State of California
California Regional Water Quality Control Board
Santa Ana Region

Staff Report

June 19, 2015

ITEM: ***10**

SUBJECT: Issuance of Waste Discharge Requirements and Master Reclamation Permit for Idyllwild Water District, Wastewater Treatment and Water Recycling Plant — Order No. R8-2015-0028, Riverside County

DISCUSSION:

See attached Fact Sheet.

RECOMMENDATIONS:

Adopt Order No. R8-2015-0028 as presented.

COMMENT SOLICITATION:

Comments were solicited from the discharger and the following agencies:

State Water Resources Control Board, Office of the Chief Counsel – David Rice
State Water Resources Control Board, Division of Drinking Water, San Diego – Steven Williams
State Water Resources Control Board, DWQ – Annalisa Kihara
Riverside County Environmental Health – John Watkins
Riverside County Flood Control and Water Conservation District – Jason Uhley
Inland Empire Waterkeeper – Megan Brousseau

State Of California
California Regional Water Quality Control Board
Santa Ana Region

3737 Main Street, Suite 500, Riverside, California 92501-3348
Phone (951) 782-4130 - FAX (951) 781-6288– TDD (951) 782-3221
http://www.waterboards.ca.gov/santaana

ORDER NO. R8-2015-0028

WASTE DISCHARGE REQUIREMENTS
AND
MASTER RECLAMATION PERMIT
FOR
IDYLLWILD WATER DISTRICT
WASTEWATER TREATMENT AND WATER RECYCLING PLANT
RIVERSIDE COUNTY

The following Discharger is subject to waste discharge and reclamation requirements as set forth in this Order:

Table 1. Discharger Information

Discharger/Operator	**Idyllwild Water District (IWD)**
Name of Facility	**Wastewater Treatment and Water Recycling Plant**
Facility Location	**52335 Apela Drive, Idyllwild, CA 92549**
Mailing Address	**P.O. Box 397, Idyllwild, CA 92549-0397**

The discharge by Idyllwild Water District (IWD) from the discharge points identified below is subject to waste discharge requirements as set forth in this Order:

Table 2. Discharge Locations and Recycled Water Use Areas

Discharge Point	Effluent Description	Discharge Point (Latitude)	Discharge Point (Longitude)	Receiving Water
DP-001 Land disposal	Secondary treated and undisinfected	33° 43' 44.1" N	116° 45' 54.9" W	Offsite Unlined Percolation Ponds and Spray Irrigation System overlying the Idyllwild Groundwater Management Zone
DP-002 Recycled water	Tertiary treated and disinfected	33° 43' 57.8" N	116° 44' 54.6" W	Idyllwild Groundwater Management Zone

Table 3. Administrative Information

This Order was adopted by the Regional Water Board on:	June 19, 2015
This Order shall become effective on:	July 1, 2015

IT IS HEREBY ORDERED that this Order supersedes and rescinds Order No. 98-78, except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the California Water Code (CWC) and regulations adopted thereunder, the Discharger shall comply with the requirements in this Order.

I, Kurt V. Berchtold, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on June 19, 2015.

Kurt V. Berchtold, Executive Officer

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I. FACILITY INFORMATION

Information regarding the Idyllwild Water District's Wastewater Treatment and Water Recycling Plant (the Facility) is summarized in Table 4, below, and in sections I and II of the Fact Sheet (Attachment F). Section I of the Fact Sheet also includes information regarding the Discharger's permit renewal application.

Table 4. Discharger/Facility Information

Discharger	Idyllwild Water District
Discharger Contact	Tom Lynch, General Manager, (951) 659-2143
Mailing Address	P.O. Box 397, Idyllwild, CA 92549-0397
Facility	Wastewater Treatment and Water Recycling Plant
Facility Location	52335 Apela Drive, Idyllwild, CA 92549
Type of Facility	Publicly Owned Treatment Works and Water Reclamation Facility
Facility Design Flow as Secondary Treatment	250,000 gallons per day
Facility Design Flow as Tertiary Treatment	57,000 gallons per day

II. FINDINGS

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter Regional Water Board), finds:

A. Legal Authorities. This Order serves as Waste Discharge Requirements (WDRs) pursuant to Article 4, Chapter 4 of the California Water Code (CWC) commencing with Section 13260 and serves as a Master Reclamation permit pursuant to Article 4, Chapter 7 of the CWC commencing with Section 13523.1.

B. Background and Rationale for Requirements. The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for requirements in this Order, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A, B, C, E, G and H are also incorporated into this Order.

C. **California Environmental Quality Act (CEQA).** This action involves the re-issuance of waste discharge requirements for existing facilities that discharge treated wastewater to land and as such, is exempt from the provisions of California Environmental Quality Act (commencing with Section 21100) in that the activity is exempt pursuant to Title 14 of the California Code of Regulations Section 15301. On September 21, 2010, the Discharger adopted a Negative Declaration for the project to construct a 57,000 gallons per day tertiary treatment plant and a pressurized pipeline for distribution of recycled water. Regional Water Board staff reviewed the Negative Declaration and related CEQA documents and determined that if the discharge from the Facility is in accordance with the requirements specified in this Order, there should be no significant adverse water quality impacts from the discharge.

D. **Notification of Interested Parties.** The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet (Attachment F) of this Order.

E. **Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet (Attachment F) of this Order.

III. DISCHARGE PROHIBITIONS

A. The discharge of wastewater at a location or in a manner different from those described in this Order is prohibited.

B. The discharge to any pond having less than one foot of freeboard is prohibited.

C. The bypass or overflow of untreated wastewater or wastes to surface waters or surface water drainage courses is prohibited.

D. The discharge of any substances in concentrations toxic to animal or plant life in the affected receiving water is prohibited.

E. The discharge of any radiological, chemical, or biological warfare agent or high level radiological waste is prohibited.

F. The distribution and use of recycled water prior to authorization by the California State Water Resources Control Board, Division of Drinking Water, is prohibited.

IV.EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The pH of the discharge shall at all times be within the range of 6.0 to 9.0 pH units. Compliance with pH limits shall be determined as follows:

1) The total time during which the pH is outside the range of 6.0 – 9.0 pH units shall not exceed 7 hours and 26 minutes in any calendar month; and
2) No individual excursion from the above range shall exceed 60 minutes.

B. Recycled Water Specifications – Discharge Point 002

1. The discharger shall comply with the following limitations for recycled water produced and distributed for landscape irrigation or other similar uses. Compliance is to be measured at monitoring location REC-001 or other approved monitoring locations where representative samples of recycled water can be obtained for laboratory testing and analysis, as described in the attached Monitoring and Reporting Program (Attachment E). The Discharger may submit for approval by the Regional Water Board's Executive Officer other monitoring location(s) not specified herein where representative samples of recycled water could be obtained for laboratory testing and analysis.

a. Physical/Biological Limitations:

Table 6. Recycled Water Effluent Limitations at DP-002

Parameter	Units	Effluent Limitations	
		Average Monthly	Average Weekly
Biochemical Oxygen Demand 5-day @ 20°C	mg/L	20	30
Total Suspended Solids	mg/L	20	30

b. Total Dissolved Solids (TDS):

The 12-month flow weighted running average TDS concentration of the recycled water used on sites overlying the Idyllwild groundwater management zone shall not exceed 350 mg/L

c. Turbidity and Disinfection Requirements:

The recycled water shall all times be adequately disinfected tertiary treated recycled water, which is a filtered and subsequently disinfected wastewater that meets the following limitations:

(1) Turbidity of the filtered effluent

When filtration[1] is through natural undisturbed soils or a bed of filter media, the turbidity of the filtered wastewater shall not exceed any of the following:

(a) Average of 2 Nephelometric Turbidity Unit (NTU) within any 24-hour period;
(b) 5 NTU more than 5 percent of the time in any 24-hour period; and
(c) 10 NTU at any time.

(2) Disinfected wastewater shall meet the following:

(a) The median concentration of total coliform bacteria in the disinfected effluent shall not exceed a Most Probable Number (MPN) of 2.2 per 100 milliliters (ml) utilizing the bacteriological results of the last seven days for which analysis has been completed.
(b) The number of total coliform organism shall not exceed an MPN of 23 total coliform bacteria per 100 ml in more than one sample in any calendar month.
(c) No total coliform sample shall exceed an MPN of 240 total coliform bacteria per 100 ml.
(d) When chlorine disinfection process is utilized following filtration, a CT (the product of total chlorine residual and modal contact time[2] measured at the same point) value of not less than 450 milligram-minutes per liter at all times with a modal contact time of at least 90 minutes, based on peak dry weather design flow shall be provided.
(e) When a disinfection process combined with the filtration process is utilized, the combined process shall demonstrate inactivation and/or removal of 99.999 percent of the plaque-forming units of F-specific bacteriophage MS2, or polio virus in the wastewater. A virus that is at least as resistant to disinfection as polio virus may be used for purposes of the demonstration.

2. The pH of the recycled water shall at all times be within the range of 6.0 to 9.0 pH units.

3. Prior to the delivery of recycled water to its first user, the Discharger shall submit to the Executive Officer of the Regional Water Board and to the State Water Resources Control Board's Division of Drinking Water (SWRCB's DDW) for their approval an Engineering Report developed pursuant to Title 22, Division 4, Chapter 3, Article 7, California Code of Regulations. The report shall clearly describe the design and reliability features specified in Articles 8, 9 and 10 of the regulations.

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1 *For recycled water use, other acceptable filtration technology that complies with Title 22 of the California Code of Regulations and approved by the California SWRCB's DDW may be used. Compliance determination will be based on California SWRCB's DDW guidance.*

2 *Modal contact time shall be calculated daily based on the minimum one-hour average value in a 24-hour period.*

4. The Discharger shall be responsible for assuring that recycled water is delivered and utilized in conformance with this Order and the recycling criteria contained in Title 22, Division 4, Chapter 3, Sections 60301 through 60355, California Code of Regulations. The Discharger shall conduct periodic inspections of the facilities of the recycled water users to monitor compliance by the users with this Order.

5. The Discharger shall establish and enforce Rules and Regulations for Recycled Water Use, governing the design and construction of recycled water use facilities and the use of recycled water in accordance with the uniform statewide recycling criteria contained in Title 22, Division 4, Chapter 3, Sections 60301 through 60355, California Code of Regulations. The Rules and Regulations for Recycled Water Use shall be submitted to the Executive Officer of the Regional Water Board and to the SWRCB's DDW for approval prior to the delivery of recycled water to the first user.

6. The discharger shall ensure that the use of recycled water by each user is consistent with its Rules and Regulations for Recycled Water Use.

7. Any revisions made to the Rules and Regulations shall be subject to the review of the Executive Officer of the Regional Water Board and to the SWRCB's DDW.

8. Prior to the delivery of recycled water to its first user, the Discharger shall develop a program to conduct compliance inspections of recycled water use sites. Inspections shall determine the status of compliance with the Discharger's Rules and Regulations for Recycled Water Use. The Discharger shall review and update the inspection program, as necessary, with the addition of each new user.

9. The storage, delivery, or use of recycled water shall not individually or collectively, directly or indirectly, result in a pollution or nuisance, or adversely affect water quality, as defined in the California Water Code.

10. Prior to delivering recycled water to any new user, the Discharger shall submit to the Regional Water Board, the SWRCB's DDW and the Riverside County Environmental Health Department a report containing the following information for review and approval:

    a. The average number of persons estimated to be served at each use site area on a daily basis.

    b. The specific boundaries of the proposed use site area, including a map showing the location of each facility, drinking water fountain, and impoundment to be used.

    c. The person or persons responsible for operation of the recycled water system at each use area.

    d. The specific use to be made of the recycled water at each use area.

e. The methods to be used to assure that the installation and operation of the recycled water system will not result in cross connections between the recycled water and potable water piping systems. This shall include a description of the pressure, dye or other test methods to be used to test the system.

f. Plans and specifications which include following:

1) Proposed piping system to be used.
2) Pipe locations of both the recycled and potable water systems.
3) Type and location of the outlets and plumbing fixtures that will be accessible to the public.
4) The methods and devices to be used to prevent backflow of recycled water into the potable water system.
5) Plan notes relating to specific installation and use requirements.

11. The Discharger shall require each user of recycled water to designate an on-site supervisor responsible for the operation of the recycled water distribution system within the recycled water use area. The supervisor shall be responsible for enforcing this Order, prevention of potential hazards, the installation, operation and maintenance of the distribution system, maintenance of the distribution and irrigation system plans in "as-built" form, and for the distribution of the recycled wastewater in accordance with this Order.

12. Recycled water shall at all times be maintained within the property lines of any user. There shall be no direct or indirect discharge of recycled water into drainage systems that could affect surface water quality standards.

V. RECEIVING WATER LIMITATIONS AND SPECIFICATIONS

A. Surface Water Limitations

The discharge of waste or use of recycled water shall not cause any surface waters to be degraded, cause water quality objectives to be exceeded, unreasonably affect beneficial uses, or cause a condition of pollution or nuisance.

B. Groundwater Limitations

The discharge of waste or use of recycled water shall not cause the underlying groundwater to be degraded, cause water quality objectives to be exceeded, unreasonably affect beneficial uses, or cause a condition of pollution or nuisance.

VI. PROVISIONS

A. Standard Provisions

1. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges from this facility, may subject the Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.

2. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition or discharge limitations of this Order, the Discharger shall notify the Regional Water Board by telephone (951) 782-4130 or by email to info8@waterboards.ca.gov within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing within five days, and/or email within 24 hours. The email notifications allow for proper documentation and can help to outline the issue that has occurred, unless the Regional Water Board waives confirmation. The written notification shall state the nature, time, duration, and cause of noncompliance, and shall describe the measures being taken to remedy the current noncompliance and, prevent recurrence including, where applicable, a schedule of implementation. Other noncompliance requires written notification as above at the time of the normal monitoring report.

3. Neither the treatment nor the discharge of waste shall create a pollution, contamination, or nuisance as defined by Section 13050 of the CWC.

4. The Discharger shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order, including additional monitoring as may be necessary to determine the nature and impact of the noncomplying discharge.

5. This Order may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:

   a. Violation of any terms or conditions of this Order;
   b. Obtaining this Order by misrepresentation or failure to disclose fully all relevant facts.

6. The Discharger shall file with the Regional Water Board a Report of Waste Discharge at least 140 days before making any material change in the character, location, or volume of the discharge. A material change includes, but is not limited to, the following:

   a. Adding a major industrial waste discharge to a discharge of essentially domestic sewage, or adding a new process or product by an industrial facility resulting in a change in the character of the waste.

b. Significantly changing the disposal method or location, such as changing the disposal to another drainage area or water body.
c. Significantly changing the method of treatment.
d. Increasing the treatment plant design capacity beyond that specified in this Order.

7. The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order, shall not be affected thereby.

8. The Discharger shall maintain a copy of this Order at the site so that it is available to site operating personnel at all times. Key operating personnel shall be familiar with its content.

9. The Discharger shall optimize chemical additions needed in the treatment process to meet waste discharge requirements so as to minimize total dissolved solid increases in the treated wastewater.

10. Collected screenings, sludge, and other solids removed from liquid wastes shall be disposed of in a manner approved by the Regional Water Board's Executive Officer.

11. In the event of any change in control or ownership of land or waste discharge facility presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to the Regional Water Board.

12. The treatment facilities shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.

13. The Regional Water Board and other authorized representatives shall be allowed:

    a. Entry upon premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order;
    b. Access to copy any records that are kept under the conditions of the Order;
    c. To inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
    d. To photograph, sample and monitor for the purpose of assuring compliance with this Order, or as otherwise authorized by the Water Code.

B. Monitoring and Reporting Program Requirements (MRP)

The Discharger shall comply with the MRP, and future revisions thereto, in Attachment E of this Order. This MRP may be modified by the Executive Officer at any time during the term of this Order, and may include a reduction or an increase in the number of

parameters to be monitored, the frequency of the monitoring or the number and size of samples to be collected.

C. Special Provisions

1. Operation and Maintenance Specifications

   a. The Discharger's wastewater treatment plant shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to Title 23, Division 3, Chapter 14, California Code of Regulations.

   b. The Discharger shall provide safeguards to assure that should there be reduction, loss, or failure of electric power, the Discharger will comply with the requirements of this Order.

   c. The Discharger shall update as necessary, the "Operation and Maintenance Manual (O&M Manual)" which it has developed for the treatment facility to conform to latest plant changes and requirements. The O&M Manual shall be readily available to operating personnel onsite. The O&M Manual shall include the following:

      (1) Description of the treatment plant table of organization showing the number of employees, duties and qualifications and plant attendance schedules (daily, weekends and holidays, part-time, etc). The description should include documentation that the personnel are knowledgeable and qualified to operate the treatment facility so as to achieve the required level of treatment at all times.
      (2) Detailed description of safe and effective operation and maintenance of treatment processes, process control instrumentation and equipment.
      (3) Description of laboratory and quality assurance procedures.
      (4) Process and equipment inspection and maintenance schedules.
      (5) Description of safeguards to assure that, should there be reduction, loss, or failure of electric power, the Discharger will be able to comply with requirements of this Order.
      (6) Description of preventive (fail-safe) and contingency (response and cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. These plans shall identify the possible sources (such as loading and storage areas, power outage, waste treatment unit failure, process equipment failure, tank and piping failure) of accidental discharges, untreated or partially treated waste bypass, and polluted drainage.

2. Special Provisions for Municipal Facilities (POTWs Only)

   a. Sewer Collection System Requirements: The Discharger's collection system is part of the system that is subject to this Order. As such, the Discharger must

properly operate and maintain its collection system (40 C.F.R. § 122.41(e)). The Discharger must report any non-compliance (40 C.F.R. § 122.41(l)(6) and (7)) and mitigate any discharge from the Discharger's collection system in violation of this Order (40 C.F.R. § 122.41(d)).

Furthermore, the General Waste Discharge Requirements for Collection System Agencies (Order No. 2006-0003- DWQ) contains requirements for operation and maintenance of collection systems and for reporting and mitigating sanitary sewer overflows. While the Discharger must comply with both Order No. 2006-0003-DWQ and this Order, the General Collection System WDR more clearly and specifically stipulates requirements for operation and maintenance and for reporting and mitigating sanitary sewer overflows. The Discharger and other governmental agencies that are discharging wastewater into the facility are required to obtain enrollment for regulation under Order No. 2006-0003-DWQ.

b. Sludge Disposal Requirements

(1) Collected screenings, sludge, and other solids removed from liquid wastes shall be disposed of in a manner that is consistent with State Water Board and Integrated Waste Management Board's joint regulations (Title 27) of the California Code of Regulations and approved by the Regional Water Board's Executive Officer.
(2) The use and disposal of biosolids shall comply with existing Federal and State laws and regulations, including permitting requirements and technical standards included in 40 CFR 503.
(3) Any proposed change in biosolids use or disposal practice from a previously approved practice should be reported to the Executive Officer and EPA Regional Administrator at least 90 days in advance of the change.
(4) The Discharger shall take all reasonable steps to minimize or prevent any discharge or biosolids use or disposal that has the potential of adversely affecting human health or the environment.

VII.COMPLIANCE DETERMINATION

Compliance with the effluent limitations contained in Section IV of this Order will be determined as specified below:

A. General

Compliance with effluent limitations for pollutants shall be determined using sample reporting protocols defined in the MRP and Attachment A of this Order. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the pollutant in the monitoring sample is greater than the effluent limitation.

B. Average Monthly Effluent Limitation (AMEL)

If the average of daily discharges over a calendar month exceeds the AMEL for a given parameter, this will represent a single violation, though the Discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger may be considered out of compliance for that calendar month. The Discharger will only be considered out of compliance for days when the discharge occurs. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

C. Average Weekly Effluent Limitation (AWEL)

If the average of daily discharges over a calendar week exceeds the AWEL for a given parameter, this will represent a single violation, though the Discharger may be considered out of compliance for each day of that week for that parameter, resulting in 7 days of non-compliance. If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWEL, the Discharger may be considered out of compliance for that calendar week. The Discharger will only be considered out of compliance for days when the discharge occurs. For any one calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week.

D. 12-Month Running Average Effluent Limitation (12-MRAEL)
Compliance with the 12-month flow weighted running average limitations under Discharge Specification IV.A.1.c., IV.A.1.d., and IV.B.1.b. shall be determined by the arithmetic mean of the last twelve monthly averages.

E. Turbidity Limitations

The Discharger shall be considered in compliance with Discharge Specifications IV.B.1.c. if the following conditions are met. If the Discharger is using a properly operating backup turbidimeter, the reading of the backup turbidimeter shall be considered in determining whether there has been an actual noncompliance:

1. There are no excursions above the limits specified in Discharge Specifications IV.B.1.c.(1)(a) and (b);
2. Exceedances of the "10 NTU at any time" turbidity requirement do not exceed a duration of one minute.
3. The apparent exceedance was caused by interference with, or malfunction of, the monitoring instrument.

F. Compliance Determination

Compliance determinations shall be based on available analyses for the time interval associated with the effluent limitation. Where only one sample analysis is available in a specified time interval (e. g., monthly or weekly average), that sample shall serve to characterize the discharge for the entire interval.

ATTACHMENT A – DEFINITIONS

Arithmetic Mean (μ), also called the average, is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

Arithmetic mean = $\mu = \Sigma x / n$

where: Σx is the sum of the measured ambient water concentrations, and
n is the number of samples.

Average Monthly Effluent Limitation (AMEL): the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Effluent Limitation (AWEL): the highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Best Management Practices (BMPs) are methods, measures, or practices designed and selected to reduce or eliminate the discharge of pollutants to surface waters from point and nonpoint source discharges including storm water. BMPs include structural and non-structural controls, and operation and maintenance procedures, which can be applied before, during, and/or after pollution producing activities.

Bioaccumulative pollutants are those substances taken up by an organism from its surrounding medium through gill membranes, epithelial tissue, or from food and subsequently concentrated and retained in the body of the organism.

Carcinogenic pollutants are substances that are known to cause cancer in living organisms.

Daily Discharge: Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

Detected, but Not Quantified (DNQ) are those sample results less than the RL, but greater than or equal to the laboratory's MDL.

Estimated Chemical Concentration is the estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

Existing Discharger means any discharger that is not a new discharger. An existing discharger includes an "increasing discharger" (i.e., an existing facility with treatment systems in place for its current discharge that is or will be expanding, upgrading, or modifying its existing permitted discharge after the effective date of this Policy).

Infeasible means not capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.

Inland Surface Waters are all surface waters of the State that do not include the ocean, enclosed bays, or estuaries.

Instantaneous Maximum Effluent Limitation: the highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

Instantaneous Minimum Effluent Limitation: the lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

Maximum Daily Flow is the maximum flow sample of all samples collected in a calendar day.

Maximum Daily Effluent Limitation (MDEL) means the highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

MEC: Maximum Effluent Concentration.

Median is the middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements (n) is odd, then the median = $X_{(n+1)/2}$. If n is even, then the median = $(X_{n/2} + X_{(n/2)+1})/2$ (i.e., the midpoint between the $n/2$ and $n/2+1$).

Method Detection Limit (MDL) is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in 40 CFR 136, Appendix B, revised as of May 14, 1999.

Minimum Level (ML) is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

Not Detected (ND) are those sample results less than the laboratory's MDL.

Persistent pollutants are substances for which degradation or decomposition in the environment is nonexistent or very slow.

Pollutant Minimization Program (PMP) means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of a priority pollutant(s) through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Regional Water Board may consider cost-effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to CWC Section 13263.3(d), shall be considered to fulfill the PMP requirements. The following reporting protocols and definitions are used in determining the need to conduct a Pollution Minimization Program (PMP). Reporting protocols in the Monitoring and Reporting Program, Attachment E, Section X.B.4 describe sample results that are to be reported as Detected but Not Quantified (DNQ) or Not Detected (ND). Definitions for a Minimum Level (ML) and Method Detection Limit (MDL) are provided in Attachment A. A Reporting Level (RL) is the ML associated with an analytical method selected by the Discharger that is authorized for monitoring effluent limitations under this Order.

Pollution Prevention means any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in Water Code Section 13263.3). Pollution prevention does not include actions that merely shift a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the SWRCB or RWQCB.

Process Optimization means minor changes to the existing facility and treatment plant operations that optimize the effectiveness of the existing treatment processes.

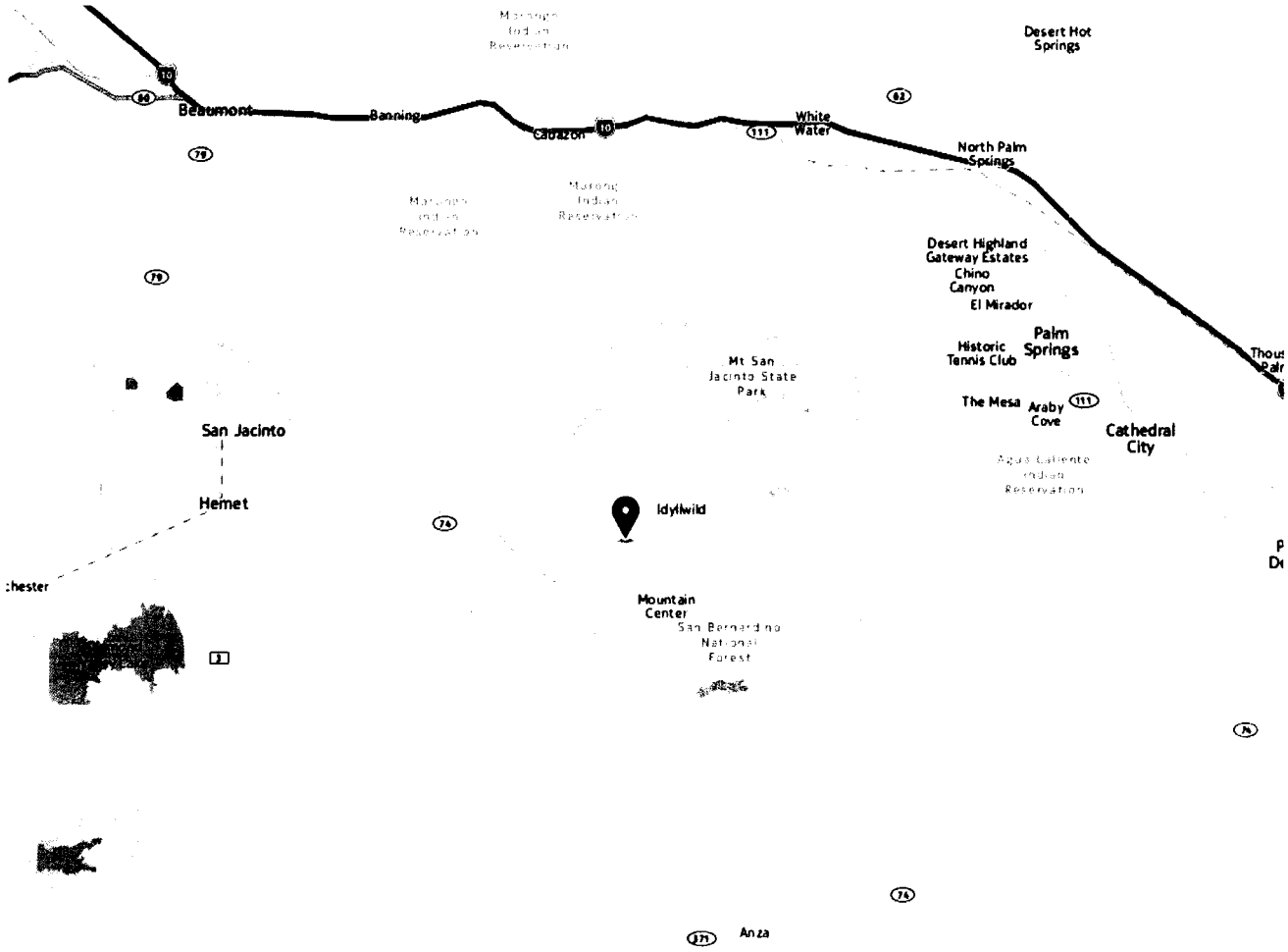
Public Entity includes the federal government or a state, county, city and county, city, district, public authority, or public agency.

Reporting Level (RL) is the ML corresponding to an approved analytical method for reporting a sample result that is selected either from Appendix 4 of the SIP by the Regional Water Board in accordance with Section 2.4.2 of the SIP or established in accordance with Section 2.4.3 of the SIP. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

Source of Drinking Water is any water designated as municipal or domestic supply (MUN) in a RWQCB basin plan.

12-Month Running Average Effluent Limitation (12-MRAEL): the highest allowable average of monthly discharges over last twelve months, calculated as the sum of all monthly discharges measured during last twelve months divided by the number of monthly discharges measured during that time period.

ATTACHMENT B: LOCATION MAP



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(No Attachment D for this Order.)

Attachment E – Monitoring and Reporting Program

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Attachment E – Monitoring and Reporting Program (MRP)

CWC Section 13267 authorizes the Regional Water Board to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements that implement the federal and California regulations.

I. GENERAL MONITORING PROVISIONS

A. General Monitoring Provision

1. All sampling and sample preservation shall be in accordance with the current approved edition of "*Standard Methods for the Examination of Water and Wastewater*" (American Public Health Association) and 40 CFR Part 136 approved methods unless otherwise specified by the Executive Officer of the Regional Water Board.

2. Chemical and bacteriological analyses shall be conducted at a laboratory certified for such analyses by the State Water Resources Control Board's Division of Drinking Water (SWRCB's DDW) in accordance with the provision of Water Code Section 13176, and must include quality assurance/quality control data with their reports, or at laboratories approved by the Regional Water Board's Executive Officer.

3. Whenever the Discharger monitors any pollutant at a specified monitoring location more frequently than is required by this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted with the discharge monitoring report as required by this MRP.

4. For every item of monitoring data where the requirements are not met, the monitoring report shall include a statement discussing the reasons for noncompliance, the actions undertaken or proposed that will bring the discharge into full compliance with requirements at the earliest time, and an estimate of the date when the Discharger will be in compliance. .

5. The Discharger shall assure that records of all monitoring information are maintained and accessible for a period of at least five years from the date of the sample, report, or application. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or by the request of the Regional Water Board at any time. Records of monitoring information shall include:

    a. The laboratory which performed the analyses;
    b. The date(s) analyses were performed;
    c. The individual(s) who performed the analyses;
    d. The modification(s) to analytical techniques or methods used;
    e. All sampling and analytical results, including

(1) Units of measurement used;
(2) Minimum reporting level (RL) for the analysis or the minimum level (ML) as determined in Attachment H;
(3) Results less than the reporting level (RL) or the minimum level (ML) but above the method detection limit (MDL);
(4) Data qualifiers and a description of the qualifiers;
(5) Quality control test results (and a written copy of the laboratory quality assurance plan);
(6) Dilution factors, if used; and
(7) Sample matrix type.

f. All monitoring equipment calibration and maintenance records;
g. All original strip charts from continuous monitoring devices;
h. All data used to complete the application for this Order; and,
i. Copies of all reports required by this Order.
j. Electronic data and information generated by the Supervisory Control and Data Acquisition (SCADA) System.

6. The flow measurement system shall be calibrated at least once per year or more frequently, to ensure continued accuracy.

7. All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. In the event that continuous monitoring equipment is out of service for greater than a 24-hour period, the Discharger shall obtain a representative grab sample each day the equipment is out of service. The Discharger shall correct the cause(s) of failure of the continuous monitoring equipment as soon as practicable. In its monitoring report, the Discharger shall specify the period(s) during which the equipment was out of service and if the problem has not been corrected, shall identify the steps which the Discharger is taking or proposes to take to bring the equipment back into service and the schedule for these actions.

8. Monitoring and reporting shall be in accordance with the following:

   a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

   b. The monitoring and reporting of influent, effluent, and sludge shall be done more frequently, as necessary, to maintain compliance with this Order and/or as specified in this Order.

   c. A "grab" sample is defined as any individual sample collected in less than 15 minutes.

d. A composite sample is defined as a combination of no fewer than eight individual grab samples obtained over the specified sampling period. The volume of each individual grab sample shall be proportional to the discharge flow rate at the time of sampling. The compositing period shall equal the specific sampling period, or 24 hours, if no period is specified.

e. Daily samples shall be collected on each day of the week.

f. Weekly samples shall be collected on any representative day during a week.

g. Monthly samples shall be collected on any representative day of each month.

II. MONITORING LOCATIONS

The Discharger shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order.

Table 1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description	Latitude	Longitude
(Influent)	M-INF1	Idyllwild Water District (IWD) Wastewater Treatment Plant Influent	33° 43' 57.8" N	116° 44' 54.1" W
DP-001	M-001	IWD Wastewater Treatment Plant effluent to offsite percolation ponds (Land Discharge) and spray irrigation system	33° 43' 57.5" N	116° 44' 55.1" W
DP-002	REC-001	IWD Wastewater Treatment Plant recycled water effluent (Reclamation)	33° 43' 57.8" N	116° 44' 54.6" W

III. INFLUENT MONITORING REQUIREMENTS

A. Influent Monitoring

The Discharger shall monitor the influent to the Facility at M-INF1 as specified in Table 1, above, for the following constituents:

Table 2. Influent Monitoring at M-INF1

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow	mgd	Recorder/Totalizer	Continuous
Specific Conductance	µmhos/cm	Recorder	Continuous
pH	Standard units	Recorder	Continuous
BOD_5	mg/L	Composite	Weekly
Total Suspended Solids	mg/L	Composite	Weekly
Total Dissolved Solids	mg/L	Grab	Monthly

IV. LAND DISCHARGE MONITORING REQUIREMENTS

A. Effluent Monitoring Location M-001

The Discharger shall monitor the treated effluent discharged at DP-001 at monitoring location M-001 as specified in Table 1, above, for the following constituents.

Table 3. Effluent Monitoring at M-001

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow	mgd	Recorder/ Totalizer	Continuous
Specific Conductance	µmhos/cm	Recorder	Continuous
pH	Standard units	Recorder	Continuous
BOD_5	mg/L	Composite	Weekly
Total Suspended Solids	mg/L	Composite	Weekly
Total Dissolved Solids	mg/L	Composite	Monthly
Total Inorganic Nitrogen	mg/L	Composite	Monthly
Volatile organic portion of EPA Priority Pollutants (See Attachment "G")[1]	µg/L	Grab	Within 60 days of the effective date of this Order and every 5 years thereafter (during the month of August)
Remaining EPA	µg/L	Composite	Within 60 days of the

[1] *Minimum levels for priority pollutant monitoring are included in Attachment H.*

Parameter	Units	Sample Type	Minimum Sampling Frequency
Priority Pollutants (See Attachment "G")[2]			effective date of this Order and every 5 years thereafter (during the month of August)

V. RECYCLED WATER MONITORING REQUIREMENTS

A. Recycled Water Monitoring Location REC-001

The Discharger shall monitor the recycled effluent discharged at DP-002 at monitoring location REC-001, as specified in Table 1, above, for the following constituents.

Table 4. Recycled Water Monitoring at REC-001

Parameter	Units	Sample Type	Minimum Sampling & Testing Frequency
Flow	mgd	Recorder/Totalizer	Continuous
pH	Standard units	Recorder/Totalizer	Continuous
CT[3]	mg/L-min	Calculation	Continuous
Turbidity[4]	NTU	Recorder	Continuous
Coliform Organisms	MPN per 100 mL	Grab	Daily
BOD_5	mg/L	Composite	Weekly
Total Suspended Solids	mg/L	Composite	Weekly
TDS	mg/L	Composite	Monthly

B. Monitoring Reclaimed Water Users

Whenever recycled water is supplied to a user, the Discharger shall record on a permanent log: the volume of recycled water supplied; the user of recycled water; the locations of those sites including the names of the groundwater management zones underlying the recycled water use sites; type of use (e.g. irrigation, industrial, etc); and the dates on which water is supplied.

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2 *See Attachment H for minimum levels applicable to priority pollutant monitoring.*

3 *CT is the product of total chlorine residual and modal contact time measured at the same point.*

4 *Turbidity analysis shall be continuous, performed by a continuous recording turbidimeter. Compliance with the daily average operating filter effluent turbidity shall be determined by averaging the levels of recorded turbidity taken at a minimum of four-hour intervals over a 24-hour period. The results of the daily average turbidity determinations shall be reported monthly. Turbidity samples shall be collected after filtration units but before chlorination.*

The Discharger shall submit a quarterly report summarizing recycled water use, including the total amount of reclaimed water supplied, the total number of reclaimed water use sites, and the locations of those sites.

VI. OTHER MONITORING REQUIREMENTS

A. Biosolids Monitoring

The Discharger shall maintain a permanent log of solids hauled away from the treatment facilities for use/disposal elsewhere, including the date hauled, the volume or weight (in dry tons), type (screening, grit, raw sludge, biosolids), application (agricultural, composting, etc), and destination. The Discharger shall also monitor for the nine pollutants identified in Table 1 of 40 CFR Part 503.13 in accordance with the frequency specified in 40 CFR 503.16. This information shall be reported annually.

B. Water Supply Monitoring

In August of each year, a sample of each source of the water supplied to the sewered area shall be obtained and analyzed for total dissolved solids concentration expressed in "mg/L". This information shall be reported annually.

VII. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. All analytical data shall be reported with method detection limit[5] (MDLs) and with identification of either reporting level (RL), minimum level (ML), or limits of quantitation (LOQs).

2. Laboratory data for effluent samples must quantify each constituent down to the approved reporting levels (RL) or minimum level (ML) for specific constituents. Any internal quality control data associated with the sample must be reported when requested by the Executive Officer. The Regional Water Board will reject the quantified laboratory data if quality control data is unavailable or unacceptable.

3. Discharge monitoring data shall be submitted in a format acceptable by the Regional Water Board. Specific reporting format may include preprinted forms and/or electronic media. The results of all monitoring required by this Order shall be reported to the Regional Water Board, and shall be submitted in such a format as to allow direct comparison with the limitations and requirements of this Order.

4. The Discharger shall tabulate the monitoring data to clearly illustrate compliance and/or noncompliance with the requirements of the Order.

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5 *The standardized test procedure to be used to determine the method detection limit (MDL) is given at Appendix B, 'Definition and Procedure for the Determination of the Method Detection Limit' of 40 CFR 136.*

5. For every item of monitoring data where the requirements are not met, the monitoring report shall include a statement discussing the reasons for noncompliance, and of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time, and an estimate of the date when the Discharger will be in compliance.

6. Self Monitoring Reports (SMRs) shall be signed by either the principal Executive Officer or ranking elected official. A duly authorized representative of the aforementioned signatories may sign documents if:

   a. The authorization is made in writing by the signatory;

   b. The authorization specifies the representative as either an individual or position having responsibility for the overall operation of the regulated facility or activity: and

   c. The written authorization is submitted to the Executive Officer of the Regional Water Board.

7. SMRs shall contain the following completed declaration:

   "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

8. The monthly reports for June and December shall include a roster of plant personnel, including job titles, duties, and level of State certification for each individual.

9. The Discharger shall report monitoring results for specific parameters in accordance with the following table:

Table 5. Reporting Requirements

Parameter	Measurement
Flow	Daily total flow
pH	Daily High and daily low
Turbidity	Daily maximum and daily average
CT	Daily minimum and daily average

10. The Discharger shall file a written report with the Regional Board within ninety (90) days after the average dry-weather waste flow for any month equals or exceeds 75 percent of the design capacity of the waste treatment and/or disposal facilities. The

Discharger's senior administrative officer shall sign a letter which transmits that report and certifies that the policy making body is adequately informed about it. The report shall include:

a. Average daily flow for the month, the date on which the instantaneous peak flow occurred, the rate of that peak flow, and the total flow for the day.

b. The Discharger's best estimate of when the average daily dry-weather flow rate will equal or exceed the design capacity of the treatment facilities.

c. The Discharger's intended schedule for studies, design, and other steps needed to provide additional capacity for the waste treatment and/or disposal facilities before the waste flow rate equals the capacity of present units.

B. Self Monitoring Reports (SMRs)

1. Monitoring Reports shall be submitted quarterly by the last day of the month following the quarter and shall include all data collected during the previous quarter. Any effluent limit violations should be reported within 24 hours of having knowledge of such violations in accordance with Provision VI.A.3 of the Order. The Executive Officer may require accelerated monitoring and other actions for constituents exceeding the effluent limits and/or if priority pollutants are identified in the discharge.

2. At any time during the term of this Order, the State or Regional Water Board may notify the Discharger to electronically submit Self-Monitoring Reports (SMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (http://www.waterboards.ca.gov/ciwqs/index.html). Until such notification is given, the Discharger shall continue submitting SMRs to the Regional Water Board via email at info8@waterboards.ca.gov. The CIWQS Web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal.

3. Reporting Protocols: The Discharger shall report with each sample result the applicable Reporting Level (RL), or Minimum Level (ML), and the current Method Detection Limit (MDL), as determined by the procedure in 40 CFR Part 136.

   The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

   a. Sample results greater than or equal to the RL shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).

   b. Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The *estimated chemical concentration of the sample shall also be reported.

      For the purposes of data collection, the laboratory shall write the estimated

chemical concentration next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc."). The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (± a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.

d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from *extrapolation* beyond the lowest point of the calibration curve.

4. The Discharger shall submit the SMRs when required by subsection B.1 above in accordance with the following requirements:

   a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations.

   b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.

   c. SMRs must be submitted to the Regional Water Board, signed and certified as specified by Reporting Requirement VII.A.6. and VII.A.7. above, to the address listed below:

      California Regional Water Quality Control Board
      Santa Ana Region
      3737 Main Street, Suite 500
      Riverside, CA 92501-3348

5. By April 1 of each year, the Discharger shall submit an annual report to the Regional Water Board. The annual report shall include the following:

   a. Tabular and graphical summaries of the monitoring data obtained during the previous year, including monitoring data for priority pollutants, if applicable;

   b. A discussion of the compliance record and the corrective actions taken or planned, which may be needed to bring the discharge into full compliance with the waste discharge requirements; and

c. A summary of the quality assurance (QA) activities for the previous year.

Attachment F – Fact Sheet

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As described in Section II.B of this Order, this Fact Sheet constitutes part of the findings of this Order. This Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

I. PERMIT INFORMATION

The following table summarizes administrative information related to the Facility.

Table 1. Facility Information

WDID	8 330105001
Discharger	Idyllwild Water District
Facility Name	Wastewater Treatment and Water Recycling Plant
Facility Address	52335 Apela Drive, Idyllwild, CA 92549, Riverside County
Facility Contacts	Tom Lynch, General Manager, (951) 659-2143 Nick Iliev, Chief Plant Operator
MailingAddress	P.O. Box 397, Idyllwild, CA 92549-0397
Type of Facility	Publicly Owned Treatment Works and Water Reclamation Facility
Threat to Water Quality	2
Complexity	B
Pretreatment Program	No
Reclamation Requirements	Producer/User
Facility Design Flow as Secondary Treatment	250,000 gallons per day
Facility Design Flow as Tertiary Treatment	57,000 gallons per day

A. Idyllwild Water District (hereinafter Discharger, or IWD) is the owner and operator of the Idyllwild Wastewater Treatment and Water Recycling Plant (the Facility) within the City of Idyllwild. (Attachment B). The Idyllwild Water District leases the land from the Idyllwild Arts Academy on which the Facility is located. Currently, secondary treated and undisinfected wastewater produced at the Facility is discharged to a series of offsite percolation ponds and a spray irrigation system located on National Forest land. The Discharger plans to add tertiary treatment processes to its current treatment system and construct a pressurized pipeline distribution system to distribute tertiary treated recycled water for landscape irrigation within the Discharger's service area. The Discharger proposes to treat only a portion of its secondary effluent to tertiary standards and will continue to discharge secondary treated wastewater to the existing percolation ponds.

B. On August 28, 1998, the Regional Board adopted Order No. 98-78 prescribing Waste Discharge Requirements (WDR) for the Facility. The Discharger filed a report of waste discharge and submitted an application for renewal of Waste Discharge Requirements (WDRs) and for a Master Reclamation Permit. This order updates the WDR for the Facility and adds reclamation requirements allowing the reuse of up to 57,000 gpd recycled water for landscape irrigation.

II. FACILITY DESCRIPTION

A. Description of Wastewater and Biosolids Treatment and Controls

1. Facility Background

The Idyllwild Water District operates the Facility, which is permitted to discharge up to 250,000 gallons per day of secondary treated effluent to a series of offsite percolations ponds and a spray irrigation system to the surrounding land under the current permit (Order No. 98-78). The wastewater treatment consists of an activated sludge unit with aerobic digestion and secondary clarification. Unit processes include a grinder, extended aeration of activated sludge, clarification chamber, and an aerobic sludge digester. Raw wastewater, after passing through the headworks, can also be routed to an external aeration tank that can serve either as back-up treatment unit during a planned or emergency shut down or as an equalization basin during peak flows. Approximately 65,000 – 70,000 gallons per day of sewage is treated during the winter months. This flow increases to approximately 100,000 gallons per day during the summer months. Undisinfected secondary effluent from the Facility is discharged at Discharge Point 001 which consists of seven offsite percolation ponds and a spray irrigation system on National Forest land located approximately a mile away from the Facility. The discharger is in the process of adding tertiary treatment processes and constructing a pressurized pipeline distribution system to distribute up to 57,000 gallons per day of tertiary treated effluent for landscape irrigation. Tertiary treatment processes that are being added to the treatment plant consist of coagulation, sand filtration and disinfection with ultraviolet (UV) light. Attachment B provides a vicinity map of the Facility. Attachment C provides flow schematics of the current treatment system at the facility as well as the tertiary treatment processes that are proposed to be added to the current system.

B. Discharge Points and Receiving Waters

The Discharger is authorized to discharge from the discharge points set forth below:

Table 2. Discharge Points

Discharge Point	Effluent Description	Discharge Point (Latitude)	Discharge Point (Longitude)	Receiving Water
DP-001 Land disposal	Secondary treated and undisinfected	33° 43' 44.1" N	116° 45' 54.9" W	Offsite Unlined Percolation Ponds and Spray Irrigation System on National Forest land overlying the Idyllwild Groundwater Management Zone
DP-002 Recycled water	Tertiary treated and disinfected	33° 43' 57.8" N	116° 44' 54.6" W	Idyllwild Groundwater Management Zone

1. **Discharge Point to Ponds (DP-001)**

   Secondary treated, undisinfected, wastewater is discharged via DP-001 to seven offsite percolation ponds located on National Forest land. This water is also used for spray irrigation of National Forest land.

2. **Discharge Points for Recycled Water Reuse (DP-002)**

   The Discharger has completed a preliminary design and obtained funding for the construction of a recycled water distribution system that will deliver up to 57,000 gpd of recycled water to a number of users for landscape irrigation. Construction for the recycled water distribution system is scheduled to begin sometime in the fall of 2015. The Idyllwild Arts Academy will use the majority of recycled water for landscape irrigation, with the remainder being distributed to County Park and other users. The recycled water use areas overlie the Idyllwild Groundwater Management Zone (GMZ). The Basin Plan for the Santa Ana River Basin (Basin Plan) does not include any numeric water quality objectives for the Idyllwild GMZ.

3. **Stormwater**

   Pursuant to Section 402(p) of the Clean Water Act and Title 40 of the Code of Federal Regulations (CFR) Part 122, 123, and 124, the State Water Resources Control Board adopted a general NPDES permit to regulate storm water discharges associated with industrial activities (State Board Order No. 97-03-DWQ) on April 17, 1997. As of July 1, 2015, Order No. 97-03-DWQ will be replaced by Order No. 2014-0057-DWQ (collectively the Industrial General Stormwater Permits). Since the flow from the Facility is less than one million gallons per day and the Facility does not have an approved pre-treatment program, coverage under the Industrial General Stormwater Permits is not required.

4. Compliance History

Discharge from the Facility has consistently met the requirements specified in Order No. 98-78.

C. Planned Changes

The Facility is being upgraded from secondary treatment to tertiary treatment with UV disinfection for water that would be used for landscape irrigation and/or other recycled water uses.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in the proposed Order are based on the requirements and authorities described in this section.

A. Legal Authorities

This Order serves as Waste Discharge Requirements (WDRs) pursuant to Article 4, Chapter 4 of the California Water Code (CWC) commencing with Section 13260 and serves as a Master Reclamation permit pursuant to Article 4, Chapter 7 of the CWC commencing with Section 13523.1.

B. California Environmental Quality Act (CEQA)

This action involves the re-issuance of waste discharge requirements for existing facilities that discharge treated wastewater to land and as such, is exempt from the provisions of California Environmental Quality Act (commencing with Section 21100) in that the activity is exempt pursuant to Title 14 of the California Code of Regulations Section 15301. On September 21, 2010, the Discharger adopted a Negative Declaration for the project to construct a 57,000 gallons per day tertiary wastewater treatment plant next to the existing treatment plant and a pressurized pipeline for the distribution of recycled water. Regional Water Board staff reviewed the Negative Declaration and related documents and determined that if the discharges from the Facility are in accordance with the requirements specified in this Order, there should be no significant adverse water quality impact from the discharge.

C. State Regulations, Policies, and Plans

1. **Water Quality Control Plans.** The Regional Water Board adopted a Water Quality Control Plan for the Santa Ana River Basin (hereinafter Basin Plan) that became effective on January 24, 1995. The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the Plan. In addition, State Water Resources Control Board (State Water Board) Resolution No. 88-63 (Sources of Drinking Water Policy) requires that, with certain exceptions, the

Regional Water Board assign the municipal and domestic water supply use to all water bodies.

On January 22, 2004, the Regional Water Board adopted Resolution No. R8-2004-0001, amending the Basin Plan to incorporate revised boundaries for groundwater sub-basins, now termed "management zones", new nitrate-nitrogen and TDS objectives for the new management zones, and new nitrogen and TDS management strategies applicable to both surface and ground waters. The State Water Board and Office of Administrative Law (OAL) approved the N/TDS Amendment on September 30, 2004 and December 23, 2004, respectively. Accordingly, these waste discharge requirements implement relevant, groundwater-related components of the N/TDS Amendment. Currently, there are no numeric water quality objectives listed in the Basin Plan for the Idyllwild GMZ.

As previously discussed, the Idyllwild Water District discharges wastewater from the Facility to the Idyllwild groundwater management zone. The designated beneficial uses of receiving waters affected by the discharge from the Facility are as follows: a) Municipal and Domestic Supply, b) Industrial Service Supply.

Requirements of this Order implement the Basin Plan.

2. Antidegradation Policy

The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference the State antidegradation policies. Requirements specified in this Order should prevent any degradation of the receiving waters. Therefore, the permitted discharge is consistent with the antidegradation provisions of State Water Board Resolution No. 68-16.

3. Pretreatment

The Discharger is not required to have a pretreatment program because there are no categorical industries discharging to the system and because the flow rate is less than 5 mgd.

4. Biosolids Requirements

On February 19, 1993, the USEPA issued a final rule for the use and disposal of sewage sludge, 40 CFR, Part 503. This rule requires that producers of sewage sludge meet certain reporting, handling, and disposal requirements. The State of California has not been delegated the authority to implement this program, therefore, the U.S. Environmental Protection Agency is the implementing agency. The sludge

generated by the Facility is hauled off to the One Stop Landscaping facility in Redlands for composting.

5. Monitoring and Reporting Requirements

Section 13267 of the CWC authorizes the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP) establishes monitoring and reporting requirements to implement state requirements. TheMRP is provided in Attachment E.

D. Other Plans, Polices and Regulations-Not Applicable

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Discharge Prohibitions

The discharge prohibitions are based on the Basin Plan, State Water Resources Control Board's plans and policies, and previous Order No. 98-78. These prohibitions are consistent with the requirements set for other discharges regulated by WDRs adopted by the Regional Water Board.

B. Effluent Limitations

Federal Regulations require technology-based effluent limitations for municipal dischargers to be placed in waste discharge requirements that also serve as NPDES permits based on Secondary Treatment Standards or Equivalent to Secondary Treatment Standards. These technology-based regulations apply to all municipal wastewater treatment plants and identify the minimum level of effluent quality attainable by secondary treatment in terms of biochemical oxygen demand (BOD_5) and total suspended solids (TSS).

Although this Order does not serve as an NPDES permit, it contains effluent limits for BOD_5 and TSS based on the federal secondary standards for wastewater discharges to the percolation ponds.

This Order requires recycled water to receive tertiary treatment before it is used. As such, the BOD_5 and TSS limits for recycled water are more stringent than the technology-based secondary treatment standards limits and are based on Best Professional Judgment. These limits are consistent with those specified for all other wastewater treatment facilities producing tertiary treated water within the region.

Also, as stated in Section III.C.1 of this Fact Sheet, one of the designated beneficial uses for the Idyllwild Groundwater Management Zone is Municipal and Domestic Water Supply (MUN). For groundwater management zones that have a beneficial use of MUN but do not have numeric water quality objectives for TDS, as in the case of the Idyllwild Groundwater Management Zone, the Basin Plan states that the narrative objectives apply. Pursuant to the narrative objective, the TDS level should be limited to 500 mg/L,

which is based on the secondary maximum contaminant level for drinking water. Consistent with the Basin Plan objectives, the anti-degradation policy and to encourage recycled water use, an effluent limit of 350 mg/L is specified in this Order. This limit is the same as the previous order and should be protective of the underlying groundwater.

For discharges to the offsite percolation ponds (DP-001), there are no coliform bacteria limits as the ponds are located on National Forest land and are not accessible to the public. Coliform limitations are specified in the Order for recycled water use, in accordance with Title 22 regulations.

C. Land Disposal Limitations DP-001

These limitations apply to discharges to the ponds and the spray irrigation systems that are located within National Forest lands.

Summary of Land Disposal Limitations at DP-001:

Table 3. Summary of Land Disposal Limitations at DP-001

Parameter	Units	Effluent Limitations			
		Average Monthly or as noted herein	Average Weekly	Range	
BOD_5	mg/L	30	45	--	Tech[1]
Total Suspended Solids	mg/L	30	45	--	Tech
TDS	mg/L	350 (12-month avg)	--	--	BPJ[2]
TIN	mg/L	10 (12-month avg)	--	--	BPJ
pH	Std. units	--	--	6.0-9.0	BP[3]

D. Reclamation Specifications DP-002

1. Section 13523 of the California Water Code provides that a Regional Water Board, after consulting with and receiving the recommendations from the State Water Resources Control Board's Division of Drinking Water (SWRCB's DDW) and any party who has requested in writing to be consulted, and after any necessary hearing, shall prescribe water reclamation requirements for water which is used or proposed to be used as recycled water, if, in the judgment of the Board, such requirements are necessary to protect the public health, safety, or welfare. Section 13523 further provides that such requirements shall include, or be in conformance with, the statewide uniform water recycling criteria established by the SWRCB's DDW pursuant to California Water Code Section 13521.

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1 *Tech = Technology-based effluent limit*
2 *BPJ = Limits based on Best Professional Judgment*
3 *BP = Limits based on the Basin Plan*

2. Reclamation specifications in the proposed Order are based upon the recycling criteria contained in Title 22, Division 4, Chapter 3, Sections 60301 through 60355, California Code of Regulations, and the California Water Code Section 13521.

3. Since there are no numeric water quality objectives listed in the Basin Plan for the Idyllwild GMZ, the TDS and TIN limitations for recycled water use and percolation, are based on Best Professional Judgment and are consistent with the previous order.

4. Summary of Recycled Water Limitations:

Table 4. Summary of Recycled Water Limitations at DP-002

Parameter	Units	Effluent Limitations					Basis
		Average Monthly or as noted herein	Average Weekly	Daily average or as noted herein	Instantaneous Minimum or as noted herein	Instantaneous Maximum	
BOD_5	mg/L	20	30	--	--	--	BPJ
Total Suspended Solids	mg/L	20	30	--	--	--	BPJ
TDS	mg/L	350 (12-month avg)	--	--	--	--	BPJ
Turbidity	NTU	--	--	2	5[4]	10	Title 22
Coliform	MPN/100 mL	23[5]	2.2 median in 7 days	240[6]	--	--	Title 22
CT	milligram-minutes per liter	--	--	--	450	--	Title 22

5. The Basin Plan water quality objectives for TIN do not apply to recycled water use for agricultural and landscape irrigation because of plant uptake of nitrogen.

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

There should not be any discharge from the Facility to surface waters. The requirements specified for surface water are to prevent any degradation of surface waters.

B. Groundwater

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4 *Not to exceed more than 72 minutes in any 24-hour period*
5 *Not more than once in any 30-day period*
6 *Maximum Daily*

The receiving groundwater limitations for groundwater are to prevent any degradation of groundwaters.

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

Sections 13267 of the CWC authorize the Water Boards to require technical and monitoring reports. The Monitoring and Reporting Program (MRP), Attachment E of the Order, establishes monitoring and reporting requirements to implement federal and State requirements. The following provides the rationale for monitoring and reporting requirements contained in the MRP for the Facility.

A. Influent Monitoring

Influent monitoring is required to determine the effectiveness of the treatment program and assess treatment plant performance.

B. Effluent Monitoring

The Discharger is required to conduct monitoring of the permitted discharges in order to evaluate compliance with permit conditions. Monitoring requirements are given in the proposed MRP (Attachment E). Attachment E includes Standard Monitoring Provisions (SMP). The SMPs are standard requirements applicable to all waste discharge requirements issued by the Regional Water Board. In addition to containing definitions of terms, it specifies general sampling/analytical protocols and the requirements of reporting of spills, violations, and routine monitoring data in accordance with WDR regulations, the California Water Code, and Regional Water Board's policies. The MRP also contains sampling program specific for the Facility. It defines the sampling stations and frequency, pollutants to be monitored, and additional reporting requirements. Pollutants to be monitored include all pollutants for which effluent limitations are specified.

This Order includes additional monitoring requirements compared to the previous order to ensure compliance with the requirements for recycled water production and use. The Executive Officer may require the Discharger to conduct accelerated monitoring if effluent limit exceedances are identified and/or if priority pollutants are detected in the discharge.

C. Other Monitoring Requirements

1. Water Supply Monitoring

The Discharger is required to collect an annual sample of each source of water supplied and analyze for total dissolved solids.

2. Biosolids Monitoring

Biosolids produced in this facility are hauled off to the One Stop Landscaping in Redlands. The Discharger is required to ensure that screenings, grit, raw sludge and other solids removed from the Facility are properly handled, disposed of, and/or beneficially used. The Discharger is also required to monitor for the nine pollutants identified in Table 1 of 40 CFR Part 503.13 in accordance with the monitoring frequencies specified in 40 CFR 503.16.

3. Pretreatment Monitoring

The Discharger is not required to have a pretreatment program because there are no categorical industries discharging to the system and the flow rate is less than 5 mgd.

VII. RATIONALE FOR PROVISIONS

A. Provisions

1. Operation and Maintenance Specifications

The Facility proposes to produce and distribute tertiary treated disinfected recycled water for various uses and, therefore, must implement proper staffing, operation, maintenance, design, and reliability requirements contained in the Water Recycling Criteria (Title 22, Division 4, Chapter 3, Articles 7 through 10, California Code of Regulations). Also, the Discharger must ensure that the operations staff has the proper certification as required under Title 23, Division 3, Chapter 26, California Code of Regulations.

2. Special Provisions for Municipal Facility - POTWs Only

a. Sewer Collection System Requirements

The State Water Board issued the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, Order No. 2006-0003-DWQ (General Order) on May 2, 2006, as amended by Order No. WQ. 2008-0002-EXEC. The General Order requires public agencies that own or operate sanitary sewer systems with greater than one mile of pipes or sewer lines to enroll for coverage under the General Order. The General Order requires agencies to develop sanitary sewer management plans and report all sanitary sewer overflows, among other requirements and prohibitions. The Discharger is currently enrolled under the General Order.

b. Sludge and Other Waste Disposal Requirements

Collected screenings, sludge, and other solids removed from liquid wastes shall be disposed of in a manner that is consistent with State Water Board and

Integrated Waste Management Board's joint regulations (Title 27) of the California Code of Regulations and approved by the Regional Water Board's Executive Officer.

VIII. PUBLIC PARTICIPATION

The Regional Water Board is considering the issuance of waste discharge requirements (WDRs) for Idyllwild Water District's wastewater treatment and water recycling plant. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process. Regional Water Board staff circulated the draft Order to interested parties and made it available for public review and comments on its website.

A. Notification of Interested Parties

The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharges and has provided them with an opportunity to submit their written comments and recommendations. Notification was provided through mailings and at the Regional Water Board website: http://www.waterboards.ca.gov/santaana

B. Written Comments

The staff determinations are tentative. Interested persons are invited to submit written comments concerning this tentative Order. To be fully responded to by staff and considered by the Regional Water Board, written comments should be received at the Regional Water Board offices given below by 5:00 p.m on June 2, 2015.

Kathleen Fong
California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3348

C. Public Hearing

The Regional Water Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: June 19, 2015
Time: 9:00 A.M.
Location: City Council Chambers
City of Loma Linda
25541 Barton Road
Loma Linda, CA

Interested persons are invited to attend. At the public hearing, the Regional Water Board will hear testimony, if any, pertinent to the discharge and the tentative Order. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our web address where you can access the current agenda for changes in dates and locations is: http://www.waterboards.ca.gov/santaana.

D. Waste Discharge Requirements Petitions

Any aggrieved person may petition the State Water Board to review the decision of the Regional Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Water Board's action to the following address:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100
Sacramento, CA 95812-0100

E. Information and Copying

The Report of Waste Discharge, related documents, tentative order, comments received, and other information are on file and may be inspected at the address above at any time between 9:00 a.m. and 3:00 p.m. Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (951) 782-4130

F. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the Waste Discharge Requirements, NPDES permits, or any other matter that the Regional Water Board considers should register at:

http://www.waterboards.ca.gov/resources/email_subscriptions/reg8_subscribe.shtml

G. Additional Information

Requests for additional information or questions regarding this Order should be directed to Kathleen Fong at (951) 774-0114 or Kathleen.Fong@waterboards.ca.gov.

ATTACHMENT G - EPA PRIORITY POLLUTANT LIST

EPA PRIORITY POLLUTANT LIST					
Metals		**Acid Extractibles**		**Base/Neutral Extractibles (continuation)**	
1.	Antimony	45.	2-Chlorophenol	91.	Hexachloroethane
2.	Arsenic	46.	2,4-Dichlorophenol	92.	Indeno (1,2,3-cd) Pyrene
3.	Beryllium	47.	2,4-Dimethylphenol	93.	Isophorone
4.	Cadmium	48.	2-Methyl-4,6-Dinitrophenol	94.	Naphthalene
5a.	Chromium (III)	49.	2,4-Dinitrophenol	95.	Nitrobenzene
5b.	Chromium (VI)	50.	2-Nitrophenol	96.	N-Nitrosodimethylamine
6.	Copper	51.	4-Nitrophenol	97.	N-Nitrosodi-N-Propylamine
7.	Lead	52.	3-Methyl-4-Chlorophenol	98.	N-Nitrosodiphenylamine
8.	Mercury	53.	Pentachlorophenol	99.	Phenanthrene
9.	Nickel	54.	Phenol	100.	Pyrene
10.	Selenium	55.	2, 4, 6 – Trichlorophenol	101.	1,2,4-Trichlorobenzene
11.	Silver		**Base/Neutral Extractibles**		**Pesticides**
12.	Thallium	56.	Acenaphthene	102.	Aldrin
13.	Zinc	57.	Acenaphthylene	103.	Alpha BHC
	Miscellaneous	58.	Anthracene	104.	Beta BHC
14.	Cyanide	59.	Benzidine	105.	Delta BHC
15.	Asbestos (not required unless requested)	60.	Benzo (a) Anthracene	106.	Gamma BHC
16.	2,3,7,8-Tetrachlorodibenzo-P-Dioxin (TCDD)	61.	Benzo (a) Pyrene	107.	Chlordane
	Volatile Organics	62.	Benzo (b) Fluoranthene	108.	4, 4' - DDT
17.	Acrolein	63.	Benzo (g,h,i) Perylene	109.	4, 4' - DDE
18.	Acrylonitrile	64.	Benzo (k) Fluoranthene	110.	4, 4' - DDD
19.	Benzene	65.	Bis (2-Chloroethoxy) Methane	111.	Dieldrin
20.	Bromoform	66.	Bis (2-Chloroethyl) Ether	112.	Alpha Endosulfan
21.	Carbon Tetrachloride	67.	Bis (2-Chloroisopropyl) Ether	113.	Beta Endosulfan
22.	Chlorobenzene	68.	Bis (2-Ethylhexyl) Phthalate	114.	Endosulfan Sulfate
23.	Chlorodibromomethane	69.	4-Bromophenyl Phenyl Ether	115.	Endrin
24.	Chloroethane	70.	Butylbenzyl Phthalate	116.	Endrin Aldehyde
25.	2-Chloroethyl Vinyl Ether	71.	2-Chloronaphthalene	117.	Heptachlor
26.	Chloroform	72.	4-Chlorophenyl Phenyl Ether	118.	Heptachlor Epoxide
27.	Dichlorobromomethane	73.	Chrysene	119.	PCB 1016
28.	1,1-Dichloroethane	74.	Dibenzo (a,h) Anthracene	120.	PCB 1221
29.	1,2-Dichloroethane	75.	1,2-Dichlorobenzene	121.	PCB 1232
30.	1,1-Dichloroethylene	76.	1,3-Dichlorobenzene	122.	PCB 1242
31.	1,2-Dichloropropane	77.	1,4-Dichlorobenzene	123.	PCB 1248
32.	1,3-Dichloropropylene	78.	3,3'-Dichlorobenzidine	124.	PCB 1254
33.	Ethylbenzene	79.	Diethyl Phthalate	125.	PCB 1260
34.	Methyl Bromide	80.	Dimethyl Phthalate	126.	Toxaphene
35.	Methyl Chloride	81.	Di-n-Butyl Phthalate		
36.	Methylene Chloride	82.	2,4-Dinitrotoluene		
37.	1,1,2,2-Tetrachloroethane	83.	2-6-Dinitrotoluene		
38.	Tetrachloroethylene	84.	Di-n-Octyl Phthalate		
39.	Toluene	85.	1,2-Dipenylhydrazine		
40.	1,2-Trans-Dichloroethylene	86.	Fluoranthene		
41.	1,1,1-Trichloroethane	87.	Fluorene		
42.	1,1,2-Trichloroethane	88.	Hexachlorobenzene		
43.	Trichloroethylene	89.	Hexachlorobutadiene		
44.	Vinyl Chloride	90.	Hexachlorocyclopentadiene		

ATTACHMENT H – MINIMUM LEVELS

MINIMUM LEVELS IN PPB (µg/l)

Table 1- VOLATILE SUBSTANCES[1]	GC	GCMS
Acrolein	2.0	5
Acrylonitrile	2.0	2
Benzene	0.5	2
Bromoform	0.5	2
Carbon Tetrachloride	0.5	2
Chlorobenzene	0.5	2
Chlorodibromomethane	0.5	2
Chloroethane	0.5	2
Chloroform	0.5	2
Dichlorobromomethane	0.5	2
1,1 Dichloroethane	0.5	1
1,2 Dichloroethane	0.5	2
1,1 Dichloroethylene	0.5	2
1,2 Dichloropropane	0.5	1
1,3 Dichloropropylene (volatile)	0.5	2
Ethylbenzene	0.5	2
Methyl Bromide (*Bromomethane*)	1.0	2
Methyl Chloride (*Chloromethane*)	0.5	2
Methylene Chloride (*Dichloromethane*)	0.5	2
1,1,2,2 Tetrachloroethane	0.5	1
Tetrachloroethylene	0.5	2
Toluene	0.5	2
trans-1,2 Dichloroethylene	0.5	1
1,1,1 Trichloroethane	0.5	2
1,1,2 Trichloroethane	0.5	2
Trichloroethylene	0.5	2
Vinyl Chloride	0.5	2
1,2 Dichlorobenzene (volatile)	0.5	2
1,3 Dichlorobenzene (volatile)	0.5	2
1,4 Dichlorobenzene (volatile)	0.5	2

Selection and Use of Appropriate ML Value:

ML Selection: When there is more than one ML value for a given substance, the discharger may select any one of those ML values, and their associated analytical methods, listed in this Attachment that are below the calculated effluent limitation for compliance determination. If no ML value is below the effluent limitation, then the discharger shall select the lowest ML value, and its associated analytical method, listed in the PQL Table.

ML Usage: The ML value in this Attachment represents the lowest quantifiable concentration in a sample based on the proper application of all method-based analytical procedures and the absence of any matrix interferences. Assuming that all method-specific analytical steps are followed, the ML value will also represent, after the appropriate application of method-specific factors, the lowest standard in the calibration curve for that specific analytical technique. Common analytical practices sometimes require different treatment of the sample relative to calibration standards.
Note: chemical names in parenthesis and italicized is another name for the constituent.

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[1] *The normal method-specific factor for these substances is 1, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.*

MINIMUM LEVELS IN PPB (µg/l)

Table 2 – Semi-Volatile Substances[2]	GC	GCMS	LC
2-Chloroethyl vinyl ether	1	1	
2 Chlorophenol	2	5	
2,4 Dichlorophenol	1	5	
2,4 Dimethylphenol	1	2	
4,6 Dinitro-2-methylphenol	10	5	
2,4 Dinitrophenol	5	5	
2- Nitrophenol		10	
4- Nitrophenol	5	10	
4 Chloro-3-methylphenol	5	1	
2,4,6 Trichlorophenol	10	10	
Acenaphthene	1	1	0.5
Acenaphthylene		10	0.2
Anthracene		10	2
Benzidine		5	
Benzo (a) Anthracene (*1,2 Benzanthracene*)	10	5	
Benzo(a) pyrene (*3,4 Benzopyrene*)		10	2
Benzo (b) Flouranthene (*3,4 Benzofluoranthene*)		10	10
Benzo(g,h,i)perylene		5	0.1
Benzo(k)fluoranthene		10	2
bis 2-(1-Chloroethoxyl) methane		5	
bis(2-chloroethyl) ether	10	1	
bis(2-Chloroisopropyl) ether	10	2	
bis(2-Ethylhexyl) phthalate	10	5	
4-Bromophenyl phenyl ether	10	5	
Butyl benzyl phthalate	10	10	
2-Chloronaphthalene		10	
4-Chlorophenyl phenyl ether		5	
Chrysene		10	5
Dibenzo(a,h)-anthracene		10	0.1
1,2 Dichlorobenzene (semivolatile)	2	2	
1,3 Dichlorobenzene (semivolatile)	2	1	
1,4 Dichlorobenzene (semivolatile)	2	1	
3,3' Dichlorobenzidine		5	
Diethyl phthalate	10	2	
Dimethyl phthalate	10	2	
di-n-Butyl phthalate		10	
2,4 Dinitrotoluene	10	5	
2,6 Dinitrotoluene		5	
di-n-Octyl phthalate		10	
1,2 Diphenylhydrazine		1	
Fluoranthene	10	1	0.05
Fluorene		10	0.1
Hexachloro-cyclopentadiene	5	5	
1,2,4 Trichlorobenzene	1	5	

MINIMUM LEVELS IN PPB (µg/l)

Table 2 - SEMI-VOLATILE SUBSTANCES[2]	GC	GCMS	LC	COLOR
Pentachlorophenol	1	5		
Phenol [3]	1	1		50
Hexachlorobenzene	5	1		
Hexachlorobutadiene	5	1		
Hexachloroethane	5	1		
Indeno(1,2,3,cd)-pyrene		10	0.05	
Isophorone	10	1		
Naphthalene	10	1	0.2	
Nitrobenzene	10	1		
N-Nitroso-dimethyl amine	10	5		
N-Nitroso -di n-propyl amine	10	5		
N-Nitroso diphenyl amine	10	1		
Phenanthrene		5	0.05	
Pyrene		10	0.05	

Table 3– INORGANICS[4]	FAA	GFAA	ICP	ICPMS	SPGFAA	HYDRIDE	CVAA	COLOR	DCP
Antimony	10	5	50	0.5	5	0.5			1000
Arsenic		2	10	2	2	1		20	1000
Beryllium	20	0.5	2	0.5	1				1000
Cadmium	10	0.5	10	0.25	0.5				1000
Chromium (total)	50	2	10	0.5	1				1000
Chromium VI	5							10	
Copper	25	5	10	0.5	2				1000
Lead	20	5	5	0.5	2				10000
Mercury				0.5			0.2		
Nickel	50	5	20	1	5				1000
Selenium		5	10	2	5	1			1000
Silver	10	1	10	0.25	2				1000
Thallium	10	2	10	1	5				1000
Zinc	20		20	1	10				1000
Cyanide								5	

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2 *With the exception of phenol by colorimetric technique, the normal method-specific factor for these substances is 1000, therefore, the lowest standards concentration in the calibration curve is equal to the above ML value for each substance multiplied by 1000.*

3 *Phenol by colorimetric technique has a factor of 1.*

4 *The normal method-specific factor for these substances is 1, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.*

MINIMUM LEVELS IN PPB (µg/l)

Table 4- PESTICIDES – PCBs[5]	GC
Aldrin	0.005
alpha–BHC (*a-Hexachloro-cyclohexane*)	0.01
beta–BHC (*b-Hexachloro-cyclohexane*)	0.005
Gamma–BHC (*Lindane; g-Hexachloro-cyclohexane*)	0.02
Delta-BHC (*d-Hexachloro-cyclohexane*)	0.005
Chlordane	0.1
4,4'-DDT	0.01
4,4'-DDE	0.05
4,4'-DDD	0.05
Dieldrin	0.01
Alpha-Endosulfan	0.02
Beta-Endosulfan	0.01
Endosulfan Sulfate	0.05
Endrin	0.01
Endrin Aldehyde	0.01
Heptachlor	0.01
Heptachlor Epoxide	0.01
PCB 1016	0.5
PCB 1221	0.5
PCB 1232	0.5
PCB 1242	0.5
PCB 1248	0.5
PCB 1254	0.5
PCB 1260	0.5
Toxaphene	0.5

Techniques:
GC - Gas Chromatography
GCMS - Gas Chromatography/Mass Spectrometry
HRGCMS - High Resolution Gas Chromatography/Mass Spectrometry (i.e., EPA 1613, 1624, or 1625)
LC - High Pressure Liquid Chromatography
FAA - Flame Atomic Absorption
GFAA - Graphite Furnace Atomic Absorption
HYDRIDE - Gaseous Hydride Atomic Absorption
CVAA - Cold Vapor Atomic Absorption
ICP - Inductively Coupled Plasma
ICPMS - Inductively Coupled Plasma/Mass Spectrometry
SPGFAA - Stabilized Platform Graphite Furnace Atomic Absorption (i.e., EPA 200.9)
DCP - Direct Current Plasma
COLOR - Colorimetric

[5] *The normal method-specific factor for these substances is 100, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 100.*