

**Central Valley Regional Water Quality Control Board**

24 January 2019

Byron Taylor  
Nautilus Data Technologies, Inc.  
5700 Stoneridge Mall Road, Suite 340  
Pleasanton, CA 94588

**CERTIFIED MAIL**  
91 7199 9991 7035 8364 7371

**NOTICE OF APPLICABILITY (NOA); LIMITED THREAT GENERAL WASTE DISCHARGE REQUIREMENTS ORDER R5-2016-0076-01; NAUTILUS DATA TECHNOLOGIES, INC., DATA STORAGE FACILITY PROJECT, SAN JOAQUIN COUNTY**

Our office received a Notice of Intent application on 19 July 2017 from Nautilus Data Technologies, Inc. (hereinafter Discharger), for discharge of non-contact cooling water to surface water. Based on the application packet submitted by the Discharger, staff has determined that the project meets the required conditions for approval under the General Order for Limited Threat Discharges to Surface Water (Limited Threat General Order), Tier 2. This project is hereby assigned Limited Threat General Order R5-2016-0076-040 and National Pollutant Discharge Elimination System (NPDES) Permit No. CAG995002. Please reference your Limited Threat General Order number, **R5-2016-0076-040**, in your correspondence and submitted documents.

The project activities shall be operated in accordance with the requirements contained in the Limited Threat General Order and as specified in this NOA. You are urged to familiarize yourself with the entire contents of the Limited Threat General Order. The enclosed Limited Threat General Order may be viewed at the following web address: [https://www.waterboards.ca.gov/centralvalley/board\\_decisions/adopted\\_orders/general\\_orders/r5-2016-0076-01.pdf](https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf). A copy of the Limited Threat General Order can also be obtained by contacting or visiting the Central Valley Water Board's office weekdays between 8:00 AM and 5:00 PM.

**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. Review of your influent water quality data in comparison to the screening values showed reasonable potential for the discharge to cause or contribute to an exceedance of chlorodibromomethane water quality objectives in the San Joaquin River, a water of the United States.

## PROJECT DESCRIPTION

The Nautilus Data Technologies, Inc. Data Storage Facility Project (Project) includes constructing and operating a waterborne data center facility at the Port of Stockton (Port). The Project will include permanent upland improvements to support in-water mooring of a barge in the northwest area of the Port's West Complex. The barge will house data storage equipment, which will receive power from local utility substations or emergency backup generators. Water from the San Joaquin River will be used to cool the barge-mounted data center equipment via a controllable water intake and discharge system at a rate of approximately 6.5 million gallons per day (MGD). The Project effluent is not expected to increase more than 4°F from the intake water temperature. The planned operational life of the facility is 35 years. The initial lease term with the Port will be for 5 years, followed by up to six 5-year extensions.

Section 7 of the Endangered Species Act of 1973 requires that the Discharger obtain consultation from the United States Fish and Wildlife Service (USFWS) regarding the possible impact the Project could have on the habitat of federally listed endangered species, in this case delta smelt (*Hypomesus transpacificus*). On 29 October 2018 the Discharger received formal consultation from the USFWS. Upon review of the Project proposal the USFWS found that the design of the intake and discharge pipelines with a screen having a maximum wedgewire slot size of 1.75 mm and an approach velocity of 0.18 feet per sec (fps) is sufficient to prevent the entrainment of delta smelt. Therefore, the USFWS concluded that the Project, as proposed, is not likely to jeopardize the continued existence of delta smelt or its designated habitat.

## INTAKE WATER CREDITS

The maximum reported influent concentrations of chlorodibromomethane exceeds the screening level specified in Table I-3 of the Limited Threat General Order. The Discharger, however, has demonstrated that the discharge from the Facility meets the conditions for granting intake water credits for chlorodibromomethane as found in Section II.A.2.d of the Limitations and Discharge Requirements of the Limited Threat General Order and Section 1.4.4 of the State Implementation Policy. The source of the pollutant is the intake from the receiving water, which is the same receiving water into which the Facility discharges. Based on the Discharger's priority pollutant sampling data collected on 13 October 2016, the screening level for chlorodibromomethane was exceeded in the intake water. However, the Facility does not include any operations that are capable of adding chlorodibromomethane in the process. Therefore, the water quality-based effluent limitations for chlorodibromomethane have been established considering intake water credits.

## EFFLUENT LIMITATIONS

Effluent limitations are specified in Section V. of the Limitations and Discharge Requirements of the Limited Threat General Order. Based on the information provided in the NOI, effluent limitations are only required for the parameters identified in items 1 – 2, below:

- 1. Constituents and Parameters of Concern (Section V.A.1.e-g).** Based on the information provided in the NOI, the discharge has reasonable potential to cause or contribute to an in-stream excursion of water quality objectives for the constituents/parameters in Table 1, below. The effluent discharge, therefore, shall not exceed the water quality-based effluent limitations for the following constituents/parameters in Table 1.

**Table 1. Effluent Limitations for Constituents and Parameters of Concern**

Parameter	Units	Effluent Limitations		Section Reference
		Average Monthly	Maximum Daily	
Chlorodibromomethane	µg/L	0.401	0.804	V.A.1.f <sup>1</sup>

<sup>1</sup> Chlorodibromomethane effluent limitations required in accordance with the Limited Threat General Order, Section V.A.1.f. However, an intake water credit has been granted for chlorodibromomethane. Therefore, compliance with this limitation shall be in accordance with the intake credits in the Limited Threat General Order, Section V.A.4 (i.e., the monthly average chlorodibromomethane concentration in the effluent shall not exceed the corresponding monthly average concentration as measured in the influent).

**2. Temperature (Section V.A.5.d).** The maximum temperature of the discharge shall not exceed the natural receiving water temperature by more than 20°F. Compliance shall be ascertained using the daily average effluent temperature at Monitoring Location EFF-001 and the daily average temperature of the receiving water measured on the same day at Monitoring Location INF-001.

The Stockton Ship Channel is listed for chlorpyrifos, DDT, diazinon, dioxin, furan compounds, Group A pesticides, mercury, low dissolved oxygen, pathogens, and PCB's on the Clean Water Act 303(d) List of impaired water bodies. However, the Project consists of using San Joaquin River water for equipment cooling and there is no possibility for the concentration of any of these constituents to be increased above levels already found in the San Joaquin River. Therefore, no additional 303(d) based effluent limitations or monitoring requirements are included in this NOA.

#### RECEIVING WATER LIMITATIONS

The Limited Threat General Order includes receiving surface water limitations in Section VIII.A. Based on the information provided in the NOI, only the following receiving surface water limitations are applicable to this discharge:

- Bacteria (VIII.A.2);
- Biostimulatory substances (VIII.A.3);
- Chemical constituents (VIII.A.4);
- Color (VIII.A.5);
- Dissolved oxygen (VIII.A.6.b);
- Floating material (VIII.A.7);
- Oil and grease (VIII.A.8);
- pH (VIII.A.9.a);
- Pesticides ((VIII.A.10);
- Radioactivity (VIII.A.11);
- Suspended sediments (VIII.A.12);
- Settleable substances (VIII.A.13);
- Suspended material (VIII.A.14);
- Taste and odors (VIII.A.15);
- Temperature (VIII.A.16.b);
- Toxicity (VIII.A.17); and
- Turbidity (VIII.A.18.a).

**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 for the influent, effluent, and receiving water in accordance with Attachment C of the Limited Threat General Order.

**Monitoring Locations** – The Discharger shall monitor the influent and effluent at the specified location as follows in Table 2:

**Table 2. Monitoring Station Locations**

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
--	INF-001	Shall be located at the influent piping before the San Joaquin River water enters the cooling system.
001	EFF-001	A location where a representative sample of the effluent can be collected prior to discharging to the San Joaquin River.

**Influent Monitoring** – When discharging to surface water, the Discharger shall monitor the influent at INF-001 in accordance with this NOA. The applicable monitoring requirements are as follows in Table 3:

**Table 3. Influent Monitoring**

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	MGD	Meter	Continuous	--
Temperature	°F	Grab	1/Month	1, 2
Chlorodibromomethane	µg/L	Grab	1/Quarter	1, 3

1. Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136 or by methods approved by the Central Valley Water Board or the State Water Board.
2. A hand-held field meter may be used, provided the meter utilizes a U.S.EPA-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.
3. If the first four quarterly sampling events result in effluent chlorodibromomethane concentrations that do not exceed the influent chlorodibromomethane concentrations, then the minimum sampling frequency may be reduced to annual upon written approval by the Executive Officer.

**Effluent Monitoring** – When discharging to the San Joaquin River, the Discharger shall monitor the effluent at EFF-001 in accordance with Table C-3 of the Limited Threat General Order and this NOA. The applicable monitoring requirements are as follows in Table 4:

**Table 4. Effluent Monitoring**

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	MGD	Meter	Continuous	–
Temperature	°F	Grab	1/Month	1, 2
Chlorodibromomethane	µg/L	Grab	1/Quarter	1, 3

1. Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136 or by methods approved by the Central Valley Water Board or the State Water Board.
2. A hand-held field meter may be used, provided the meter utilizes a U.S.EPA-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.
3. If the first four quarterly sampling events result in effluent chlorodibromomethane concentrations that do not exceed the influent chlorodibromomethane concentrations, then the minimum sampling frequency may be reduced to annual upon written approval by the Executive Officer.

**Receiving Water Monitoring** – When discharging to surface water, the Discharger shall monitor the conditions in the San Joaquin River (within a 300-foot radius of the barge) on a monthly basis. A log shall be kept of the presence or absence of the following receiving water conditions:

- 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 quarterly monitoring reports.

**Monitoring Report Submittals** – Monitoring in accordance with the Limited Threat General Order shall begin upon initiation of discharge. Monitoring reports shall be submitted to the Central Valley Water Board on a quarterly basis, beginning with the **First Quarter 2019**. This report shall be submitted on **1 May 2019**. If monitoring samples were not obtained within 24 hours of initiation of the discharge, the Discharger must document the reasons in the corresponding monitoring report. If the discharge has not begun there is no need to monitor; however, a 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 by Central Valley Water Board staff in accordance with the Limited Threat General Order, even if there is no discharge during the reporting quarter.

**Table 5. Monitoring Periods and Reporting Schedule**

Sampling Frequency	Monitoring Period Begins On...	Quarterly Report Due Date
1/Day, 1/Week, 1/Month, 1/Quarter	24 January 2019	1 May (1 Jan – 31 Mar) 1 Aug (1 Apr – 30 Jun) 1 Nov (1 Jul – 30 Sep) 1 Feb, of following year (1 Oct – 31 Dec)

### GENERAL INFORMATION AND REQUIREMENTS

The Discharger must notify Central Valley Water Board staff within 24 hours of having knowledge of 1) the start of each new discharge, 2) noncompliance, and 3) when the discharge ceases. The Central Valley Water Board shall be notified immediately if any effluent limit violation is observed during implementation of the Project.

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). 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 may be 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 certified quarterly monitoring report indicating that no discharge occurred to avoid being subject to enforcement actions.

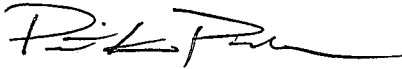
### COMMUNICATION

All documents, including monitoring reports, response to inspections, written notifications, and documents submitted to comply with this NOA and the Limited Threat General Order, should be submitted to the NPDES Compliance Unit, attention Mohammad Farhad. Mr. Farhad can be reached at (916) 464-1181 or [Mohammad.Farhad@waterboards.ca.gov](mailto:Mohammad.Farhad@waterboards.ca.gov).

We have transitioned to a paperless office, therefore, please convert all documents to a searchable Portable Document Format (pdf) and email them to [centralvalleysacramento@waterboards.ca.gov](mailto:centralvalleysacramento@waterboards.ca.gov). **Please include the following information in the email:** Attention: NPDES Compliance Unit; Discharger: Nautilus Data Technologies, Inc.; Facility: Data Storage Facility Project; County: San Joaquin County; and the CIWQS place ID 846597 in the body of the email. Documents that are 50 megabytes or larger must be transferred to a DVD, or flash drive and mailed to our office, attention "ECM Mailroom-NPDES". Please include the attached Monitoring Report Transmittal Form as the first page of each monitoring report.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water 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 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 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](http://www.waterboards.ca.gov/public_notices/petitions/water_quality) or will be provided upon request.



Patrick Pulupa, Executive Officer

Enclosures (3): Attachment A – Project Location Map  
General Order R5-2016-0076-01 (Discharger only)  
Monitoring Report Transmittal Form (Discharger only)

cc: Elizabeth Sablad, U.S. EPA, Region IX, San Francisco (email only)  
Peter Kozelka, U.S. EPA, Region IX, San Francisco (email only)  
Division of Water Quality, State Water Board, Sacramento (email only)

ATTACHMENT A – PROJECT LOCATION MAP

