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ENVIRONMENTAL HEALTH

February 23, 2021

Ms. Annette Olson
Principal Planner
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Santa Cruz, CA 95060
EMAIL: Annette.Olson@santacruzcounty.us

SUBJECT: Response to Site Redevelopment Building Permit/Plans, Former Western Farm Service, Inc. – Green Gro Facility (Record ID# RO0000060; GeoTracker Global ID# SL203221260); 1485 Ranport Road, Watsonville, California

Dear Ms. Olson:

This email provides a summary of the historical Site uses that caused the current contamination in soil, soil gas, and groundwater at the Site, historical cleanups that have been conducted, historical institutional controls that were implemented (i.e., deed restriction), and additional work that is required of the responsible party (Shell) prior to case closure. Approval of the proposed Site redevelopment building plans is not contingent on Shell updating their Human Health and Ecological Risk Assessment (HHERA). However, a condition of the permit approval must be that the office trailer located on the lower Site terrace be removal or relocated (further detailed below) prior to issuance of the building permit.

Site History

The former Western Farm Service, Inc. (WFS) Green Gro facility is located at 1485 Ranport Road in Watsonville, California, which includes approximately 8.4 acres of land on two APNs (052-511-06 and 052-511-08). Current structures at the Site include an office trailer, a water above ground storage tank, and various structures used for storage including the former Office/Maintenance Building, the former Mixing Room, three open-walled shelters, three cargo containers, and a shed.

The Site has housed various operations since the 1960s. The Site was purchased in 1978 by WFS, a Shell Chemical subsidiary, and was used to store and distribute pesticides and fertilizers for use on area farms, including the liquid pesticide fumigants dichloropropane-dichloropropene (D-D®) and Telone II. D-D® consisted entirely of various chlorinated hydrocarbons, including 1,2-dichloropropane (1,2-DCP) and 1,3-dichloropropene and the composition of Telone II was 97.5% 1,3-dichloropropene. The fertilizer formerly stored and distributed at the facility is assumed to be a nitrogen fertilizer due to the nitrate as nitrogen presence in the subsurface. Shell Chemical sold the Site to Herman Wilson, dba Western Farmco, Inc., in 1988. Pesticide and fertilizer storage and distribution operations were terminated in 1996. Western Farmco, Inc. merged with two other companies into WFS in 1997 and WFS sold the property to Forrest Moore in 2001. The property was conveyed from Forrest Moore to Dennis Williams

in 2003 and from Dennis Williams to Richard Henry in 2019. Williams Tree Service, a commercial tree-cutting service, is currently a tenant. Dave Joseph is the beneficiary of a Deed of Trust for the property.

Historical sampling results indicate the presence of fertilizer and pesticide components, including 1,2-DCP in soil, groundwater, and soil vapor and nitrate in groundwater. Polychlorinated biphenyls (PCBs) and organochlorine pesticides in soil are present in a localized area near the former fertilizer storage tanks in the north central portion of the Site. Site remedial activities began in the early 1980s and included subsurface investigation and over-excavation of an unlined disposal pit and rinse water pond. Additional investigations and remediation have included soil sampling, monitoring well installation, in-situ denitrification and soil flushing pilot testing, installation and operation of a groundwater injection/treatment system, and soil vapor sampling. Semiannual groundwater monitoring took place from 2003 to 2008, with an additional shallow well groundwater sampling event in 2016 and a shallow and deep well groundwater sampling event in 2019 to investigate concentrations of 1,2-DCP, nitrate as nitrogen, PCB congeners, benzene, and 1,4-dioxane.

Deed Restriction

A deed restriction was recorded on the property on September 28, 2001, which restricts the Site use as follows: (1) an environmental restriction prohibits the property from being used for residential purposes and (2) a use restriction prohibits use of the property as a distribution center for agricultural chemicals and fertilizer products. Currently, an amended deed restriction is planned for the property that will restrict the use of shallow groundwater and will require adherence to a May 20, 2020, *Subsurface Media Management Plan*.

Future Risks to PCB and Dieldrin Contamination in Soil Near Former Fertilizer Storage Tank Area

Historical PCB and pesticide (dieldrin) impacted soil remail under portions of the Site near the former fertilizer storage tank area (i.e., soil boring SB-23) between 1.5 feet below grade (fbg) and 9.5 fbg, but do not pose a risk for the current Site use and configuration. Risks to human health and the environment during the proposed Site redevelopment were evaluated. Three risk assumptions were evaluated for the known PCB and pesticide soil contamination: (1) the above-mentioned impacted soil area; (2) the future benthic community exposures in future surface sediment (0 to 1 fbg) in the vicinity of a planned emergent wetland; and (3) ecological risk to upland organisms in soil from below 2 fbg and above 9.5 fbg due to the potential for construction-related redistribution of contamination to the surface.

It was determined that soils in the former fertilizer storage tank area have elevated concentrations of PCBs and dieldrin and must be mitigated if soils are brought to the surface. Unacceptable risks to commercial and construction workers are present if soils from between 2 and 9.5 fbg are brought to the surface and left accessible for 250 days per year for construction workers or for 25 years for commercial workers. If soils from below 1.5 fbg are brought to the surface for extended periods of time, there are potential hazards to ecological receptors. Additionally, if these soils from 2 to 9.5 fbg are brought to the surface, there are potential future ecological risks associated with exposure to the proposed soil/wetland sediment. Potential impacts associated with the proposed Site redevelopment project must be mitigated through the adherence to the approved *Subsurface Media Management Plan*, dated May 20, 2020.

Additional Required Environmental Work for Shell

Groundwater: In 2020, the Central Coast Regional Water Quality Control Board (CCRWQCB) requested three additional quarterly groundwater monitoring events be conducted at the Site. The purpose of this investigation is to further evaluate current trends of the contaminant concentrations of

1,2-DCP; 1,2,3-trichloropropane (TCP); and nitrate as nitrogen. TCP has not been evaluated at the Site and its groundwater MCL, adopted in 2017, of 5 parts per trillion (0.005 µg/L) is very low. TCP is an impurity/manufacturing by-product resulting from the production of the soil fumigants formerly stored at the Site, D-D® and Telone II. TCP is considered a persistent pollutant in groundwater and has been classified by the US EPA as "likely to be a carcinogenic to humans." Two of the three quarterly groundwater sampling events have occurred. After the three quarterly groundwater sampling events have been conducted, Shell's environmental consultant will make conclusions and recommendations for the CCRWQCB to consider.

Human Health Risk Assessment and Vapor Intrusion

Former Office/Maintenance Building (Upper Terrace Location): Relatively recently, in 2020, Shell discovered that the former Office/Maintenance Building, located on the upper terrace on the northwestern portion of the Site, is currently occupied by a Site worker(s) for up to one hour per day. This is new knowledge and was not incorporated into the HHERA for the Site. This building is located within 100 lateral feet of the soil gas plume associated with 1,2-DCP, benzene, and 1,3-butadiene. Therefore, Shell is required to evaluate the Site and this building with current applicable soil gas and indoor air screening levels. At this time, Shell has not conducted their re-evaluation of the potential indoor air inhalation pathway risks for the Office/Maintenance Building. However, if potential indoor air risks are found, Shell could recommend further soil gas and/or indoor air investigation(s), remediation, and/or mitigation controls at the Office/Maintenance Building.

Office Trailer (Lower Terrace Location): It should be noted that the office trailer located in the lower terrace is within 100 lateral feet of the 1,2-DCP and benzene soil gas plume. The indoor air for this office trailer building has not been evaluated for vapor intrusion human health risks. Shell does not plan to further evaluate this building because of its temporary construction (i.e., the building is a trailer) and the planned redevelopment includes the construction of a new office building on the lower terrace area. However, vapor intrusion inhalation risks may still be present in the office trailer at its current location. Therefore, the office trailer located on the lower terrace must be removed from the Site or moved to a location that is greater than 100 lateral feet from the Site soil gas plumes and not above contaminated soil prior to issuance of the redevelopment building permit.

If you have any comments or questions regarding this letter, you may contact me by email address at John.Gerbrandt@santacruzcounty.us or at (831) 454-2731, 8:00 a.m. to 9:30 a.m., Monday through Friday.

Sincerely,

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