

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

**FINAL ORDER NO. R2-2019-0012**

**ADOPTION OF FINAL SITE CLEANUP REQUIREMENTS AND RESCISSION OF  
ORDER NOS. R2-2005-0038 and R2-2014-0008 for:**

**TH-HW Enterprise LLC**

For the property located at:

8610 ENTERPRISE DRIVE  
NEWARK, CA 94560  
ALAMEDA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter Regional Water Board), finds that:

- 1. Site Location:** The property is located at 8610 Enterprise Drive, Newark, Alameda County on a 9.96-acre parcel bounded by Willow and Hickory Streets (herein referred to as "the Site"). The Site is located near tidal wetlands bordering San Francisco Bay and lies west of Highway 880, south of Highway 84 and Dumbarton Bridge, and east of Highway 101 and the salt evaporation ponds (Figure 1, Site Location Map). Land use in the vicinity of the Site has changed from industrial/commercial to largely residential due to zoning and planning changes adopted by the City of Newark pursuant to its Dumbarton Transit Oriented Development Specific Plan encompassing the Site.
- 2. Site History:** Ashland Oil Company, Inc. purchased the property in 1972 and transferred it to Ashland Inc. (together, Ashland), a wholly-owned subsidiary of Ashland Oil Company, Inc., in 1989. In 2016, Ashland LLC became the successor in interest to Ashland Inc., including Ashland Inc.'s ownership of the property. TH-HW Enterprise LLC took ownership of the property on May 21, 2019. From 1973 to 2000, Ashland operated the Site as a storage, blending, packing and distribution center for solvents, bases, acids, and specialty chemicals. From 1973 to 1982, an onsite drainage ditch was permitted as a waste discharge outfall for the facility. Ashland operated as a hazardous waste facility with a permitted drum storage area from 1985 to 1990 and as a generator/transporter from 1990 until the facility closed in 2000. Structures, including aboveground storage tanks, drum storage areas, a chemical warehouse, loading areas, a stormwater collection pond, and an office building, were removed during remedial excavation activities performed in 2005 and 2006 and during soil grading activities performed in 2008.

Documented releases of various chemicals, mostly volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs), contributed to the soil and groundwater pollution at the Site.

- 3. Future Site Use:** A deed restriction recorded by Ashland on July 11, 2003 in accordance with Regional Water Board requirements restricted the Site to commercial and industrial uses. The 2003 deed restriction was terminated on December 14, 2018 because the Site is proposed to be redeveloped for residential use in accordance with the City of Newark's Dumbarton Transit Oriented Development Specific Plan. TH-HW Enterprise LLC plans to construct approximately 139 residences at the Site. The additional remedial actions required by this Order are needed to make Site conditions protective of human health once the Site is redeveloped. Prior to sale and occupancy of any of the new homes, the Discharger will be required to record a new deed restriction to address management of any residual pollution present, risk posed by this pollution, and to ensure engineered controls are properly maintained and monitored. Prior to recordation of the new deed restriction, the Site may not be used for residential purposes or for any purposes other than the effectuation of investigation, remediation, or construction.
- 4. Named Dischargers:** TH-HW Enterprise LLC is named as a Discharger because it is the owner of the property on which there is a discharge of pollutants, it has knowledge of the discharge or the activities that caused the discharge, and it has the legal ability to control the discharge.

Ashland LLC (the successor in interest to Ashland) qualifies as a Discharger because it is the former owner of the Site and was responsible for discharging pollutants to soil and groundwater at the Site. Although Ashland was the named discharger on prior site cleanup requirements for the Site, it is not named as a discharger in this Order because TH-HW Enterprise LLC has adequate financial resources to comply with this Order, TH-HW Enterprise LLC has indicated its intention to comply with this Order, and TH-HW Enterprise LLC has requested that Ashland not be named in this Order. However, Ashland LLC may be named to this Order in the future if these circumstances change.

If additional information is submitted indicating that other parties caused or permitted any waste to be discharged on the Site where it entered or could have entered waters of the state, the Regional Water Board will consider adding those parties' names to this Order.

- 5. Regulatory Status:** The Site was subject to Order No. R2-2005-0038, Site Cleanup Requirements, as amended by Order No. R2-2014-0008. This Order will rescind previous orders.

**6. Site Hydrogeology:** The Site is located within the Niles Cone Groundwater Basin, a sub-basin of Santa Clara Valley. The ground surface at the Site is relatively flat with an elevation of approximately 11 feet above mean sea level and a mild slope downward toward the southern portion of the property. The soils beneath the Site consist of a thin layer of fill materials and native soils (stiff clay and gravelly clay) to 10 feet below ground surface (bgs) underlain by alluvial deposits (medium to coarse grained sand and silty sand) from 10 to 22 feet bgs, termed the Shallow Zone for the purpose of this Order.

Shallow Zone groundwater is first encountered approximately 3 to 12 feet bgs, and generally flows southwesterly, towards San Francisco Bay. Shallow groundwater flow direction is generally northeasterly in the northeast portion of the property and southwesterly to southeasterly in the southern portion of the property.

Beneath the Shallow Zone is the Newark Aquitard, composed of low permeability silty clay or clayey silt materials. A clay layer encountered at 22 feet bgs is 20 to 25 feet thick and is underlain by permeable sands and gravels that constitute the Newark Aquifer, a water supply aquifer of the Alameda County Water District (ACWD). The Newark Aquitard is underlain sequentially by the following three aquifers: the Newark Aquifer, Centerville-Fremont Aquifer, and the Deep Aquifer. Each is separated by a clay aquitard. Regionally, the Newark Aquifer typically occurs at depths of 40 to 140 feet bgs, with a thickness ranging from less than 20 feet near the San Francisco Bay to greater than 140 feet at the Hayward Fault. The groundwater gradient and flow direction in the Newark Aquifer varies between south and southwesterly.

The Newark Aquitard is not considered an effective barrier to the downward migration of solvent-impacted groundwater in the vicinity of the Site. There is, or was, a hydraulic connection between the Shallow Zone and the Newark Aquifer. Contaminants have been detected in the Newark Aquifer in the vicinity of the Site, indicating that transport of contaminants from the Shallow Zone to the Newark Aquifer has occurred. The vertical hydraulic gradient between the Shallow Zone and the Newark Aquifer varies seasonally, downward in the rainy season and upward during the remainder of the year, providing a pathway for possible cross-contamination between groundwater zones.

Surface runoff from the Site flows to Plummer Creek, located 0.5 mile from the Site. Plummer Creek flows 1.2 stream-miles to the Newark Slough, which flows 0.25 stream-miles to the San Francisco Bay. The entire drainage pathway is tidal and is lined by tidal wetlands.

**7. Remedial Investigation:** Soil and groundwater contamination at the Site is well characterized. Ashland discovered soil and groundwater pollution in 1981 during excavation for onsite construction. Subsequent investigations conducted between 1982 and 2001 detected over 45 VOCs and SVOCs in soil and Shallow Zone groundwater samples at the Site. Ashland implemented the 2005 Revised Remedial Action Plan (RAP), removing soil and treating groundwater, from 2001 to 2006, as described further in Finding 10 below. From 2006 through 2018, Ashland conducted soil and soil vapor testing to assess residual contaminants of concern (COCs) in soil in 2006, subslab soil vapor sampling in 2008, a soil investigation to address data gaps along a former rail spur located on the eastern edge of the Site in November 2013, a soil investigation of dioxins/furans in May 2014, soil investigations focused on VOCs and 1,4-dioxane in September and November 2016, sampling to evaluate surface soil management and re-use alternatives in 2017, and semi-annual groundwater monitoring as part of a monitored natural attenuation (MNA) program from 2006 through 2018. Based on soil and groundwater data collected in 2018, 35 COCs were identified for the Site because they were detected at concentrations greater than 2016 environmental screening levels (ESLs).

Concentrations and locations of soil and groundwater sampling data are described in the December 15, 2015, Human Health Risk Assessment (HHRA) and the February 25, 2019, Focused Feasibility Study and Removal Action Plan (FFS/RAP) and are summarized below.

- a. Soil:** Ashland has conducted extensive sampling of shallow soil, which extends from the ground surface to the top of the Shallow Zone groundwater encountered at 3 to 12 feet bgs and has adequately delineated the lateral and vertical extent of soil contamination. The following COCs exceed 2016 residential soil ESLs for direct contact: benzene, carbon tetrachloride, 1,2-dichloroethane (1,2-DCA), cis-1,2-dichloroethene (cis-1,2-DCE), 1,2-dichloropropane, trans-1,3-dichloropropene, dieldrin, ethylbenzene, naphthalene, methyl isobutyl ketone, tetrachloroethene (PCE), trichloroethene (TCE), vinyl chloride (VC), and xylenes. Dieldrin is not considered a COC at the Site because it has only been detected in one location at one sample event and the concentration was only slightly greater than the 2016 residential direct exposure ESL.
- b. Groundwater:** Groundwater is monitored semi-annually from 28 onsite and offsite monitoring wells; 3 wells are screened in the Newark Aquifer, and 25 wells are screened in the Shallow Zone. VOCs and SVOCs have consistently been detected in groundwater since 1982. Key compounds consistently detected during remedial investigations include acetone;

benzene, toluene, ethylbenzene, xylenes (BTEX); methylene chloride; PCE; TCE; cis-1,2-DCE; 1,1-dichloroethane (1,1-DCA); VC; 1,2-DCA; and 1,1,1-trichloroethane. Long-term groundwater monitoring indicates that concentrations of many COCs are decreasing with time. Concentrations of 1,4-dioxane and 1,2-DCA have remained relatively stable. 1,2-DCA is not considered a COC for this Site because it is associated with a regional plume with off-site sources.

- c. Soil Vapor:** Soil vapor sampling at the Site is limited by the shallow depth to groundwater (as shallow as 3 feet bgs) and low-permeability, shallow soil. In 2008, five subsurface soil gas samples were collected beneath concrete slabs that remain at the Site to assess potential vapor migration conditions. This limited sampling detected the following contaminants with concentrations exceeding their respective ESLs: 1,1-DCA, 1,2-dichloropropane, carbon tetrachloride, PCE, TCE, and VC.
- 8. Risk Assessment:** The HHRA evaluated potential human health risks associated with redevelopment and residential land use at the Site using site characterization data collected from 2001 to 2014.

Contaminant concentrations detected in shallow soil present a direct exposure health concern for future residents and may also present a risk to groundwater quality as a result of leaching. The HHRA determined that the primary risk from soil was the potential exposure of a future child resident to PCE via ingestion of soil, resulting in an excess cancer risk greater than  $1 \times 10^{-6}$ . Contaminants detected in shallow soil and groundwater have the potential to impact groundwater quality and present theoretical future vapor intrusion health concerns. The HHRA concluded that exposure to COCs that migrate from groundwater within areas of concern to indoor air via vapor intrusion exceeded the de minimis cancer risk levels and vapor intrusion ESLs. Additionally, the calculated cumulative cancer risk for a utility worker potentially exposed to groundwater COCs via vapor accumulation in a construction trench exceeded acceptable levels of risk and hazard. Additional remedial action and mitigation is needed to reduce the risk to human health through these exposure pathways for residential land redevelopment and use.

- 9. Adjacent Sites:** Four neighboring sites are currently conducting groundwater cleanup under Board Orders: FMC Corporation at 8787 Enterprise Drive, former Romic Environmental Technologies at 37445 Willow Street, former Jones-Hamilton Company at 8400 Enterprise Drive, and former Baron Blakeslee Inc. at 8333 Enterprise Drive. Pollutants from the Site and neighboring sites have commingled to some extent in the Shallow Zone. Ongoing remediation at adjacent sites may impact the subject Site but cannot be relied upon to cleanup

any contamination on Site because each site is regulated independently. Each of these neighboring properties is being redeveloped with mixed uses including residential, commercial, and/or park use.

**10. Previous Remedial Measures:** Ashland operated a Shallow Zone groundwater extraction system from 1982 until 2005. The extracted groundwater was treated through an anaerobic bioreactor with granulated active carbon air filters and disposed of through the sanitary sewers by permit. The extraction system removed more than 900 pounds of chlorinated solvents and ketones from groundwater at the Site. The extraction system was decommissioned to allow for soil excavation in 2005.

In 2005 and 2006, Ashland excavated approximately 22,700 cubic yards (CY) of unsaturated and saturated soil in accordance with the 2005 Revised RAP. Approximately 10,600 CY of the excavated soil were transported offsite for disposal, 4,200 CY were treated onsite using soil vapor extraction, and 7,900 CY met site-specific requirements and were used as backfill above the water table.

After soil removal activities were complete, replacement groundwater monitoring wells were installed. A groundwater MNA program began in 2006. Groundwater geochemical parameters and concentration data show that an anaerobic environment exists and is able to support contaminant degradation in the area of excavation and that concentrations of COCs have been significantly reduced.

The following table compares the 35 COCs using historical maximum groundwater concentrations, maximum concentrations detected in groundwater since the 2005/2006 remedial action was completed, and 2016 residential ESLs to show the extent of groundwater contamination at the Site.

**Groundwater Concentrations in µg/L**

<b>Contaminant of Concern</b>	<b>Historical Maximum Concentration</b>	<b>Maximum Concentration after 2005/2006 Remedial Action</b>	<b>Residential ESL<sup>1</sup></b>
Acetone	1,000,000	700	1,500
Benzene	3,200	520	1.0
Bis(2-ethylhexyl)phthalate	450	8	4
Bromoform	2	ND	80
Carbon Tetrachloride	98,000	ND	0.22
Chlorobenzene	3,400	129	25
Chloroethane	930	930	16
Chloroform	930	ND	2.3
Chloromethane	ND	ND	190

<b>Contaminant of Concern</b>	<b>Historical Maximum Concentration</b>	<b>Maximum Concentration after 2005/2006 Remedial Action</b>	<b>Residential ESL<sup>1</sup></b>
1,2-Dichlorobenzene	110	110	14
1,1-Dichloroethane	12,000	1,100	5
1,2-Dichloroethane	37,000	210	0.5
1,1-Dichloroethene	3,400	160	3.2
cis-1,2-Dichloroethene	29,000	4,900	6
trans-1,2-Dichloroethene	54,000	52	10
1,2-Dichloropropane	3,100	340	5
1,3-Dichloropropene	ND	ND	0.5
1,4-Dioxane	1,100	1,100	0.38
Ethylbenzene	44,000	2,400	13
Methyl isobutyl ketone	150,000	380	120
Methyl tertiary butyl ether <sup>2</sup>	not analyzed	not analyzed	5
Methylene chloride	3,000,000	65	5
2-Methylnaphthalene	36	36	2.1
Naphthalene	280	110	0.17
Styrene	60	10	10
1,1,2,2-Tetrachloroethane	250	ND	1
Tetrachloroethane	29,000	110	3
Toluene	270,000	18,000	40
1,2,4-Trichlorobenzene <sup>2</sup>	not analyzed	not analyzed	5
1,1,1-Trichloroethane	36,000	1,100	62
1,1,2-Trichloroethane	ND	ND	5
1,2,4-Trimethylbenzene	470	460	no ESL established
Trichloroethene	32,000	98	5
Vinyl chloride	2,700	1,400	0.061
Xylenes	166,000	10,000	20

**2016 Environmental Screening Levels**

COC found only in soil. COC not analyzed in groundwater.

ND = not detected

In 2011 and 2012, Ashland implemented a series of bench scale trials and determined that chemical oxidation is an effective treatment to reduce residual groundwater and saturated zone soil impacts at the site.

**11. Feasibility Study:** The FFS/RAP considered the following remedial measure alternatives for the Site: no action, deed restriction, risk management plan

(RMP), groundwater monitoring, passive vapor barriers, passive ventilation systems, subslab depressurization systems, groundwater extraction as a hydraulic control, MNA, groundwater pump and treat, soil excavation, and in-situ chemical oxidation (ISCO). The alternatives were evaluated based on nine criteria: 1) overall protection of human health and the environment; 2) compliance with applicable regulations; 3) short-term effectiveness; 4) long-term effectiveness; 5) reduction of toxicity, mobility, or volume through treatment; 6) implementability; 7) community acceptance; 8) state acceptance; and 9) cost.

**12. Remedial Action Plan:** Based on the results of the feasibility study, TH-HW Enterprise LLC selected remediation and management measures for soil, groundwater, and soil vapor. The FFS/RAP presents the proposed plan in detail:

Contaminated soil will be removed, and clean soil will be imported to backfill and grade the Site. Soil that exceeds residential remedial goals will be excavated. Approximately 10,900 CY of soil is delineated for excavation. If suspect soil is observed during excavation, additional excavation will be performed. Verification soil samples of the side-wall and bottom of the excavation will be collected, except for excavations that extend to the top of the saturated zone, where only side-wall samples will be collected. Excavated soil that has been characterized by pre-excavation sampling will be direct loaded for off-site disposal. Soil that will be stockpiled on-site will then be sampled and evaluated for offsite disposal or onsite reuse if concentrations of contaminants are less than current residential ESLs. Dust and erosion controls, air monitoring of VOC concentrations and fugitive dust, and perimeter controls will be specified in a Health and Safety Plan to manage risk during excavation. The FFS/RAP includes contingency plans for dewatering and removal of slabs and utilities, if needed. The excavation will be backfilled with clean soil and raised to an elevation 5 feet above existing site grading. Backfill of the excavation with clean or re-used soil will be coordinated with and permitted by ACWD.

Groundwater will be treated in-situ. ISCO was selected to treat 1,4-dioxane in groundwater. The FFS/RAP suggests injections of a sodium persulfate reagent (PersulfOx or similar) at 10 to 15 feet bgs in 1,4-dioxane source areas. In conjunction with ISCO, a liquid activated carbon barrier (Plumestop or similar) will be injected at the downgradient property boundary to contain VOCs that may mobilize as a result of ISCO. MNA is proposed for VOC remediation in groundwater throughout the site.

To address potential vapor concerns, all homes will be built with subslab depressurization systems, passive ventilation systems, and subslab barriers in accordance with the FFS/RAP. Subslab depressurization systems will be activated for structures located within 100 feet of the soil vapor plume as

determined by soil vapor sampling. The vapor mitigation systems will be maintained by a company assigned this responsibility by the Discharger. To restrict soil vapor migration through utility trenches onsite, low-permeability cutoff plugs will be installed at 200-foot intervals within the utility trench. Pre-occupancy indoor air sampling will be performed for all residential units to confirm the effectiveness of the vapor intrusion mitigation systems.

A comprehensive RMP and deed restriction will be implemented at the Site as additional risk management measures. The deed restriction will prohibit excavation into the shallow groundwater zone without compliance with the RMP and Water Board notification and will prohibit onsite wells other than those for groundwater monitoring purposes. The RMP will evaluate potential risk to utility workers during utility installation, maintenance, and repair and present appropriate risk management measures. The RMP will include operation and maintenance of the vapor mitigation systems and reporting requirements. Groundwater and soil vapor monitoring will be required until concentrations of contaminants reach levels that can be evaluated for case closure with a minimum of one year of monitoring required.

### **13. Basis for Cleanup Levels:**

- a. General:** State Water Board Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California," applies to this discharge. It requires maintenance of background levels of water quality unless a lesser water quality is consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial uses, and will not result in exceedance of applicable water quality objectives. This Order and its requirements are consistent with Resolution No. 68-16 because they do not authorize degradation of the waters of the state. This Order requires remedial actions and establishes cleanup goals that will reduce pollution in soil, soil gas, and ground and surface water and will allow the property to be used for residential purposes. Accordingly, this Order's requirements are consistent with the maximum benefit to the people of the State.

State Water Board Resolution No. 92-49, "Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304," applies to this discharge. It directs the Regional Water Boards to set cleanup levels equal to background water quality or the best water quality which is reasonable, if background levels cannot be restored. Here, background levels cannot be restored, but cleanup levels will achieve the best water quality reasonable: they will be protective of human health and safety, and they will allow the site to be used for

residential purposes. This Order and its requirements are consistent with the provisions of Resolution No. 92-49, as amended.

- b. Beneficial Uses:** The Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) is the Board's master water quality control planning document. It designates beneficial uses and water quality objectives for waters of the State, including surface waters and groundwater. It also includes programs of implementation to achieve water quality objectives. The Basin Plan was duly adopted by the Water Board and approved by the State Water Resources Control Board, Office of Administrative Law and the U.S. EPA, where required.

Regional Water Board Resolution No. 89-39, "Sources of Drinking Water," defines potential sources of drinking water to include all groundwater in the region, with limited exceptions for areas of high TDS, low yield, or naturally-high contaminant levels. Groundwater underlying and adjacent to the Site qualifies as a potential source of drinking water.

The Basin Plan designates the following potential beneficial uses of groundwater underlying and adjacent to the Site:

- Municipal and domestic water supply
- Industrial process water supply
- Industrial service water supply
- Agricultural water supply
- Freshwater replenishment to surface waters

The existing and potential beneficial uses of surface water near the Site (i.e., Plummer Creek and South San Francisco Bay) include:

- Water contact and non-contact recreation
- Wildlife habitat
- Estuarine habitat
- Preservation of rare and endangered species

- c. Basis for Groundwater Cleanup Levels:** The groundwater cleanup levels for the Site are intended to prevent ecotoxicity, taste and odor nuisances, and human health risks from direct exposure and vapor intrusion. Additionally, the more stringent of U.S. EPA and California primary maximum contaminant levels (MCLs) are required as minimum groundwater cleanup standards because the Site overlies the Newark Aquifer which is used by ACWD Newark Desalination Facility to supply

municipal drinking water. Cleanup to this level will protect beneficial uses of groundwater and will result in acceptable residual risk to humans.

- d. Basis for Soil Cleanup Levels:** The soil cleanup levels for the Site are intended to prevent leaching of contaminants to groundwater, health threats to Site occupants from direct exposure, and nuisance odors. To evaluate which soil concerns apply to each COC at the Site, site-specific data was assessed. If groundwater meets the groundwater cleanup level for a specific COC, leaching is not considered in determining the soil cleanup level for that COC. Cleanup to this level will result in acceptable residual risk to humans.
- e. Basis for Soil Gas Cleanup Levels:** The soil gas cleanup levels for the Site are intended to prevent vapor intrusion into occupied buildings in an unrestricted land-use scenario and will result in acceptable residual risk to humans. The subslab and soil gas cleanup levels are based on a 1/30 attenuation factor from soil gas to indoor air and are back-calculated from the indoor air cleanup levels which are based on human health risk due to vapor intrusion and nuisance odor concerns.
- f. Basis for Indoor Air Cleanup Levels:** The indoor air cleanup levels for the Site are intended to prevent potential unhealthy levels of VOCs in indoor air as a result of vapor intrusion in an unrestricted land-use scenario. Cleanup levels for indoor air are based on the human health risk due to vapor intrusion and nuisance odors. They will apply to future buildings designated for human occupancy.

**14. Future Changes to Cleanup Levels:** If new technical information indicates that the established cleanup levels are significantly over-protective or under-protective, the Regional Water Board will consider revising those cleanup levels.

**15. Risk Management:** The Regional Water Board considers the following human health risks to be acceptable at remediation sites: a cumulative hazard index of 1.0 or less for non-carcinogens and a cumulative excess cancer risk of  $10^{-6}$  to  $10^{-4}$  or less for carcinogens. The risk assessment for this Site found contamination-related risks in excess of these acceptable levels. Active remediation will reduce these risks over time. However, risk management measures are needed at this Site during and after active remediation to assure protection of human health. These include (i) engineering controls (such as vapor intrusion mitigation), (ii) monitoring and reporting requirements for engineering controls, and (iii) a deed restriction to enforce compliance with the RMP and prohibit use of underlying groundwater and other activities, as appropriate. The RMP will also present risk

management measures for utility workers during installation and post-construction repair and maintenance.

- 16. Reuse or Disposal of Extracted Groundwater:** Regional Water Board Resolution No. 88-160 allows discharges of extracted, treated groundwater from site cleanups to surface waters only if it has been demonstrated that neither reclamation nor discharge to the sanitary sewer is technically and economically feasible.
- 17. Basis for 13304 Order:** Water Code section 13304 authorizes the Regional Water Board to issue orders requiring a discharger to cleanup and abate waste where the discharger has caused or permitted waste to be discharged or deposited where it is, or probably will be, discharged into waters of the State and creates, or threatens to create, a condition of pollution or nuisance.
- 18. Cost Recovery:** Pursuant to Water Code section 13304, the discharger is hereby notified that the Regional Water Board is entitled to, and may seek reimbursement for, all reasonable costs actually incurred by the Regional Water Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this Order.
- 19. California Safe Drinking Water Policy:** It is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This Order promotes that policy by requiring discharges to meet or exceed maximum contaminant levels designed to protect human health and ensure that water is safe for domestic use.
- 20. CEQA:** This Order requires investigation, remediation, and management of polluted soil, soil vapor, and groundwater. As the lead agency for the Dumbarton Transit Oriented Development Specific Plan, the City of Newark (City) certified a Final Program Environmental Impact Report (PEIR) dated July 2011, submitted an updated Newark General Plan dated December 2013 that includes the redevelopment plans at the Site, and accepted the Compass Bay Initial Study/Addendum (Initial Study) dated August 2018 which evaluates Site-specific potential environmental impacts. The PEIR and Initial Study identify the potential impacts of the remedial activities at the Site consistent with the CEQA thresholds of significance, including hazards to the public and the environment, and recommend mitigation and monitoring to reduce these impacts to a less than significant level. The reports recognize institutional controls, deed restrictions, health and safety plans, risk management plans, remedial action plans, and monitoring to be appropriate mitigation measures. The PEIR and Initial Study

conclude that the impact of remedial activities would be potentially significant but mitigable with implementation of the identified mitigation measures.

The Regional Water Board, as a responsible agency, has reviewed the PEIR and the Initial Study and has determined that the City's evaluation of the environmental impacts of remediation was adequate. This Order is consistent with the findings in the PEIR and Initial Study because it requires the Discharger to mitigate the environmental impacts of constructing housing on a hazardous materials site by implementing a remedial action plan that will reduce contamination levels, by achieving risk-based cleanup levels, by installing vapor mitigation systems, and by implementing long-term risk management measures and land use controls. Accordingly, the Water Board finds that the significant environmental effects of the proposed project, which are within the Board's purview and jurisdiction, have been identified and mitigated to less than significant levels. This Order requires implementation of these mitigation measures.

**21. Self-Monitoring Program:** A Self-Monitoring Program cannot be established at this time because the existing groundwater monitoring wells at the Site must be decommissioned to allow for remedial excavation. New groundwater monitoring wells will be installed as part of the post-remediation construction. After new wells are proposed, the Discharger will be required to propose a Long-Term Self-Monitoring Program.

**22. Notification:** The Regional Water Board has notified the discharger and all interested agencies and persons of its intent under Water Code section 13304 to prescribe site cleanup requirements for the discharge and has provided them with an opportunity to submit their written comments.

**IT IS HEREBY ORDERED**, pursuant to sections 13304 and 13267 of the Water Code, that the discharger (or its agents, successors, or assigns) shall clean up and abate the effects described in the above findings as follows:

**A. PROHIBITIONS**

1. The discharge of wastes or hazardous substances in a manner that will degrade water quality or adversely affect beneficial uses of waters of the State is prohibited.
2. Further migration of wastes or hazardous substances through subsurface transport to waters of the State is prohibited.

3. Activities associated with the subsurface investigation and cleanup that will cause significant adverse migration of wastes or hazardous substances are prohibited.

**B. REMEDIAL ACTION PLAN AND CLEANUP LEVELS**

1. **Implement Remedial Action Plan:** The discharger shall implement the FFS/RAP described in Findings 11 and 12.
2. **Soil Cleanup Levels:** The following soil cleanup levels shall be met in all onsite vadose-zone soils.

<b>Constituent</b>	<b>Soil Cleanup Level (mg/kg)</b>	<b>Basis for Soil Cleanup Level</b>
Acetone	500	Odor
Benzene	0.044	Leaching
Bis(2-ethylhexyl)phthalate	39	Leaching
Bromoform	63	Direct Exposure
Carbon Tetrachloride	0.12	Direct Exposure
Chlorobenzene	1.5	Leaching
Chloroethane	1.1	Leaching
Chloroform	0.3	Direct Exposure
Chloromethane	100	Direct Exposure
1,2-Dichlorobenzene	1.6	Leaching
1,1-Dichloroethane	0.2	Leaching
1,2-Dichloroethane	0.0045	Leaching
1,1-Dichloroethene	0.55	Leaching
cis-1,2-Dichloroethene	0.19	Leaching
trans-1,2-Dichloroethene	160	Direct Exposure
1,2-Dichloropropane	0.12	Leaching
1,3-Dichloropropene	0.28	Direct Exposure
1,4-Dioxane	0.00023	Leaching
Ethylbenzene	1.4	Leaching
Methyl isobutyl ketone	100	Odor
Methyl tertiary butyl ether	42	Direct Exposure
Methylene chloride	0.077	Leaching
2-Methylnaphthalene	0.25	Leaching
Naphthalene	0.033	Leaching
Styrene	500	Odor

1,1,2,2-Tetrachloroethane	0.53	Direct Exposure
Tetrachloroethane	0.42	Leaching
Toluene	2.9	Leaching
1,2,4-Trichlorobenzene	24	Direct Exposure
1,1,1-Trichloroethane	500	Odor
1,1,2-Trichloroethane	0.96	Direct Exposure
1,2,4-Trimethylbenzene	300	Direct Exposure
Trichloroethene	0.46	Leaching
Vinyl chloride	0.0082	Direct Exposure
Xylenes	2.3	Leaching

**3. Groundwater Cleanup Levels:** The following groundwater cleanup levels shall be met in all wells.

<b>Constituent</b>	<b>Groundwater Cleanup Level (µg/L)</b>	<b>Basis for Groundwater Cleanup Level</b>
Acetone	1,500	Ecotoxicity
Benzene	1.0	MCL
Bis(2-ethylhexyl)phthalate	4.0	MCL
Bromoform	80	Human Health Risk
Carbon Tetrachloride	0.22	Human Health Risk
Chlorobenzene	25	Ecotoxicity
Chloroethane	16	Taste and Odor
Chloroform	2.3	Human Health Risk
Chloromethane	190	Human Health Risk
1,2-Dichlorobenzene	14	Ecotoxicity
1,1-Dichloroethane	5.0	MCL
1,2-Dichloroethane	0.5	MCL
1,1-Dichloroethene	3.2	Ecotoxicity
cis-1,2-Dichloroethene	6.0	MCL
trans-1,2-Dichloroethene	10	MCL
1,2-Dichloropropane	5	MCL
1,3-Dichloropropene	0.5	MCL
1,4-Dioxane	0.38	Human Health Risk
Ethylbenzene	13	Human Health Risk
Methyl isobutyl ketone	120	Human Health Risk

Methyl tertiary butyl ether	5	Taste and Odor
Methylene chloride	5	MCL
2-Methylnaphthalene	2.1	Ecotoxicity
Naphthalene	0.17	Human Health Risk
Styrene	10	Taste and Odor
1,1,2,2-Tetrachloroethane	1	MCL
Tetrachloroethane	3	Human Health Risk
Toluene	40	Taste and Odor
1,2,4-Trichlorobenzene	5	MCL
1,1,1-Trichloroethane	62	Ecotoxicity
1,1,2-Trichloroethane	5	MCL
1,2,4-Trimethylbenzene	none	none
Trichloroethene	5	MCL
Vinyl chloride	0.061	Human Health Risk
Xylenes	20	Taste and Odor

**4. Soil Vapor and Indoor Air Cleanup Levels:** The following soil vapor cleanup levels shall be met in all onsite vadose-zone soils and subslab locations. The following indoor air cleanup levels shall be met in occupied onsite buildings.

Constituent	Indoor Air Cleanup Level ( $\mu\text{g}/\text{m}^3$ )	Soil Vapor Cleanup Level ( $\mu\text{g}/\text{m}^3$ )	Basis for Indoor Air and Soil Vapor Cleanup Levels
Acetone	31,000	930,000	Odor
Benzene	0.097	2.91	Human Health Risk
Bis(2-ethylhexyl)phthalate	none	none	none
Bromoform	2.6	78	Human Health Risk
Carbon Tetrachloride	0.067	2.01	Human Health Risk
Chlorobenzene	52	1,560	Human Health Risk
Chloroethane	10,000	300,000	Human Health Risk
Chloroform	0.12	3.6	Human Health Risk
Chloromethane	94	2,820	Human Health Risk
1,2-Dichlorobenzene	210	6,300	Human Health Risk
1,1-Dichloroethane	1.8	54	Human Health Risk
1,2-Dichloroethane	0.11	3.3	Human Health Risk
1,1-Dichloroethene	73	2,190	Human Health Risk
cis-1,2-Dichloroethene	8.3	249	Human Health Risk

trans-1,2-Dichloroethene	83	2,490	Human Health Risk
1,2-Dichloropropane	0.28	8.4	Human Health Risk
1,3-Dichloropropene	0.18	5.4	Human Health Risk
1,4-Dioxane	0.36	10.8	Human Health Risk
Ethylbenzene	1.1	33	Human Health Risk
Methyl isobutyl ketone	420	12,600	Odor
Methyl tertiary butyl ether	11	330	Human Health Risk
Methylene chloride	1.0	30	Human Health Risk
2-Methylnaphthalene	68	2,040	Odor
Naphthalene	0.083	2.49	Human Health Risk
Styrene	940	28,200	Human Health Risk
1,1,2,2-Tetrachloroethane	0.048	1.44	Human Health Risk
Tetrachloroethane	0.48	14.4	Human Health Risk
Toluene	310	9,300	Human Health Risk
1,2,4-Trichlorobenzene	2.1	63	Human Health Risk
1,1,1-Trichloroethane	1,000	30,000	Human Health Risk
1,1,2-Trichloroethane	0.18	5.4	Human Health Risk
1,2,4-Trimethylbenzene	none	none	none
Trichloroethene	0.48	14.4	Human Health Risk
Vinyl chloride	0.0095	0.285	Human Health Risk
Xylenes	100	3,000	Human Health Risk

## C. TASKS

### 1. IMPLEMENTATION OF WORKPLAN FOR MONITORING WELL DESTRUCTION

COMPLIANCE DATE: August 31, 2019

Destroy Shallow Zone monitoring and Newark Aquifer monitoring wells in accordance with permits obtained from ACWD as described in the Workplan for Monitoring Well Destruction, dated September 27, 2018. Submit a technical report acceptable to the Executive Officer documenting completion of well destruction.

### 2. IMPLEMENTATION OF REMEDIAL ACTION PLAN

Complete and report on remedial activities specified in the FFS/RAP described in Finding 12:

**a. COMPLETION OF EXCAVATION**

COMPLIANCE DATE: April 1, 2020

Complete soil removal, backfill, verification sampling (or pre-excavation characterization sampling), and stockpile sampling and disposal as described in the FFS/RAP. Submit a technical report acceptable to the Executive Officer documenting completion of excavation activities, explaining any deviations from the approved FFS/RAP, and providing conclusions and recommendations.

**b. WORKPLAN FOR IN-SITU CHEMICAL OXIDATION**

COMPLIANCE DATE: 90 days after completion of excavation,  
Task 2a

Submit a workplan acceptable to the Executive Officer for implementation of ISCO in 1,4-dioxane source areas and injection of a liquid activated carbon barrier along the downgradient property boundary, in accordance with the FFS/RAP. The workplan shall describe all significant implementation steps, injection locations, and protocols and shall include an implementation schedule.

**c. IMPLEMENTATION OF IN-SITU CHEMICAL OXIDATION**

COMPLIANCE DATE: 120 days after approval of workplan, Task 2b

Complete the ISCO tasks described in the workplan and submit a technical report acceptable to the Executive Officer documenting the work performed, any deviations from the approved FFS/RAP, and presenting initial results on system effectiveness (e.g., area of influence or contaminant reduction). Proposals for expansion or modification of the treatment may be included in subsequent reports.

**d. SUBMITTAL OF RISK MANAGEMENT PLAN**

COMPLIANCE DATE: 30 days before the start of remedial  
construction and no later than November 30,  
2019

Submit an RMP acceptable to the Executive Officer as described in Finding 15 and in accordance with the FFS/RAP. The RMP shall present design details of vapor mitigation measures, locations of low-permeability utility trench cutoff plugs, construction risk management

measures, and risk management measures for ongoing maintenance and utility workers. The RMP shall include long-term operations and maintenance of risk management measures such as vapor mitigation systems, groundwater monitoring wells, and soil vapor probes, and include sampling and reporting schedules.

**e. INSTALLATION OF UTILITY TRENCH CUTOFF PLUGS**

COMPLIANCE DATE: July 31, 2020

Complete installation of vapor and groundwater low-permeability cutoff plugs in utility trenches as described in the FFS/RAP and RMP and submit a technical report acceptable to the Executive Officer documenting completion of installation activities and any deviations from the approved RMP.

**f. WORKPLAN FOR SITE-WIDE SOIL VAPOR EVALUATION**

COMPLIANCE DATE: 90 days after completion of excavation,  
Task 2a

Submit a soil vapor investigation workplan acceptable to the Executive Officer to install permanent soil vapor probes and to conduct site-wide soil vapor sampling in accordance with the FFS/RAP. The workplan shall describe all significant implementation steps, number of samples, sample locations and depths, quality control sampling, and protocols and shall include sampling and reporting schedules.

**g. POST-EXCAVATION SITE-WIDE INVESTIGATION OF SOIL VAPOR**

COMPLIANCE DATE: 120 days after approval of workplan, Task 2f,  
and before the start of construction of  
residential units

Complete the tasks described in the site-wide soil vapor evaluation workplan and submit a technical report acceptable to the Executive Officer documenting the work performed, any deviations from the approved FFS/RAP, data collected, and summarizing conclusions and recommendations, including delineation of soil vapor plumes throughout the Site. The data will be used to determine which structures will require activation of subsurface depressurization systems.

**h. WORKPLAN FOR INSTALLATION OF VAPOR MITIGATION SYSTEMS AND PRE-OCCUPANCY SUBSLAB AND INDOOR AIR SAMPLING**

COMPLIANCE DATE: 30 days before the start of construction of residential units and no later than November 30, 2019

Submit a workplan acceptable to the Executive Officer for installation of vapor mitigation systems and collection of pre-occupancy paired samples of subslab soil vapor and indoor air in each residential unit in accordance with the FFS/RAP and RMP. The workplan shall describe all significant steps for vapor mitigation system installation and include the design of each type of system, an explanation of the monitoring and alert system, contingency plans, operation and maintenance procedures, and installation schedule. Additionally, the workplan shall describe all significant implementation steps in pre-occupancy subslab and indoor air sampling, sample locations, quality control sampling, and protocols and shall include sampling and reporting schedules. This workplan may be combined with the RMP described in Task 2d.

**i. INSTALLATION OF VAPOR MITIGATION SYSTEMS AND COMPLETION OF PRE-OCCUPANCY SUBSLAB AND INDOOR AIR SAMPLING**

COMPLIANCE DATE: Prior to occupancy. Initial report due by December 31, 2020. Subsequent reports submitted as construction progresses and in accordance with Risk Management Plan.

Complete the tasks described in the workplan for vapor mitigation system installation and pre-occupancy subslab and indoor air sampling and submit a technical report acceptable to the Executive Officer documenting the work performed. The report shall document the work performed, any deviations from the approved RMP, quality control testing, and observations of subslab membrane installation. The initial report shall present initial results on vapor mitigation system effectiveness and data for pre-occupancy subslab and indoor air samples. Proposals for modification of the mitigation systems may be included in the reports. One report may be submitted for several residential units or buildings; however, data and inspections logs must be presented for each building.

### **3. WORKPLAN(S) FOR GROUNDWATER MONITORING WELL AND SOIL VAPOR PROBE INSTALLATION AND LONG-TERM SELF-MONITORING**

COMPLIANCE DATE: January 31, 2020

Submit workplan(s) acceptable to the Executive Officer for installation and long-term monitoring of Shallow Zone monitoring wells and permanent soil vapor monitoring probes in accordance with the FFS/RAP. The workplans shall describe all significant installation steps and shall include an installation schedule. The workplans shall include a monitoring program for groundwater, soil vapor, and subslab air in accordance with the FFS/RAP that includes sampling protocols including quality controls, and sample locations and depths (as applicable) and schedules for sampling and reporting.

Under the Long-Term Self-Monitoring Program, the discharger shall measure groundwater elevations quarterly in all monitoring wells and collect and analyze representative samples of groundwater. The discharger shall sample any new monitoring wells quarterly or as otherwise directed by the Water Board and analyze groundwater samples for the same constituents listed in the Workplan. The discharger may propose changes to the approved monitoring program; any proposed changes are subject to Executive Officer approval. The discharger shall submit quarterly monitoring reports to the Regional Water Board no later than 30 days following the end of each calendar quarter (e.g., report for first quarter of the year due April 30).

### **4. INSTALLATION OF GROUNDWATER MONITORING WELLS AND SOIL VAPOR PROBES**

COMPLIANCE DATE: December 31, 2020

Install Shallow Zone monitoring and soil vapor monitoring probes in accordance with permits obtained from ACWD as described in the monitoring well installation workplan. Submit a technical report acceptable to the Executive Officer documenting completion of well and probe installation.

### **5. MONITORING OF VAPOR MITIGATION SYSTEMS**

COMPLIANCE DATE: Initial report due 90 days after completion of installation of vapor mitigation systems, Task 2i. Subsequent reports submitted quarterly for one year after installation and at a frequency determined by the Executive Officer thereafter.

Monitor all vapor mitigation systems monthly for the first year after installation as described in the FFS/RAP, the RMP described in Task 2d, and the Vapor Mitigation System and Pre-Occupancy Subslab and Indoor Air Sampling Workplan described in Task 2h. After one year of operation, the frequency of monitoring may be reduced to quarterly with direction from the Executive Officer. Submit technical reports acceptable to the Executive Officer documenting the work performed, any deviations from the approved plans, presenting results on system effectiveness, and recommending any additional actions or modifications to protect human health.

## **6. DOCUMENTATION OF FINANCIAL ASSURANCE**

COMPLIANCE DATE: 30 days before the closing of the sale of the first residential unit with annual updates on March 31 of subsequent years

Submit a report, acceptable to the Executive Officer, documenting the establishment of a financial assurance mechanism and demonstrating the availability of financial resources to conduct the full scope of long-term operations and maintenance, including vapor mitigation systems for all residential units and groundwater and soil vapor monitoring; and identifying an entity with authority, funding mechanism, and capability to implement long-term operation and maintenance without assigning this responsibility to single-family-home owners. The amount of financial assurance estimated shall be sufficient to cover all future cleanup and risk management costs, including Water Board oversight costs, prior to case closure. Annual updates shall recalculate the necessary amount of financial assurance.

## **7. PROPOSED DEED RESTRICTION**

COMPLIANCE DATE: 90 days after completion of excavation, Task 2a

Submit a proposed deed restriction acceptable to the Executive Officer whose goal is to limit onsite occupants' exposure to Site contaminants to acceptable levels. The proposed deed restriction shall prohibit the use of shallow groundwater beneath the Site as a source of drinking water until cleanup levels are met. It shall prohibit penetration of the concrete slab of any building and require owners and occupants to notify the Water Board of any disturbance to a mitigation or monitoring system. The proposed deed restriction shall incorporate by reference the RMP and shall allow reasonable access to the Site for the purposes of inspection, surveillance, maintenance, or monitoring, as provided for in Division 7 of the Water Code. The proposed deed restriction shall name the Regional Water Board as a beneficiary and shall anticipate that the Regional Water Board will be a signatory.

## **8. RECORDATION OF DEED RESTRICTION**

COMPLIANCE DATE: 60 days after Executive Officer approval of the proposed deed restriction, Task 7, and prior to subdivision of the Site and/or the sale of any lots or residences

Record the approved deed restriction and submit a technical report acceptable to the Executive Officer documenting that the deed restriction has been duly signed by all parties and has been recorded with the Alameda County Recorder's Office. The report shall include a copy of the recorded deed restriction.

## **9. RISK MANAGEMENT PLAN IMPLEMENTATION REPORT**

COMPLIANCE DATE: July 31, 2020, and annually thereafter

Implement the approved RMP and submit a technical report acceptable to the Executive Officer documenting its implementation over the previous 12-month period ending on June 30. The report shall include a detailed comparison of RMP elements and implementation actions taken. The report shall provide a detailed discussion of any instances of implementation actions falling short of RMP requirements, including an assessment of any potential human health or environmental effects resulting from these shortfalls. The report shall include discussions of vapor mitigation system operation and maintenance and ongoing monitoring of groundwater and soil vapor, as well as other relevant risk management measures. The report may be combined with the reports created during implementation of the long-term self-monitoring program described in Task 3, provided that the report title clearly indicates its scope. The report may propose changes to the RMP, although those changes shall not take effect until approved by the Regional Water Board or the Executive Officer.

## **10. FIVE-YEAR STATUS REPORT**

COMPLIANCE DATE: April 1, 2024, and every five years thereafter

Submit a technical report acceptable to the Executive Officer evaluating the effectiveness of the approved FFS/RAP. The report shall include:

- Summary of effectiveness in controlling contaminant migration and protecting human health and the environment
- Comparison of contaminant concentration trends with cleanup levels

- Comparison of anticipated versus actual costs of cleanup activities
- Performance data (e.g., chemical mass eliminated, degradation graphs)
- Cost effectiveness data
- Summary of additional investigations (including results) and significant modifications to remediation systems
- Additional remedial actions proposed to meet cleanup levels (if applicable) including time schedule

If cleanup levels have not been met and are not projected to be met within a reasonable time, the report shall assess the technical practicability of meeting cleanup levels and may propose an alternative cleanup strategy.

## **11. PROPOSED CURTAILMENT**

COMPLIANCE DATE: 60 days prior to proposed curtailment

Submit a technical report acceptable to the Executive Officer containing a proposal to curtail remediation. Curtailment includes system closure (e.g., monitoring well closure, monitoring probe removal), system suspension (e.g., cease monitoring but wells retained, activation/deactivation of individual subslab depressurization systems), and significant system modification (e.g., changes to vapor mitigation systems). The report shall include the rationale for curtailment. Proposals for final closure shall demonstrate that cleanup levels have been met, contaminant concentrations are stable, and contaminant migration potential is minimal.

## **12. IMPLEMENTATION OF CURTAILMENT**

COMPLIANCE DATE: 60 days after approval of proposed curtailment,  
Task 11

Implement the approved curtailment and submit a technical report acceptable to the Executive Officer documenting completion of the tasks identified in the proposed curtailment report.

## **13. WORKPLAN FOR MONITORING WELL DESTRUCTION IN PREPARATION FOR CASE CLOSURE**

COMPLIANCE DATE: 30 days after required by Executive Officer

Destroy all monitoring wells in accordance with permits obtained from ACWD. Submit a technical report acceptable to the Executive Officer documenting completion of the well destruction.

#### **14. DESTRUCTION OF MONITORING WELLS FOR CASE CLOSURE**

COMPLIANCE DATE: 120 days after approval of workplan, Task 13

Destroy monitoring wells in accordance with permits obtained from ACWD as described in the monitoring well destruction workplan and submit a technical report acceptable to the Executive Officer documenting completion of the well destruction.

#### **15. EVALUATION OF NEW HEALTH CRITERIA**

COMPLIANCE DATE: 90 days after required by Executive Officer

Submit a technical report acceptable to the Executive Officer evaluating the effect on the approved remedial action plan of revising one or more cleanup levels in response to revision of drinking water standards, maximum contaminant levels, or other health-based criteria.

#### **16. EVALUATION OF NEW TECHNICAL INFORMATION**

COMPLIANCE DATE: 90 days after required by Executive Officer

Submit a technical report acceptable to the Executive Officer evaluating new technical information which bears on the approved FFS/RAP and cleanup levels for this Site. In the case of a new cleanup technology, the report should evaluate the technology using the same criteria used in the feasibility study. Such technical reports shall not be required unless the Executive Officer determines that the new information is reasonably likely to warrant a revision in the approved FFS/RAP or cleanup levels.

#### **17. Delayed Compliance:**

If the discharger is delayed, interrupted, or prevented from meeting one or more of the completion dates specified for the above tasks, the discharger shall promptly notify the Executive Officer, and the Regional Water Board may consider revision to this order.

## D. PROVISIONS

1. **No Nuisance:** The storage, handling, treatment, or disposal of polluted soil or groundwater shall not create a nuisance as defined in Water Code section 13050(m).
2. **Good O&M:** The Discharger shall maintain in good working order and operate as efficiently as possible any facility or control system installed to achieve compliance with the requirements of this order.
3. **Cost Recovery:** The Discharger shall be liable, pursuant to Water Code section 13304, to the Regional Water Board for all reasonable costs actually incurred by the Regional Water Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this order. If the Site addressed by this order is enrolled in a State Water Board-managed reimbursement program, reimbursement shall be made pursuant to this order and according to the procedures established in that program. Any disputes raised by the discharger over reimbursement amounts or methods used in that program shall be consistent with the dispute resolution procedures for that program.
4. **Access to Site and Records:** In accordance with Water Code section 13267(c), the Discharger shall permit the Regional Water Board or its authorized representative:
  - a. Entry upon premises in which any pollution source exists, or may potentially exist, or in which any required records are kept, which are relevant to this order.
  - b. Access to copy any records required to be kept under the requirements of this order.
  - c. Inspection of any monitoring or remediation facilities installed in response to this order.
  - d. Sampling of any groundwater or soil that is accessible, or may become accessible, as part of any investigation or remedial action program undertaken by the discharger.
5. **Long-Term Self-Monitoring Program:** The Discharger shall comply with the Long-Term Self-Monitoring Program described in Task 3 and as may be amended by the Executive Officer.

- 6. Contractor / Consultant Qualifications:** All technical documents shall be signed by and stamped with the seal of a California registered geologist, a California certified engineering geologist, or a California registered civil engineer.
- 7. Lab Qualifications:** All samples shall be analyzed by State-certified laboratories or laboratories accepted by the Regional Water Board using approved U.S. EPA methods for the type of analysis to be performed. Quality assurance/quality control (QA/QC) records shall be maintained for Regional Water Board review. This provision does not apply to analyses that can only reasonably be performed onsite (e.g., temperature).
- 8. Document Distribution:** An electronic version of all correspondence, technical reports, and other documents pertaining to compliance with this Order shall be provided to the Regional Water Board, and electronic copies shall be provided to the following agencies:
  - a. City of Newark
  - b. Alameda County Department of Environmental Health
  - c. Alameda County Water District

The Executive Officer may modify this distribution list as needed.

Electronic copies of all correspondence, technical reports, and other documents pertaining to compliance with this order shall be uploaded to the State Water Board's GeoTracker database within five business days after submittal to the Regional Water Board. [Guidance for electronic information submittal](#) is available at:

[http://www.waterboards.ca.gov/water\\_issues/programs/ust/electronic\\_submittal](http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal)

- 9. Reporting of Changed Owner or Operator:** The discharger shall file a technical report on any changes in its contact information, any sale of the entire Site or any sale of over one acre of the Site, any subdivision of the Site, and, upon the sale of the discharger's final sale of all portions of the Site, a list of all purchasers of any portion of the property described in this Order.
- 10. Reporting of Hazardous Substance Release:** If any hazardous substance is discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, the Discharger shall report such discharge to the Regional Water Board by calling (510) 622-2369.

A written report shall be filed with the Regional Water Board within five working days. The report shall describe: the nature of the hazardous substance, estimated quantity involved, duration of incident, cause of release, estimated size of affected area, nature of effect, corrective actions taken or planned, schedule of corrective actions planned, and persons/agencies notified.

This reporting is in addition to reporting to the California Emergency Management Agency required pursuant to the Health and Safety Code.

**11. Rescission of Existing Order:** This order supersedes and rescinds Order Nos. R2-2005-0038 and R2-2014-0008.

**12. Periodic SCR Review:** The Regional Water Board will review this order periodically and may revise it when necessary.

I, Michael Montgomery, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on 5/21/19.

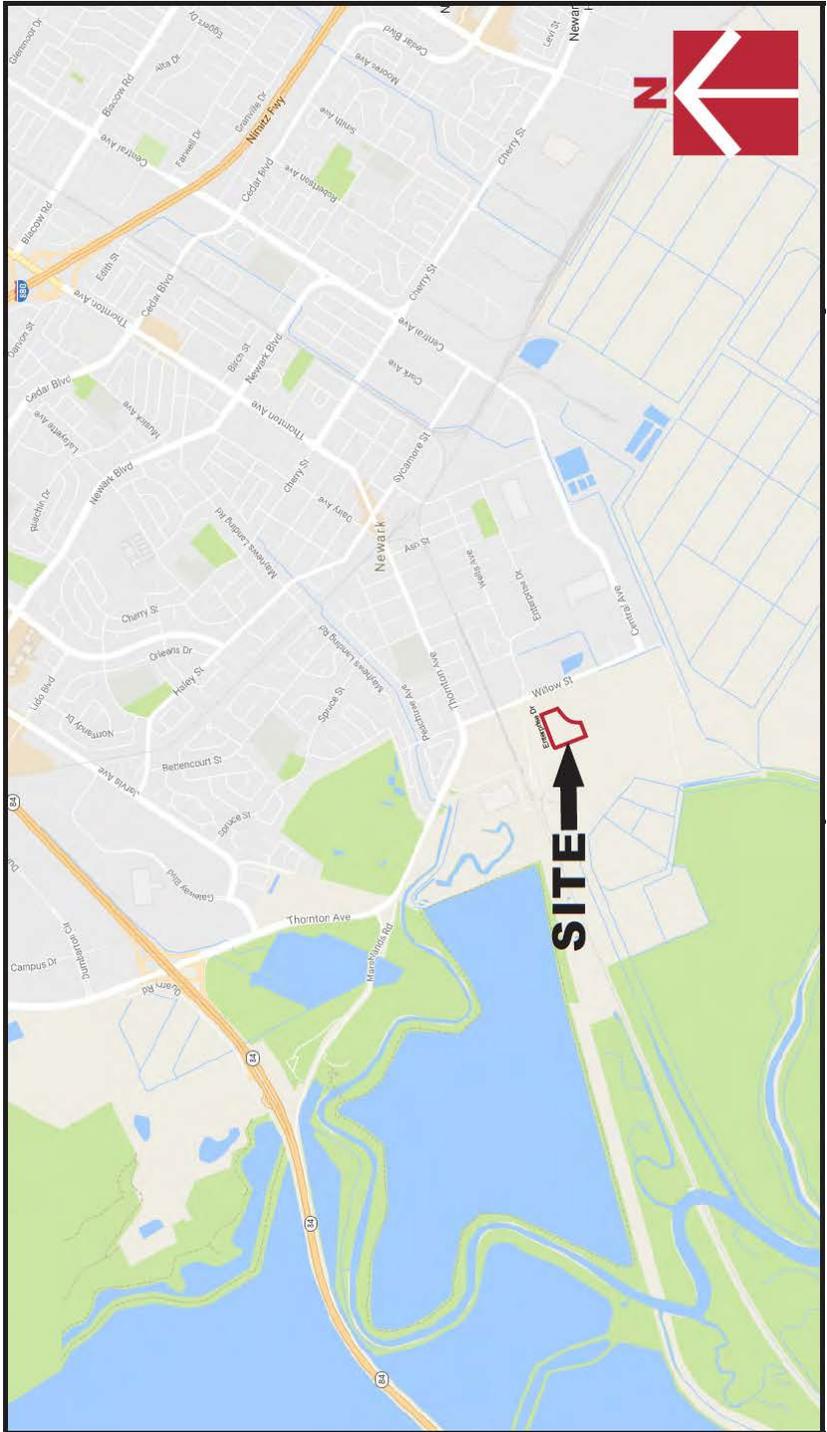
\_\_\_\_\_  
Michael Montgomery  
Executive Officer

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FAILURE TO COMPLY WITH THE REQUIREMENTS OF THIS ORDER MAY  
SUBJECT YOU TO ENFORCEMENT ACTION, INCLUDING BUT NOT LIMITED TO:  
IMPOSITION OF ADMINISTRATIVE CIVIL LIABILITY UNDER WATER CODE  
SECTIONS 13268 OR 13350, OR REFERRAL TO THE ATTORNEY GENERAL FOR  
INJUNCTIVE RELIEF OR CIVIL OR CRIMINAL LIABILITY

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Attachments: Site Map



**Figure 1, Site Map:  
8610 Enterprise Drive, Newark  
Alameda County, California 94560**