

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. R2-2012-0041

RESCISSION OF SITE CLEANUP REQUIREMENTS (ORDER NO. 97-114) for:

GEORGIA-PACIFIC CORPORATION

For the property located at:

38811 CHERRY STREET (FORMERLY 38801 CHERRY STREET)
NEWARK, ALAMEDA COUNTY

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

1. **Regional Water Board Orders:** The Regional Water Board adopted Order No. 97-114, Final Site Cleanup Requirements, for this site on September 17, 1997 (Order), which designated a containment zone at the site pursuant to State Water Board Resolution 92-49 as amended. The Order established drinking water standards as the water quality objectives at the boundary of the site's containment zone. In the absence of a drinking water standard for petroleum, the Order set site-specific objectives for petroleum.

PACCAR, Inc., owned the Peterbilt Motor truck assembly business when the pollutants were discharged and assumed responsibility for the Regional Water Board's requirements until December 1997. Georgia-Pacific Corporation (the discharger) purchased the site from PACCAR in 1995 and assumed responsibility for the Regional Water Board's requirements after 1997, including the management of the residual pollutants in the containment zone.

2. **Summary of Investigation and Remediation Activities:** Site investigations beginning in 1983 identified chemicals of concern in soil and shallow groundwater beneath the site, including total petroleum hydrocarbons as gasoline and diesel (TPH-G, TPH-D), benzene, toluene, ethyl benzene, xylenes, and minor detections of volatile organic compounds (VOCs). Groundwater monitoring for over 20 years confirms that the groundwater plume beneath the site has remained onsite, is stable and shrinking, and has not impacted the deeper Newark Aquifer.

Since 1993, no VOC detections have exceeded drinking water standards. Benzene is the only chemical that exceeds a drinking water standard in groundwater at the site. As of July 2011, benzene was only detected in one well (EC-2), at a concentration of 8 µg/l, and not detected in the 15 other wells at the site. TPH-D was detected at concentrations of 610 µg/l, 870 µg/l, and 1,100 µg/l in wells KW-5, EC-2, and W-3, respectively. Similarly, TPH-G was detected at concentrations of 77 µg/l, 290 µg/l, and 130 µg/l in wells KW-5, EC-2, and W-3, respectively. These concentrations are projected to decrease further and meet water quality objectives within a reasonable time.

In addition to long-term monitoring, facility closure and soil and groundwater remediation has been completed at the site. The 1987 facility closure activities included removal of underground and aboveground storage tanks, hydraulic lift cylinders, sumps, and pipelines used to convey lubricants, coolants, thinners, and diesel fuel and to transport solvent lubricants and wastewater to the tank farm area and treatment plant; and closure of the wastewater treatment plant. Soil cleanup actions included excavating 5,587 tons of affected soil from three areas. Groundwater remediation included extracting 2,300,000 gallons of groundwater and removing 34 pounds of TPH-D, 14 pounds of TPH-G, and 2 pounds of benzene (between December 1991 and September 1995), and applying oxygen releasing compounds to promote bioremediation in the former underground storage tank area (between 2001 and 2006).

3. **Environmental Human Health Risk Assessment:** The discharger developed a conceptual site model and conducted a site-specific risk assessment to evaluate the human health and ecological risks due to residual levels of the chemicals of concern (“chemicals”) present in soil and groundwater at the site (ref. *Evaluation of Shallow Zone Groundwater Remediation Report*, dated January 1996). The only complete exposure pathway was volatilization of chemicals through the vadose zone into the indoor air of onsite structures. The discharger performed modeling to calculate average and maximum indoor airborne concentrations of the chemicals. The toxicity of the chemicals was evaluated on the basis of derived acceptable daily intakes for non-carcinogenic effects and potency slope factors for potential carcinogenic effects. The results show that, given the residual chemical concentrations and exposure scenario, there is no significant non-carcinogenic risk to humans working onsite. The maximum calculated lifetime incremental cancer risk was 2×10^{-6} , which is considered acceptable. A qualitative ecological risk evaluation showed that there was no expected movement of chemicals to surface water and therefore no associated ecological risk.

The Regional Water Board concurred with the conclusion of the risk assessment that the residual levels of chemicals at the site would not pose a significant human health risk due to the low concentrations of residual chemicals present at the site. In addition, other probable exposure pathways are eliminated by a deed restriction that limits potential exposures to the residual chemicals in groundwater and a risk management plan.

4. **Basis for Rescission:**

- a. The site has been fully characterized.
- b. Sources of contamination have been removed to the extent practicable, and the remaining impacted groundwater is limited in extent and not migrating further downgradient or vertically to the deeper Newark Aquifer.
- c. The discharger effectively managed the residual pollution in the containment zone in accordance with Order No. 97-114. Water quality objectives for toluene, ethyl benzene, xylenes, 1,2-DCA, 1,1-DCE, and 1,2-DCP have been met in all SMP monitoring wells, as confirmed by regular groundwater monitoring. No VOCs have been detected in groundwater since 1993.

- d. Natural attenuation is expected to further reduce the benzene concentration in shallow groundwater to below drinking water standards before the groundwater is used as a source of drinking water.
 - e. No water supply wells are located in the immediate vicinity of the site. Shallow groundwater is not used as a current source of drinking water but overlies an important aquifer that is used for drinking water. The silty and clayey nature of shallow soil precludes significant future use of the shallow groundwater as a source of drinking water. The deeper Newark Aquifer monitoring well(s) have been monitored (since December 14, 1984) and have not been affected, indicating the aquitard is competent to prevent vertical migration to deeper groundwater underlying the site.
 - f. Residual soil pollution is limited in extent to the western wall of the site's former Assembly Plant Building, which borders the excavated underground storage tank and pipeline trench areas. In the future, if the former Assembly Plant Building is demolished, additional soil removal is recommended along its western wall.
 - g. An environmental deed restriction for the site was recorded in 1997. The deed restriction prohibits the installation of water supply wells on the site and activities that will result in the spreading of pollutants. A risk management plan to address residual soil and groundwater pollution was submitted as an addendum to the Site Closure Request Report dated October 8, 2009. The risk management plan addresses the potential for additional soil removal in the future if the former Assembly Plant Building is demolished. The deed restriction and the risk management plan are sufficient to protect human health and the environment in the future.
 - h. All the tasks in the Order have been completed.
5. **Next Steps Prior to Case Closure:** Monitoring wells owned by the discharger need to be properly closed before this case is closed by the Regional Water Board, to eliminate vertical conduits for potential future groundwater contamination.
 6. **CEQA:** This action rescinds an order to enforce the laws and regulations administered by the Regional Water Board. All actions mandated by the Order have been completed and no further action will occur. As such, rescission of the Order is not a project as defined in the California Environmental Quality Act (CEQA).
 7. **Notification:** The Regional Water Board has notified the discharger and all interested agencies and persons of its intent under California Water Code section 13304 to rescind site cleanup requirements for the discharge and has provided them with an opportunity to submit their written comments.
 8. **Public Hearing:** The Regional Water Board, at a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, pursuant to section 13304 of the California Water Code, that Order No. 97-114 is rescinded.

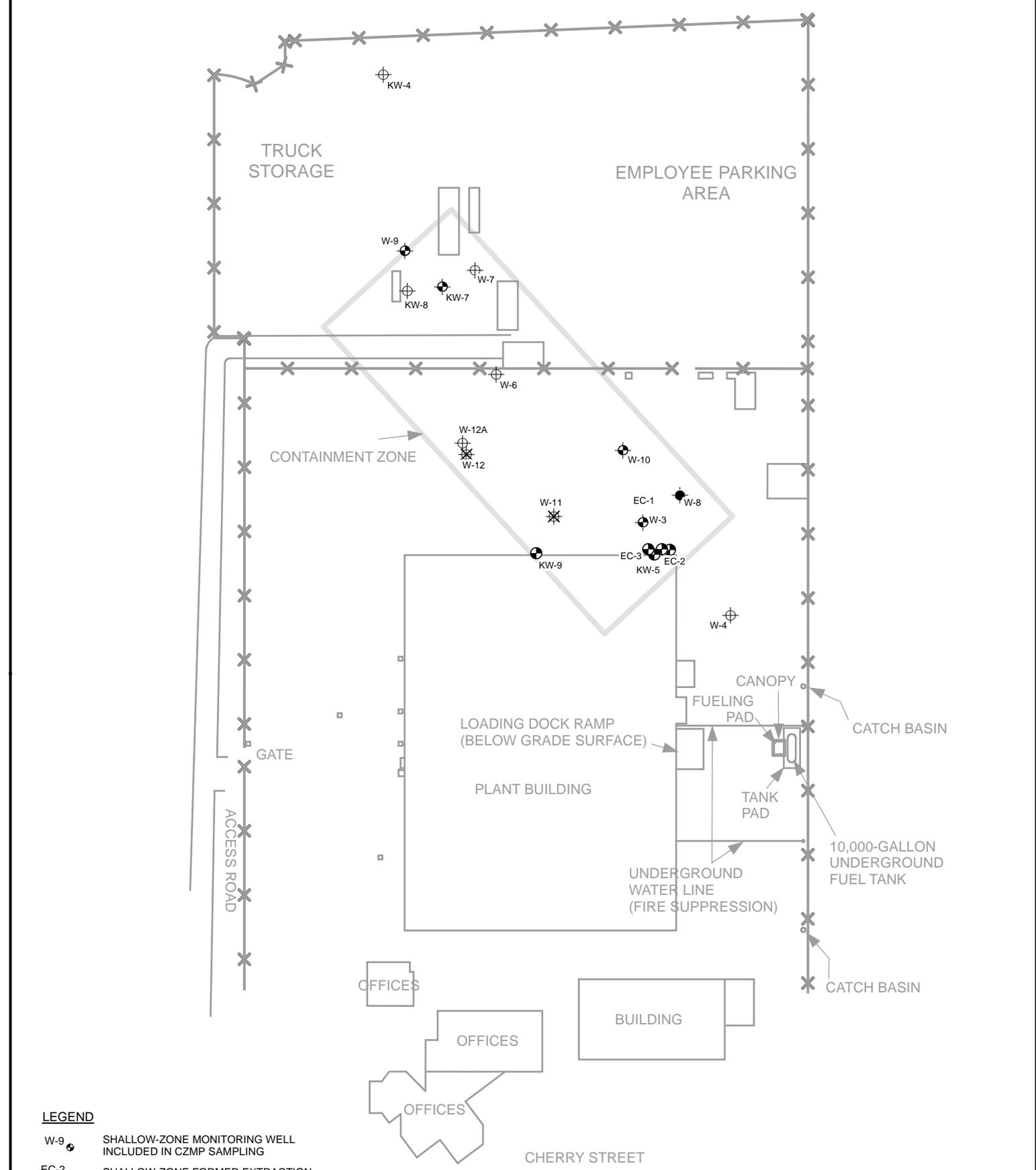
IT IS FURTHER ORDERED that the discharger shall properly close all monitoring and extraction wells consistent with applicable local agency requirements and shall document such closure in a technical report to be submitted to the Regional Water Board within 30 days following the completion of closure activities.

I, Bruce H. Wolfe, 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 May 9, 2012.

Bruce H. Wolfe
Executive Officer

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

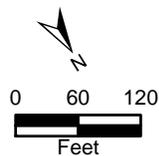
Attachment: Site Map



LEGEND

- W-9 SHALLOW-ZONE MONITORING WELL INCLUDED IN CZMP SAMPLING
- EC-2 SHALLOW-ZONE FORMER EXTRACTION WELL INCLUDED IN CZMP SAMPLING
- W-8 NEWARK AQUIFER MONITORING WELL INCLUDED IN CZMP SAMPLING
- W-7 SHALLOW-ZONE MONITORING WELL NOT INCLUDED IN CZMP SAMPLING
- W-11 SHALLOW-ZONE MONITORING WELL ABANDONED JULY 1998
- FENCE

CHERRY STREET



SITE MAP

Georgia-Pacific LLC
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AME
 Engineers and Earth Scientists

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