CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
NORTH COAST REGION

Cleanup and Abatement and 13267 Order No. R1-2016-0037

For

The Selwyn Bruce Turner and Barbara Ann Turner 2013 Trust
Selwyn Bruce Turner
Barbara Ann Turner

Turners Automotive
9001 Graton Road
Graton, CA
Case No. 1TSO614

Sonoma County

This Order is issued to The Selwyn Bruce Turner and Barbara Ann Turner 2013 Trust (Selwyn Bruce Turner and Barbara Ann Turner, Trustees) and Selwyn Bruce Turner and Barbara Ann Turner (hereinafter referred to as Dischargers) based on provisions of Water Code section 13304, which authorizes the North Coast Regional Water Quality Control Board (Regional Water Board) to issue a Cleanup and Abatement Order (Order), and Water Code section 13267, which authorizes the Regional Water Board to require the preparation and submittal of technical and monitoring reports.

The Assistant Executive Officer finds, with respect to the Dischargers' acts, or failure to act, the following:

1. Purpose of the Order: This Order requires the Dischargers to clean up and abate the effects of the discharges or releases of petroleum hydrocarbons into soil and groundwater and to eliminate the threat of future discharges. The Dischargers' actions associated with operating as Turner's Gulf (gasoline service station) and Turner's Garage (automotive repair service) have resulted in the unauthorized discharge of petroleum hydrocarbons to the subsurface soil and groundwater and have created, and threaten to create, a condition of pollution and/or nuisance by unreasonably affecting the beneficial uses of waters of the State of California. Continuing discharges violate the Porter-Cologne Water Quality Control Act and provisions of the Basin Plan. These conditions threaten to continue unless the discharge or threatened discharge is permanently cleaned up and abated.

Specifically, the Order is requiring the implementation of a pilot test as the first step in a targeted remediation of heavily impacted soils and groundwater under the building in the vicinity of underground tanks that were never removed from the property. This work is required to determine the appropriate remedial strategy for a final corrective action plan to complete the cleanup of the subsurface. This Order also requires the Dischargers to characterize the vertical extent of the discharge, submit a final corrective action plan and complete any additional corrective work deemed necessary to clean up and abate the effects of petroleum hydrocarbon discharges both on the property and beyond the property limits.[1]

[1] Unless otherwise indicated, all references to the "Water Code" refer to the California Water Code.

2. **Responsible Parties:** The Dischargers, as the property owners and persons discharging or creating a threat of discharge, are responsible parties for purposes of this Order.

3. **Site Location and Description:** The property identified as Sonoma County Assessor's parcel number 130-162-028 (hereinafter Site), is located at 9001 Graton Road, in the town of Graton. The Site and surrounding area are more specifically described as follows:

   a) The Site is bordered to the north by Graton Road and to the south by an alley way and single family homes. The Site is bordered to the west by a real estate office and Edison Street, and to the east by residential properties. The Site itself contains a building, currently used as a residence. The front of the building is paved in concrete with graveled areas, while the backyard is covered by grass. The east side of the Site is covered with gravel. Two filled in-place underground storage tanks (USTs) are still located under the northeast corner of the onsite building.

   b) Groundwater is the primary drinking water source in the Graton area. The Site is located in an area where most residences have private domestic wells. There is an onsite domestic well that has been impacted with petroleum hydrocarbons and, consequently, has an onsite well treatment system. There is a small local water system (Downtown Graton Mutual Water System), which supplies water to a small portion of the local businesses. However, this water system also uses local groundwater and the main production well is located about 300 feet southwest from the Site.

   c) The Site is underlain by the Wilson Grove formation, which is a high quality aquifer formation. The subsurface consists of soils ranging from silty sands to sandy silts. These soils are derived from the underlying sandstone bedrock formation. Groundwater is first encountered between 10 and 25 feet below ground surface (bgs) depending on the season. Shallow water wells at the Site are screened from 15-40 feet bgs. Deeper wells are screened from 90-100 feet bgs, and the domestic wells in the surrounding area are usually screened around 100 feet bgs, but there are also shallower well screens and wells with no sanitary seals in this area.

   d) Groundwater flow direction at the Site varies through the seasons but is primarily to the west (towards Atascadero Creek) and southwest (toward the Downtown Graton Mutual Water System well). Historically, the groundwater gradient may have trended towards the northwest when the Downtown Graton Mutual Water System was pumping from a different well located behind the Graton market.

4. **Site History, Case Background, and Current Status:**

   a) Operational History: The Site was operated as various independent gasoline stations from the early 1940s. The Dischargers purchased the Site in 1971, and operated it as Turner's Gulf until 1975, before converting it into Turner's Garage, an automotive repair service that operated until the early 2000s. As mentioned above, the building on the property is currently used as a residence.

b) Site Environmental Investigation History:

i. In May 1995, Gallardo & Associates (Gallardo), a consultant working on behalf of the Dischargers, submitted a workplan to conduct a limited soil and groundwater investigation at the Site. Sonoma County Public Health Department reviewed and accepted the workplan, and the Dischargers subsequently conducted the investigation. The findings of the investigation confirmed that the soil and groundwater at the Site had been impacted by petroleum hydrocarbons.

ii. In September 1995, W.A. Craig, Inc., working on behalf of the Dischargers, exposed two USTs in preparation for removal, but the USTs were located under the onsite building and could not be removed without damaging the foundation. The USTs were filled and left in place.

iii. In December 1996, Geosolve, Inc., working on behalf of the Dischargers, drilled two borings and converted these into shallow groundwater monitoring wells. The soils collected from the borings revealed gasoline.

iv. From January 1998 through October 2013, Gallardo has conducted additional Site investigation activities on the Dischargers' behalf, including installing thirteen shallow groundwater wells (MW-1 through MW-13), three deep monitoring wells (MW-1D through MW-3D), and ten soil vapor extraction wells (SVE-1 through SVE-10). In addition, Gallardo has collected numerous soil samples from ten soil borings (EB1 through EB-10) in order to determine appropriate source soil remediation strategies. In January 2005, the Dischargers decommissioned monitoring wells MW-1 through MW-5 and MW-14. Gallardo reported that monitoring wells MW-1 through MW-5 were abandoned because they were not properly constructed and MW-14 was abandoned because the well was up-gradient and historically showed no contamination.

v. At the direction of Regional Water Board staff, responsible parties for three cleanup sites in Graton, including the Dischargers, conducted periodic sampling and testing of groundwater from domestic wells located within the town of Graton. The Dischargers collected samples from various domestic wells located within 750 feet of the Site and tested for gasoline petroleum hydrocarbons and associated compounds in 1999, 2003, and 2012. In each case, analytical results showed no detectable concentrations for any of the constituents of concern included in the analyses.

vi. In May 2011, the Sonoma County Local Oversight Program (LOP) referred the Site to the Regional Water Board, and on October 20, 2011, the Regional Water Board issued Monitoring and Reporting Program (MRP) Order No. R1-2011-0106 for the Site.

vii. In October 2013, Environmental & Geological Solutions, Gallardo and Associates renamed in 2013, installed ten soil borings (EB-1 through EB-10) ranging in depth between 35 and 50.5 feet bgs. Analytical results for the soil samples showed that there are two zones of impacted soil beneath the Site. The upper

zone, extending from the ground surface to 10 feet bgs, has low concentrations of total petroleum hydrocarbons as gasoline (TPH-g) and benzene. The second zone, extending from 10 feet bgs to 48 feet bgs, has concentrations of TPH-g ranging from 6 parts per million (ppm) to 1,730 ppm, and concentrations of benzene ranging from 0.24 ppm to 12 ppm. The borings with the highest concentrations of TPH-g and benzene are those located near the two in-place USTs.

viii. Elevated concentrations of benzene in the shallow groundwater near the onsite building led to concerns that there may be a risk of indoor air contamination from soil vapor. In March and September 2015, the Dischargers conducted air quality sampling. Results of this sampling showed that concentrations of chemicals of concern were below background levels in samples collected outside of the building.

c) Site Environmental Remediation History:

As noted above in Finding 4.b) ii., in 1995, two underground tanks at the site were exposed for removal in 1995, but were left in place so as to not damage the building foundation. While the tanks were exposed, they were reportedly cleaned and neutralized of any volatiles and filled with a lean mortar mix, before being backfilled and left in place. As discussed above, soil and groundwater sampling on the site since 1995 has shown very high concentrations of gasoline and related compounds in the vicinity of the tanks. Since 1995, Gallardo has conducted two remedial efforts at the site, as follows:

i. In 2007, Gallardo began installing a soil vapor extraction (SVE) system. Delays associated with mechanical and financial issues prevented the system from coming online until June 2009. Due to neighbor concerns related to noise, the system was only operated for 12 hours per day. Operation continued until 2012, and has not resumed since then, reportedly due to the noise complaints from neighbors.

ii. From August through September 2010 and January through February 2011, Gallardo conducted two dual-phase vacuum extraction events. Approximately 1,525 pounds of hydrocarbons were removed during the two extraction events and 10,000 gallons of impacted groundwater was recovered and treated during these events.

Despite these remedial efforts, concentrations of TPH-g and associated chemicals continue to be high in shallow ground water on the site. For example, during the most recently reported sampling event, which occurred on August 13, 2015, groundwater sampled from well MW-2A showed concentrations of TPH-g at 54,000 parts per billion (ppb), and concentrations of benzene at 23,000 ppb. In addition, groundwater sampled from the onsite domestic well during this sampling event showed TPH-g concentrations of 1,400 ppb. The water quality objective for TPH-g is 50 ppb.

d) Current Status of Site Investigation and Remediation:

i. Characterization of Contaminant Plume in Groundwater

Site investigations to date indicate that there are contaminant plumes in two zones of the groundwater aquifer, shallow and deep. Regional Water Board staff believe that the plume in the shallow groundwater zone is well-characterized and relatively stable. However, the vertical and horizontal extents of the contaminant plume in the deeper groundwater zone have not been adequately characterized. At present, there are three monitoring wells in place for monitoring the deeper groundwater zone, all located to the south of the USTs. Given that the groundwater gradient at the site currently appears to trend towards the southwest or west, and may have historically trended to the northwest, it is likely that the three wells to the south are not in a position to provide representative downgradient monitoring for the onsite tanks, nor are they appropriately located to define the deep groundwater plume associated with those tanks.

In March 2012, in response to a request from Regional Water Board staff, Gallardo submitted to the Regional Water Board a "Workplan to Evaluate the Groundwater at a Depth of 100 Feet Beneath and Beyond the Turner Site," proposing the installation of four new deep wells at various locations around the tanks. Staff subsequently rejected this proposal in an August 28, 2014 letter, noting that four new deep wells to 100 feet below ground surface, as proposed, would be expensive, and that remediation of the source soils around the tanks should be a priority at the site. Staff also noted that there are other, cheaper methods to determine the extent of contamination in deeper groundwater, including grab groundwater sampling or screening with a membrane interface probe. Staff recommended that the Dischargers add into their annual monitoring schedule sampling of two offsite domestic wells located within 100 feet of the site.

This Order requires that the Dischargers provide a revised workplan for deep groundwater sampling, employing economical technologies as available and appropriate, to provide an initial screening for the presence and extent of deep groundwater contamination at and around the site of the tanks.

ii. Remediation of Contaminated Soils Around the Tanks

1) Responding to requests by Regional Water Board staff to focus remediation attention on the contamination in the vicinity of the onsite underground tanks, in December 2014, Gallardo submitted to the Regional Water Board a workplan to conduct an in-situ chemical oxidation pilot test for the Site to determine the feasibility of using this system for remediation. Subsequently, in January 2015, the Dischargers submitted a workplan to Inject Ozone and/or Hydrogen Peroxide into the groundwater at the Site and a Notice of Intent (NOI) to comply with the General Waste Discharge Requirements Order No. R1-2006-0107 for the "Treatment of Soils and Groundwater by Chemical Oxidation" (General Permit). The workplan and NOI describe a proposal to install a slant

injection well under the in-place USTs. On April 5, 2015, Regional Water Board staff notified the Dischargers and Gallardo that the NOI was incomplete, requiring specific additional information. The Dischargers submitted a revised Notice of Intent (NOI) to inject ozone and/or hydrogen peroxide on June 11, 2015.

On December 7, 2015, the Regional Water Board posted a 30-day public notice for the Dischargers' NOI. No comments were received. Staff will enroll the Dischargers for coverage under the General Permit upon receipt of a signed Form 200 and appropriate filing fee from the Dischargers.

This Order requires that the Dischargers provide a signed Form 200 and the appropriate filing fee.

2) In situ injection of ozone and/or hydrogen peroxide is an appropriate technology for treatment of the impacted soil and groundwater that are still present under the building at this Site. Due to impacted soils being seasonally saturated by groundwater, chemical oxidants injected into groundwater will reach impacted soils as well.

   Ozone and hydrogen peroxide injection is a remediation strategy that was successfully employed at another property undergoing groundwater cleanup located just to the west of the Site. Staff understands from the individuals operating the system at the nearby site that building and operating such a system can present significant technical challenges.

   This Order requires that the Dischargers report every 45 days during the pilot test as to the operation, and, if necessary, seek technical support of a person or persons with training and experience in working with such systems to ensure timely completion of project milestones.

3) The proposed project is a 90-day pilot, involving ozone injection via a single boring. Following the 90-day pilot period, the Dischargers will evaluate the effectiveness of this project, as demonstrated through groundwater, soil vapor, and/or soil sampling during and following the project. This Order requires that the Dischargers submit a Report of Findings that reports on the effectiveness of the pilot project and that recommends scaling up or modifying the system if/as appropriate to remediate onsite contamination, or to pursue a different remedial action.

   In the event that the pilot scale study demonstrates that this technology and system is effective in remediating contamination at the Site, it may be appropriate to scale up the system to deliver oxidant via multiple borings.

5. **Factual Basis of Order:** As noted above, the Dischargers purchased the Site in 1971, operating it as Turner's Gulf (a gasoline service station) until 1975, then converting it into Turner's Garage, an automotive repair service, operated until the early 2000s. The Dischargers' activities and the conditions revealed at the Site through continuing soil and

groundwater investigations, as detailed above, created and threaten to create, conditions of pollution in soil and groundwater, Atascadero Creek, and the Russian River, by unreasonably impacting water quality and beneficial uses. The groundwater at the Site is water of the state. Atascadero Creek is tributary to the Russian River; both are waters of the state and of the United States. (References hereinafter to waters of the United States are inclusive of waters of the state.)[2] The investigations and Site conditions described herein are among several documented in reports prepared by consultants on behalf of the Dischargers. The activities and operation of the service station created a release or releases and conditions of pollution and/or nuisance. Specifically, the Dischargers:

a) Stored gasoline in three tanks with associated infrastructure (i.e., pumps and plumbing) for business operations on the Site. As discussed above, in 1995, site investigation efforts revealed subsurface contamination from past practices that had resulted in a release or releases of petroleum hydrocarbons to the subsurface soil and groundwater. The source of the contaminants was two underground storage tanks (USTs) and associated piping used for storage and distribution of gasoline when the Site was operated as a service station. The USTs were partially exposed, drained and filled in-place.

b) Contaminants discovered at the Site include benzene and other volatile chemicals, including ethylbenzene, toluene, xylene, and petroleum hydrocarbons in the gasoline range. Benzene is a human carcinogen, and is listed by the State of California, pursuant to the Safe Drinking Water and Toxic Enforcement Act of 1986, as a chemical known to the State to cause cancer.

c) Contaminants have been found in high concentrations both in onsite soils and the shallow groundwater zone at the site. Contaminant concentrations in groundwater are far in excess of applicable water quality objectives.

d) The two remediation efforts described in Finding 4.c), above, were locally effective in removing impacted shallow groundwater. However, neither method addressed the source area located under the onsite building near the USTs. Based on Site investigative reports submitted to date by Gallardo, Regional Water Board staff believes that there is still significant contaminant mass at the Site.

e) Monitoring and Reporting Program No. R1-2011-0106 requires that the Dischargers provide quarterly monitoring reports that include analytical results for groundwater and soil vapor samples collected from a number of monitoring locations. Monitoring reports submitted by the Dischargers and/or by Gallardo are frequently deficient, for various reasons, or are submitted past the due date.

[2] The Regional Water Board administers and enforces the Clean Water Act (CWA). The CWA applies to "waters of the United States." The Porter-Cologne Water Quality Control Act (Porter Cologne) provides the Regional Water Board additional authority to regulate discharges of waste into "waters of the state." (See e.g. Water Code §§ 13304, 13260.) The term "water of the state" is defined as "any surface water or groundwater, including saline waters, within the boundaries of the state." (Water Code § 13050(3).) All waters of the United States that are within the boundaries of California are also waters of the state for purposes of Porter-Cologne.

f) Cleanup of the Site by the Dischargers has been slow and Regional Water Board staff has found it necessary to place significant effort towards ensuring that the Dischargers and their consultant perform adequate planning, investigation, and remediation in a timely manner.

g) To date, the Dischargers have spent approximately 1 million dollars on Site investigation and remedial efforts, yet significant amounts of pollutants remain on the site and in the groundwater, threatening the drinking water of neighboring properties. The Dischargers are eligible for reimbursement for remediation from the Underground Storage Tank Cleanup Fund (USTCF), but there is only about $500,000 left in the Dischargers' allotment to remediate the Site. If the USTCF expires or the Dischargers spend the remainder of their allocation without fully remediating the contamination, the costs of remaining necessary remediation work will be solely the responsibility of the Dischargers. Therefore, staff believe that a high level of care and consideration must be made in planning continuing and future investigation and/or cleanup work on this Site to ensure that work is cost-effective, that selected investigative methods and efforts are technically appropriate and effective in providing the information needed to guide remediation, and that selected remediation methods and efforts are also technically appropriate and will efficiently address outstanding onsite contamination and water pollution issues associated with the Site.

6. **Beneficial Uses and Water Quality Objectives:** The Water Quality Control Plan for the North Coast Region (Basin Plan) designates beneficial uses, establishes water quality objectives, contains implementation programs for achieving objectives, and incorporates by reference, plans and policies adopted by the State Water Resources Control Board. The beneficial uses of areal groundwater include domestic, agricultural, and industrial supply.

a) The Site is located within 1250 feet of Atascadero Creek, which is a tributary to the Lower Russian River. The existing and potential beneficial uses of the Lower Russian River Hydrologic Unit include: Municipal and Domestic Supply (MUN); Agricultural Supply (AGR); Industrial Service Supply (IND); Industrial Process Supply (PRO); Groundwater Recharge (GWR); Freshwater Replenishment (FRSH); Navigation (NAV); Hydropower Generation (POW); Water Contact Recreation (REC-1); Non-contact Water Recreation (REC-2); Commercial and Sport Fishing (COMM); Warm water Habitat (WARM); Cold Freshwater Habitat (COLD); Wildlife Habitat (WILD); Rare Threatened or Endangered Species (RARE); Migration of Aquatic Organisms (MIGR); Spawning, reproduction, and/or Early Development (SPWN); Shellfish Harvesting (SHELL); Estuarine Habitat (EST), and Aquaculture (AQUA). Beneficial uses of any specifically identified water body generally apply to all of its tributaries.

b) The State Water Board has adopted Resolution No. 92-49, *Policies and Procedures for Investigation and Cleanup and Abatement of Discharges under Water Code Section 13304* (Resolution No. 92-49). Resolution No. 92-49 sets forth the policies and procedures for investigation and cleanup and abatement of discharges under Water Code section 13304, and requires that cleanup levels be consistent with State Water Board Resolution No. 68-16, the *Statement of Policy with Respect to Maintaining High Quality Waters in California* (Resolution No. 68-16), which is included as Appendix 6

of the Basin Plan. Thus, Resolution No. 92-49 requires the waste to be cleaned up in a manner that promotes attainment of either background water quality, or the best water quality that is reasonable if background levels of water quality cannot be restored. Any alternative cleanup level to background must: (1) be consistent with the maximum benefit to the people of the state; (2) not unreasonably affect present and anticipated beneficial use of such water; and (3) not result in water quality less than that prescribed in the Basin Plan and applicable Water Quality Control Plans and Policies of the State Water Board.

c) Water quality objectives in the Basin Plan are adopted to ensure protection of the beneficial uses of water. The most stringent water quality objectives for protection of all beneficial uses are selected as the protective water quality criteria. Alternative cleanup and abatement actions must evaluate the feasibility of, at a minimum: (1) cleanup to background levels, (2) cleanup to levels attainable through application of best practicable technology, and (3) cleanup to the level of water quality objectives for protection of beneficial uses. A table of applicable Water Quality Objectives for groundwater is incorporated in this Order as Attachment A.

7. Legal Authority to Require Cleanup and Abatement: Water Code section 13304, subdivision (a) states, in relevant part:

A person who has discharged or discharges waste into the waters of this state in violation of any waste discharge requirement or other order or prohibition issued by a regional board or the state board, or who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance, shall, upon order of the regional board, clean up the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts…Upon failure of a person to comply with the cleanup or abatement order, the Attorney General, at the request of the board, shall petition the superior court for that county for the issuance of an injunction requiring the person to comply with the order. In the suit, the court shall have jurisdiction to grant a prohibitory or mandatory injunction, either preliminary or permanent, as the facts may warrant.

a. "Waste" is defined by Water Code section 13050, subdivision (d) as,

Sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing , or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal.

b. Petroleum Hydrocarbons, when discharged to waters of the state, are deemed a "waste" as defined in Water Code section 13050. The Dischargers caused or permitted waste to be discharged or deposited where it will be, or has the potential to be, discharged to groundwater and/or surface waters draining to Atascadero Creek and the Russian River, waters of the state.

c. "Pollution" is defined by Water Code section 13050, subdivision (l)(1) as,

An alteration of the quality of the waters of the state by waste to a degree which unreasonably affects either of the following:
i. The waters for beneficial uses;
ii. Facilities which serve these beneficial uses

d. "Nuisance" is defined by Water Code section 13050, subdivision (m) as,

i. Injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property;
ii. Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal;
iii. Occurs during, or as a result or, the treatment or disposal of wastes.

8. **Cleanup and Abatement Action Necessary:** Cleanup and abatement action is necessary to ensure that the existing conditions of pollution and nuisance are addressed, the Site is cleaned up, threatened unauthorized discharges of waste from the Site are prevented, and any impacts to beneficial uses are mitigated. The current condition of pollution is a priority violation and the issuance of a cleanup and abatement order pursuant to Water Code section 13304 is appropriate and consistent with policies of the Regional Water Board.

9. **Technical Reports Required:** Water Code section 13267(a) provides that the Regional Water Board may investigate the quality of any water of the State within its region in connection with any action relating to the Basin Plan. Water Code section 13267(b) provides that the Regional Water Board, in conducting an investigation, may require a Dischargers to furnish, under penalty of perjury, technical or monitoring program reports. The technical reports required by this Order are necessary to assure compliance with this Order and to protect the waters of the United States. The technical reports are further necessary to demonstrate that appropriate methods will be used to clean up waste discharged to groundwater and threatened surface waters and surface water drainage courses, and to ensure that cleanup complies with Basin Plan requirements. In accordance with Water Code section 13267(b), the findings in this Order provide the Dischargers with a written explanation with regard to the need for remedial action and reports and identify the evidence that supports the requirement to implement cleanup and abatement activities and submit the reports. Based on the nature and possible consequences of the discharges, the burden of providing the required reports, including the costs, bears a reasonable relationship to the need for the reports, and the benefits to be obtained from the reports. The Dischargers named in this Order own the Site from which waste was discharged, and thus are appropriately responsible for providing the reports.

10. **California Environmental Quality Act:** Issuance of this Order is being taken for the protection of the environment and to enforce the laws and regulations administered by the Regional Water Board. This Order generally requires the Dischargers to submit plans for Executive Officer review and approval prior to implementation of cleanup and

restoration activities at the Site. Mere submittal of plans is exempt from the California Environmental Quality Act (Public Resources Code Section 21000 et seq.) ("CEQA"). Submittal of reports is not a project that will cause a direct or indirect physical change in the environment. The submittal of planning documents and reports is an activity that cannot possibly have a significant effect on the environment. (Cal. Code Regs., tit.14 §15063 (b)(3).)

The Regional Water Board will ensure adequate public participation at key steps in the remedial action process, and shall ensure that concurrence with a remedy for cleanup and abatement of the discharges at the Site shall comply with the California Environmental Quality Act (Public Resources Code Section 21000 et seq.) ("CEQA"). Because the Regional Water Board is unable, pursuant to Water Code section 13360, to direct the manner and method of compliance, the Regional Water Board will not have any plan for actual cleanup of the Site until the responsible parties have identified in a draft remedial action plan the proposed method of cleaning up the Site. Once the Dischargers have submitted a complete remedial action plan, the Regional Water Board will ensure that prior to granting concurrence with the final remedial action plan, it has complied with the requirements of CEQA.

The proposed interim remediation, injecting ozone and/or hydrogen peroxide into the subsurface, will be performed with coverage under the General Waste Discharge Requirements Order No. R1-2006-0107 "Treatment of Soils and Groundwater by Chemical Oxidation." Granting coverage under Order No. R1-2006-0107 is considered a ministerial action.

REQUIRED ACTIONS

IT IS HEREBY ORDERED that, pursuant to Water Code sections 13304 and 13267, the Dischargers shall eliminate the threat of future discharges, and clean up and abate the effects of any past discharges, of fuel and petroleum products into groundwater, Atascadero Creek, and the Russian River. The Dischargers shall clean up and abate the impacts to water quality in accordance with the scope and schedule set forth below, and implement the actions herein. The Dischargers shall obtain all necessary permits for the activities required in this Order.

1. By no later than **August 29, 2016**, the Dischargers shall submit Form 200 "Application/Report of Waste Discharge General Information form for Waste Discharge Requirements or NPDES Permit" along with a check for the filing fee. The form can be found at

http://www.waterboards.ca.gov/publications_forms/forms/index.shtml

The filing/annual fee for waste discharge requirements is based on Threat to Water Quality (TTWQ) and Complexity (CPLX) rating, as defined by section 2200 of the Water Code. General Waste Discharge Requirements for the Addition of Chemical Oxidants to Soil and/or Groundwater (Order No. R1-2006-0107) is applicable to discharges with a TTWQ-CPLX rating of 3A, and the applicable annual fee for fiscal year 2015-16 is $8,823.

2. By **October 30, 2016**, the Dischargers shall complete construction and installation of the proposed in-situ chemical oxidation remediation system that addresses the source area contamination, and start operation of the remediation system to conduct a 90-day pilot test.

3. The Dischargers shall submit a ***written progress report*** 45 days after the commencement of the 90-day pilot test and a final written progress report the Friday following completion of the 90-day pilot.

   The written progress reports shall at a minimum include the following information:

   a) Initial findings of the pilot test including groundwater and indoor air monitoring data; and
   b) Any obstacles encountered during implementation of the pilot test, including a discussion of cause(s) and actions taken or planned to correct obstacles encountered.

4. By **March 1, 2017,** the Dischargers shall submit a ***Source Area and Shallow Groundwater Remedial Action Plan***, for review and approval by the Executive Officer, that:

   a) Summarizes findings from the 90-day pilot test including groundwater and indoor air monitoring data.
   b) Identifies and evaluates cost-effective remedial alternatives and recommends the most appropriate alternative(s) to adequately and permanently cleanup and abate contaminated soils near the source and shallow groundwater at the Site.
   c) Provides a schedule of implementation for the recommended remedial alternative(s) including scaling up, continued operation, and/or modification of the remedial system(s).

5. By no later than **May 1, 2017**, the Dischargers shall implement the approved *Source Area and Shallow Groundwater Remedial Action Plan* per the approved schedule of implementation. The Executive Officer will determine when adequate source removal and shallow groundwater plume remediation is deemed complete.

6. By **March 1, 2017**, the Dischargers shall submit, for review and approval by the Executive Officer, a ***Deep Groundwater Investigation Workplan and Schedule*** to characterize the vertical and horizontal extent of the deep groundwater plume.

7. By no later than **May 1, 2017**, the Dischargers shall implement the approved *Deep Groundwater Investigation Workplan* per the approved schedule of implementation. The Executive Officer will determine when adequate deep groundwater plume characterization is deemed complete.

8. Upon completion of source removal and characterization of the deep groundwater contaminant plume, but no later than **January 2, 2019**, the Dischargers shall submit a ***Final Deep Groundwater Remedial Action Plan*** for review and approval by the Executive Officer.

9. By no later than **March 1, 2019**, the Dischargers shall implement the approved *Final Deep Groundwater Remedial Action Plan* per the approved schedule of implementation.

10. The Dischargers shall complete any additional work deemed reasonably necessary by the Regional Water Board's Executive Officer to abate and clean up the discharge of waste or threatened discharge of waste, restore water quality in groundwater, and protect the beneficial uses of surface and groundwater, human health and the environment.

GENERAL REQUIREMENTS AND NOTICES

1. **Duty to Use Qualified Professionals:** The Dischargers shall provide documentation that plans and reports required under this Order are prepared under the direction of appropriately qualified professionals. As required by the California Business and Professions Code sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. The Dischargers shall include a statement of qualification and registration numbers, if applicable, of the responsible lead professionals in all plans and reports required under this Order. The lead professional shall sign and affix their registration stamp, as applicable, to the report, plan, or document.

2. **Good Operation and Maintenance:** The Dischargers must maintain in good working order and operate as efficiently as possible any monitoring system, site or control system installed to achieve compliance with this Order.

3. **No Pollution, Contamination or Nuisance**: The storage, handling, treatment, or disposal of soil containing waste, or polluted groundwater must not create conditions of nuisance as defined in Water Code section 13050 (m). The Dischargers must properly manage, treat, and dispose of wastes and polluted groundwater in accordance with applicable federal, State, and local regulations.

4. **Signatory Requirements:** All technical reports submitted by the Dischargers shall include a cover letter signed by the Discharger, or a duly authorized representative, certifying under penalty of law that the signer has examined and is familiar with the report and that to his or her knowledge, the report is true, complete, and accurate. The Dischargers shall also state if he agrees with any recommendations/proposals and whether he approves implementation of said proposals. Any person signing a document submitted under this Order shall make the following certification:

   I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my knowledge and on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

5. **Notice of Change in Ownership or Occupancy:** The Dischargers shall file a written report on any changes in the Site's ownership or occupancy. This report shall be filed with the Regional Water Board no later than 30 days prior to a planned change and shall reference the number of this Order.

6. **Submissions:** All deliverables required by this Order shall be submitted electronically to the State Water Resources Control Board's Geographic Environmental Information Management System database (GeoTracker) as required by Title 23, Division 3, Chapter 30 of the California Code of Regulations.

7. **Other Regulatory Requirements:** The Dischargers shall obtain all applicable local, state, and federal permits necessary to fulfill the requirements of this Order prior to beginning the work. In addition, the Dischargers must notify the Regional Water Board in writing prior to implementing any Site activities that have the potential to cause further migration of contaminants or that would provide new opportunities for site investigation.

8. **Delayed Compliance:** If for any reason, the Dischargers are unable to perform any activity or submit any document in compliance with the schedule set forth herein, or in compliance with any work schedule submitted pursuant to this Order and approved by the Executive Officer, the Dischargers 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 be granted by revision of this Order or by a letter from the Executive Officer.

9. **Violation Reports**: If the Dischargers violate any requirement of this Order, the Dischargers must notify the Regional Water Board office as soon as practicable once the Dischargers have knowledge of the violation. The Regional Water Board may, depending on violation severity, require the Dischargers to submit a separate technical report on the violation within 5 working days of the telephone notification.

10. **Potential Liability:** If the Dischargers fail to comply with the requirements of this Order, the Regional Water Board may issue a complaint for administrative civil liability, or this matter may be referred to the Attorney General for judicial enforcement. Failure to comply with this Order may result in the assessment of administrative civil liability up to the following maximum liability amounts: $1,000 per violation per day pursuant to Water Code section 13268, $5,000 per violation per day pursuant to Water Code section 13350, and/or $10,000 per violation per day pursuant to Water Code section 13385. The Regional Water Board reserves its right to take any enforcement actions authorized by law, including but not limited to, violation of the terms and condition of this Order.

11. **No Limitation of Water Board Authority.** This Order in no way limits the authority of the Regional Water Board to institute additional enforcement actions or to require additional investigation and cleanup of the Site consistent with the Water Code. This Order may be revised as additional information becomes available.

12. **Modifications.** Any modification to this Order shall be in writing and approved by the Executive Officer of the Regional Water Board, including any potential extension requests.

13. **Requesting Review by the State Water Board:** Any person aggrieved by this or any final action of the Regional Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and Title 23, California Code of Regulations, section 2050 et al. The State Water Board must receive the petition by 5:00 p.m., 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 on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at

    http://www.waterboards.ca.gov/public_notices/petitions/water_quality

    or will be provided upon request.

This Order is effective upon the date of signature.

Shin-Roei Lee
2016.08.05
11:14:02 -07'00'

Water Boards

Shin-Roei Lee
Assistant Executive Officer
August 5, 2016

Attachment A: Water Quality Objectives

Attachment A

Table of Water Quality Objectives

Turner's Automotive
9001 Graton Road
Graton, California
Case No. 1TSO614

The California Water Code, and regulations and policies developed thereunder require cleanup and abatement of discharges and threatened discharges of waste to the extent feasible. Cleanup and abatement activities are to provide attainment of background levels of water quality or the highest water quality that is reasonable if background levels of water quality cannot be restored. Alternative cleanup levels greater than background concentration shall be permitted only if the Dischargers demonstrate that it is not feasible to attain background levels, the alternative cleanup levels are consistent with the maximum benefit to the people of the State, alternative cleanup levels will not unreasonably affect present and anticipated beneficial uses of such water, and they will not result in water quality less than prescribed in the Basin Plan and Policies adopted by the State and Regional Water Board (State Water Resources Control Board Resolutions Nos. 68-16 and 92-49).

Water quality objectives in the Basin Plan are adopted to ensure protection of the beneficial uses of water. The Basin Plan provides that "whenever several different objectives exist for the same water quality parameter, the strictest objective applies". Accordingly, the most stringent water quality objectives for protection of all beneficial uses are selected as the protective water quality criteria. Alternative cleanup and abatement actions must evaluate the feasibility of, at a minimum, (1) cleanup to background levels, (2) cleanup to levels attainable through application of best practicable technology, and (3) cleanup to protective water quality criteria levels.

The table below sets out the water quality objectives for waters of the State impacted by discharges from the identified constituents of concern:

Constituent of Concern	Practical Quantitation Limit (µg/L)	Water Quality Objective[1] (µg/L)
Gasoline	50	5[2]
Diesel	50	100[3]
Benzene	0.5	0.15[4]
Toluene	0.5	42[5]
Ethylbenzene	0.5	3.2[6]
Xylenes	0.5	17[5]
Methyl tert-butyl ether	0.5	5[7]
Tert-butyl alcohol	5	12[8]
Diisopropyl ether	0.5	0.8[9]
Naphthalene	1.0	17[8]
1,2-Dichloroethane	0.5	0.4[4]

[1]Practical quantitation limits are based on current technology. For instances when technology cannot achieve the water quality objective the practical quantitation limit will be used.

[2]Published literature provides a taste and odor threshold of 5 µg/L, applied to the narrative TASTE AND ODOR water quality objective of the Basin Plan.

[3]Published literature provides a taste and odor threshold of 100 µg/L, applied to the narrative TASTE AND ODOR water quality objective of the Basin Plan.

[4]California Public Health Goal in Drinking Water (Office of Environmental Health Hazard Assessment), applied to the GENERAL water quality objective in the Basin Plan.

[5]US EPA taste and odor threshold, Federal Register 54 (97):22064-22138, which is applied to the narrative TASTE AND ODOR water quality objective in the Basin Plan.

[6] Cal/EPA Cancer Potency Factor, applied to the GENERAL water quality objective in the Basin Plan.

[7]California Department of Health Services Secondary Maximum Contaminant Level, applied to TASTE AND ODOR water quality objective in the Basin Plan.

[8]California Department of Public Health Drinking Water Notification Level, applied to the GENERAL water quality objective in the Basin Plan.

[9]Published literature provides a taste and odor threshold of 0.8 µg/L, applied to the narrative TASTE AND ODOR water quality objective of the Basin Plan.