

California Regional Water Quality Control Board
North Coast Region
Water Code Section 13383 Investigative Order R1-2021-0019
Directing the Ukiah Rifle & Pistol Club
To Submit Sampling and Monitoring Reports
Pertaining to Discharges from the Ukiah Rifle & Pistol Club
Mendocino County

FINDINGS

The North Coast Regional Water Quality Control Board (Regional Water Board) finds that:

1. The City of Ukiah owns, and the Ukiah Rifle and Pistol Club (URPC) leases, the property located on 2300 Vichy Springs Road, in Mendocino County (Property). URPC operates multi-discipline shooting ranges and conducts classes on the Property.
2. The Property and the URPC are not currently subject to any monitoring and reporting orders, nor regulated under any waste discharge permit(s) issued by the Regional Water Board or the State Water Resources Control Board.¹
3. Runoff from the Property drains into a roadside swale along the south side of the Property and ultimately discharges into Sulphur Creek, which is a tributary to the Russian River. Both Sulphur Creek and the Russian River are waters of the United States.
4. In response to complaints regarding discharges and/or threatened discharges of waste from the Property to receiving waters, Regional Water Board staff inspected the Property, and subsequently requested that URPC prepare a Storm Water Management and Sampling Plan (SWMSP) and implement applicable Best Management Practices (BMPs) to proactively minimize any potential contaminants in runoff from the Property.

¹ The Regional Water Board Assistant Executive Officer issued Monitoring and Reporting Order No. R1-2021-0007 on February 16, 2021. Based on comments received from interested parties, the Assistant Executive Officer rescinded the Order informing parties that the Regional Water Board intends to reissue a monitoring and reporting order. This Order serves as that reissued order.

5. URPC submitted a SWMSP to the Regional Water Board on April 10, 2020 (Attachment 1). This Order includes Regional Water Board staff comments on the SWMSP document under the Requirements section below.
6. On December 3, 2020, Regional Water Board staff inspected the Property to assess site conditions, to confirm that BMPs had been implemented as described in the SWMSP, and to ensure that the proposed sampling locations were appropriate to collect samples representative of the site discharge as documented in the inspection report (Attachment 2). During the inspection, Regional Water Board staff observed newly installed BMPs including inlet protection, hay bales, riprap, rock-lining in drainage ditches, and wattles; BMPs specified in the SWMSP were in place and well-maintained.
7. Large quantities of spent bullet shells were observed in numerous areas throughout the site (see photos 1 & 6 of Attachment 2.) As stated in the *Interstate Technology Regulatory Council Characterization and Remediation of Soils at Closed Small Arms Firing Ranges* Technical Guidance Document:²

“Empty brass casings represent a potential source of lead into the environment because the initiators, or primers, use shock-sensitive lead compounds with residuals left in the casing after firing. The muzzle blast deposits these same lead compounds, as well as lead dust resulting from the rifling on the barrel of the weapon cutting into the projectile as it leaves the barrel.”

8. Lead containing ammunition used at small arms firing ranges may result in lead contributions to the environment and waterways through stormwater action:³

“The use of lead-containing ammunition at small arms firing ranges, results in a continual contribution of lead into the environment. Lead accumulates in berms and other structures used to backstop targets on ranges. Bullets will lodge into the berm either whole or in fragments. Once there, the erosional processes of storm water can result in the movement of these fragments off the berm and into the environment. In cases where the storm water and/or soils in and

² Interstate Technology Regulatory Council, *Characterization and Remediation of Soils at Closed Small Arms Firing Ranges*; p.8 (January 2003) available at: <https://www.itrcweb.org/Guidance/ListDocuments?TopicID=26&SubTopicID=25>.

³ Ibid, Appendix E: White Paper on Created Wetlands for Range Runoff Control, Charles Harman, *Efficacy of Using Passive Constructed Wetland Systems to Prevent Migration and Erosion of Lead from Small Arms Ranges*; p. E-1

around the berm are acidic, lead may leach from the bullets or fragments, further dispersing into the environment. As noted in USAEC (1998), the dispersal of lead through these mechanisms results in a potential ecological risk and may be in violation of the Clean Water Act, the Safe Drinking Water Act, and Section 7003 of the Resource Conservation and Recovery Act (RCRA).”

9. Regulatory Authority and Necessity: California Water Code Section 13383 authorizes the Regional Water Board to require monitoring and reporting for any person discharging or proposing to discharge pollutants into waters of the United States. The technical and monitoring information obtained from the monitoring reports and status reports will allow the Regional Water Board to assess and determine the level of threat posed by, or pollution created in, waters of the United States by spent ammunition and bullet casings on the Property. The information will also allow the Regional Water Board to determine the effectiveness of pollution control BMPs deployed on the Property and whether discharges from the Property will require coverage under a waste discharge permit, or other regulatory action will be necessary to abate actual or threatened discharges. The burden to URPC to submit the monitoring information and reports bears a reasonable relationship to the Regional Water Board’s need for the actions, specifically to ensure the protection of water quality and beneficial uses in Sulphur Creek and the Russian River. The Regional Water Board has provided an estimate of the costs to comply with the monitoring and reporting requirements of this order (Attachment 3). The costs are estimates only, actual costs may vary from those provided based on factors within the control of URPC and not the Regional Water Board.
10. The evidence in the public record that supports issuance of this order is in the public file for this site and includes the information referenced in finding nos. 4, 5, 6, 7, and 8.
11. Information provided in response to this Order will be evaluated by the Regional Water Board and may result in the revision of this Order, or further action, as necessary.
12. California Environmental Quality Act: This Order is categorically exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to: California Code of Regulations, title 14, section 15306, because, by requiring submittal of technical and/or monitoring reports, this Order merely requires information collection; California Code of Regulations, title 14, section 15308, because issuance of this Order is an action by a regulatory agency for protection of the environment; and California Code of Regulations, title 14, section 15304 (minor alterations to

land), because it is unlikely that compliance with this Order, including implementation of any work plans, could result in anything more than minor physical changes to the environment that will not result in significant environmental effects.

Pursuant to the requirements of section 13383 of the Water Code, the URPC is directed to submit the following information to the Regional Water Board **no later than 30 days from the issuance date of this Order:**

REQUIREMENTS

- 1) URPC shall conduct a sampling and monitoring program that meets the following criteria:
 - a) Samples shall be collected from ten (10) discharge events. It may be necessary to sample over multiple years in order to satisfy this requirement.
 - b) All samples shall be collected by personnel trained by a Qualified Storm Water Pollution Prevention Plan (SWPPP) Practitioner/Qualified SWPPP Developer (QSP/QSD) or Qualified Industrial Stormwater Practitioner (QISP) and submitted to a State of California Environmental Laboratory Accreditation Program (ELAP) certified laboratory for chemical analysis.
 - c) The monitoring program shall include photographic documentation of storm water discharges from the URPC and sampling activities.
 - d) At a minimum, storm water samples shall be analyzed for pH, turbidity, hardness, Polynuclear Aromatic Hydrocarbon (PAH), and total lead.
 - e) The appropriate U.S. EPA analytical method shall be utilized to analyze all applicable analytes. For total Lead, URPC shall use U.S. EPA analytical method 200.8.
 - f) Properly calibrated field meters may be used for pH, turbidity, and hardness.
 - g) National Oceanic and Atmospheric Administration (NOAA) sourced precipitation data must be provided. Site specific and/or other rain gage data may be provided to supplement the NOAA data. Reference information, including data source and calibration records, must be provided with any supplemental data submitted.
 - h) Samples must be collected during any discharge event that generates runoff from the Property at any of the three discharge points identified in the SWMSP. When sampling a discharge at a location previously sampled, URPC shall wait at least 48 hours prior to re-sampling that same discharge location.

- 1) If additional discharge points are identified, the SWMSP shall be revised, and those discharge points shall be sampled as well.
 - 2) This requirement applies during business and daylight hours until discharge samples have been collected from a total of ten discharge events, regardless of the number of discharge points sampled in each discharge event. If a storm event occurs during operating hours, the URPC shall collect samples as required by the Final Order even if the site is closed to its membership.
 - 3) If a rain event does not generate runoff at one or more discharge points, or a required sample was not successfully collected or analyzed, URPC must identify the discharge point(s) where samples were not collected and document and include a description of conditions and/or reason that the sampling event was unsuccessful in the Annual Report.
 - 4) Hardness shall be measured in the receiving water (Sulphur Creek) whenever discharge samples are collected. Hardness must be measured in Sulphur Creek immediately upstream of the point where the roadside swale that conveys runoff from URPC enters the creek. It shall be noted in the inspection log whether discharge from the roadside swale was reaching the creek at the time of measurement. Because lead toxicity in receiving waters is hardness dependent, hardness measurement within the receiving water is necessary to determine whether lead discharges from the URPC could produce toxicity in the receiving water.
- i) If a laboratory result indicates that a pollutant is detected in a collected discharge sample above the Method Detection Limit (MDL)⁴, then within 90 days of receiving the results, URPC shall prepare and submit a Monitoring Response Workplan (Workplan) to the Assistant Executive Officer for review and approval. The workplan shall at a minimum:
- 1) Identify and evaluate all potential pollutant sources for the constituent(s) detected in the runoff, including potential offsite sources that could enter the Property;
 - 2) Identify additional types and/or locations of BMPs that if installed will reduce and/or eliminate pollutant discharges from the Property;
 - 3) Identify locations for sample collection to improve characterization of those pollutant sources, including background sources;

⁴ 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 C.F.R. part 136, Attachment B, revised as of July 3, 1999. The laboratory establishes the MDL values based on the analytical test method and the types of calibrated laboratory equipment that are used.

- 4) Indicate the schedule of implementation for any work identified;
- 5) Revise the SWMSP and Property map as necessary to reflect current site conditions and proposed additional sample locations if necessary; and
- 6) Provide an evaluation of sample results, MDL(s) exceeded, and applicable water quality objectives.

2) Submittal of a Revised SWMSP

Within 30 days of the issuance of this Order, URPC shall revise the previously submitted SWMSP to address the following comments and submit the revised SWMSP to the Assistant Executive Officer for review and approval.

- 1) Update SWMSP, Table 4.5 Sample Collection, "Preservation and Analysis for Water Quality Samples" to remove sampling for Oil and Grease and TSS.
- 2) Update SWMSP, Table 4.5 Sample Collection, "Preservation and Analysis for Water Quality Samples" to include field measurement of Turbidity in addition to pH using calibrated field meters and the data recorded on field sampling sheets. Also, note that a properly calibrated pH meter must be utilized instead of a litmus.
- 3) Update SWMSP, Table 4.5 Sample Collection, "Preservation and Analysis for Water Quality Samples" to change the minimum sample volume for PAH to 2,000 mL and specify the MDL for this analyte.
- 4) Revise the analytical test methods for total Lead to EPA 200.8. Revise and specify the MDL and Reporting Limit to be achieved by the selected laboratory to be consistent with EPA 200.8. Also, indicate that samples to be analyzed must be properly preserved for laboratory analysis.
- 5) Add a sampling location to collect samples at internal location(s) where the runoff drains from the shooting range areas, (such as main shooting range and pistol areas) to evaluate whether additional BMP installations are necessary for source control.
- 6) Revise the SWMSP to indicate the whole drainage system including all culverts, pipes, drop inlets, and French drain(s). Also, show the BMP types deployed and locations on the site map.

3) Reporting and Documentation

- a) All sampling results shall be submitted within 30 days after laboratory results are received.

- b) Monthly visual observation reports shall be kept on site, be made available upon request, and included in the Annual Reports.
- c) The SWMSP shall be kept up to date such that it reflects the current site conditions and associated BMPs. An updated version of the SWMSP must be submitted to the Regional Water Board within 30 days of the issuance of this Order and following any material revision or change in site conditions.
- d) Employee training logs (Storm water management training log) shall be kept on site, be made available upon request, and included in the Annual Reports.
- e) An Annual report shall be submitted no later than July 15th of each year to the Regional Water Board and shall include items a, b, and d above, as well as tabulation of all monitoring results to date and all supporting documentation (such as laboratory reports and chain of custody forms).
- f) Annual reports, sampling reports and any other documents submitted to the Regional Water Board are subject to the Certification Statement required under this order.

PROVISIONS

1. **Signatory Requirements:** All reports and submittals in response to this Order shall be signed and certified by a corporate officer of the URPC⁵.
2. **Certification Statement:** Any person signing a document under these provisions shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system

⁵ For the purpose of this Order a responsible corporate officer means: A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function; or the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

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.”

3. **Use of Registered Professionals:** URPC shall provide documentation that each technical report required by this Order was prepared under the direction of appropriately qualified professionals. In preparing each technical report required by this Order, any engineering or geologic evaluations and judgments must be performed by or under the direction of registered professionals pursuant to California Business and Professions Code sections 6735, 7835, and 7835.1. A statement of qualifications and registration numbers of the responsible lead professional shall be included in the report submitted by URPC. The lead professional shall sign and affix their registration stamp to the report.
4. **Delayed Compliance:** If for any reason, URPC is unable to perform any activity or submit any document in compliance with the schedule set forth herein, URPC may request, in writing, an extension of the time specified. The extension request shall include justification for the delay. Any extension request shall be submitted as soon as a delay is recognized and prior to the compliance date. An extension may only be granted by modification of this Order or by a letter from the Executive Officer or his/her delegee.
5. **Report Submittal:** The annual report and all other submissions required under this Order shall be submitted electronically to NorthCoast@waterboards.ca.gov and cc:

Farzad Kasmaei
Water Resource Control Engineer, NPDES Unit
North Coast Regional Water Quality Control Board
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Santa Rosa, CA 95403

Farzad.Kasmaei@waterboards.ca.gov

NOTIFICATIONS

1. **Enforcement Discretion:** The Regional Water Board reserves its rights to take any enforcement action authorized by law for violations of the terms and conditions of this Order. Furthermore, compliance with this Order is wholly distinct from any possible enforcement that may follow from the discharges

themselves, pursuant to violations of the Water Code or other orders issued by the Regional Water Board.

2. **Enforcement Notification:** Pursuant to Water Code section 13385, failure to submit the required technical reports as required by Water Code section 13383, or falsifying any information provided therein, may result in the imposition of administrative civil liability of up to \$10,000 per violation per day. Any actual unauthorized discharge to waters of the United States may subject URPC to up to \$10,000 for each day of discharge, and \$10 for each gallon over 1,000 gallons not cleaned up pursuant to Water Code section 13385.
3. **Appeal Notification:** Any person aggrieved by this action of the Regional Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00pm, 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00pm on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:

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

If you have questions about this Order please contact: Farzad Kasmaei at Farzad.Kasmaei@waterboards.ca.gov.

Sincerely,

Claudia E. Villacorta, P.E.
Assistant Executive Officer

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Attachment 1: SWMSP

Attachment 2: December 3, 2020 Inspection Report

Attachment 3: Estimates of Monitoring and Reporting Costs