harris, 527 North Shirk Road, Visalia, CA 93291 Robert and Sabrina Shahan Living Trust, c/o Robert Shahan, 635 N. Plaza Drive, Visalia, CA 93291
Bernard te Velde Trust, c/o Bernard te Velde, 5821 West Prospect Drive, Visalia, CA 93291 Attachment A – Site Map Daikin Applied Americas Inc. Groundwater Remediation System R5-2016-0076-020



Attachment B – Flow Schematic Daikin Applied Americas Inc. Groundwater Remediation System R5-2016-0076-020

