THE STENCH OF "SUSTAINABILITY":

Monitoring Darling's Animal Rendering Plant in an Over-Polluted Community



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Santa Clara University's Environmental Justice and the Common Good Initiative (EJCGI) is a collaborative of faculty, students, and staff that aims to conduct research and provide training, resources, and networking to support community-driven research partnerships for environmental justice among community organizations, Santa Clara University faculty and students, and other academic institutions in Northern California and Jesuit higher education.

Disclaimer: The views expressed in this report represent the views of the authors only—and do not represent the views of Santa Clara University, Santa Clara University, School of Law, or the Environmental Justice and the Common Good Initiative. This report is intended for educational purposes and policy discussions.

REPORT OBJECTIVE

In Spring 2021, Greenaction for Health and Environmental Justice (Greenaction) asked the Environmental Justice Law and Advocacy Lab (EJ Lab) at Santa Clara University, School of Law to investigate whether Darling Ingredients, Inc. (Darling) was compliant with various environmental laws. The EJ Lab is a part of the EJCGI at Santa Clara University. The EJ Lab provides support for advocacy, policy development, public education, and community-based research to improve access to clean air, land, and water in low-income communities and communities of color.

Greenaction works closely with Bayview Hunters Point residents. Greenaction reported "gut pinching" and "nauseating" smells coming from Darling's San Francisco rendering facility —located in Bayview Hunters Point. The community endured the nuisance caused by Darling for decades and for years filed and documented complaints. More recently, Greenaction had concerns regarding an ongoing controversy of the local air district's effectiveness in oversight and enforcement of environmental regulations. As a result of the concerns, Greenaction suspected Darling was operating without a valid permit. While Greenaction would prefer the rendering facility be moved elsewhere, at the least, the organization wants an end to the nuisance imposed by the facility's operations and for quality of life for the community to improve. One way to achieve this is through enforcing environmental regulations. By understanding the regulatory framework that Darling operates within, Greenaction and community members can gain a sense of what their possibilities are for ending the nuisance and pursuing environmental justice for the community.

As part of an independent study project, Elias Rodriguez, supervised by Professor Zsea Bowmani and overseen by Professor Tseming Yang, set out to investigate Greenaction's claims regarding Darling's San Francisco facility. Mr. Rodriguez and Mr. Bowmani identified ten agencies with jurisdiction over Darling's operations. Due to time and resource constraints, Mr. Rodriguez and Mr. Bowmani selected three agencies with which to assess regulatory compliance and requested public records from these three agencies regarding Darling's San Francisco facility.

This report makes several conclusions regarding the public records and environmental laws related to Darling's facility. Additionally, this report serves as an objective independent evaluation and provides recommendations that government agencies may implement to reduce the harmful effects that Darling's operations have on the community and its air quality. Finally, this report suggests a full compliance review should be completed to investigate seven other agencies with which Darling must comply. Because this report cannot give a complete picture of Darling's compliance with environmental laws, this report serves only as the beginning of a full compliance review of Darling's San Francisco facility.

EXECUTIVE SUMMARY

For over 50 years, Darling Ingredients, Inc. (Darling) has operated an animal rendering facility in Bayview-Hunters Point (BVHP)—a low-income community in San Francisco, California (CA) made up of large populations of Black, Asian-American/Pacific Islander, and Latinx residents. The facility's noxious emissions along with several other pollution sources put BVHP in the 80th percentile for pollution sources and health risks in the entire state of California. This report analyzes the rendering facility's compliance status with environmental laws and makes several conclusions and recommendations for the community to reduce the disproportionate harm caused from the facility's operations.

The BVHP community is a small neighborhood in the southeast portion of San Francisco, CA, where Black, Asian-American/Pacific Islander, and Latinx residents make up over 80 percent of the community. Darling began its operations in the BVHP community in 1969 and has operated in this neighborhood since. Darling's operations include animal rendering—the process of converting animal carcasses into usable material to make products such as animal feed, lubricants, soaps, plastics, cosmetics, and paints. More recently, Darling expanded its operations in the San Francisco facility to include the production of biofuel through animal fat recycling. The operations produce many potential impacts for Darling's neighbors in the BVHP community including toxic air emissions, noxious fumes, stormwater runoff, and hazardous chemical disposal.

The Darling facility is just one of many environmental burdens that the BVHP community is currently exposed to. A water sewage treatment facility also calls BVHP home. Additionally, three concrete production plants operate in BVHP. At least two concrete plants operate without a valid air quality permit. Over the hill from Darling is a federally designated Superfund site. The site is filled with soil contaminated by radiological and other toxic contaminants from the decontamination of ships used for nuclear testing and a retired radiological lab. Finally, the BVHP community is cordoned off from the rest of San Francisco (City) by two freeway arteries leading into the City.

Greenaction suspected Darling was non-compliant with environmental laws and reported complaints of "gut pinching" and "nauseating" fumes coming from the facility. Because BVHP community members are inundated by pollution from many sources throughout the neighborhood, we conclude that assessing Darling's compliance status with environmental laws is crucial to determine the cumulative environmental impacts on the local community. Additionally, state and federal law are often inadequate at addressing nuisances. Local agency regulations can be a solution to these inadequacies.

This report utilizes information from public documents requested from three out of ten agencies who regulate Darling's operations: the Bay Area Air Quality Management District

(BAAQMD), the San Francisco Planning Department, and the Port of San Francisco. We conclude that the BAAQMD yielded the most relevant data on air emissions because the agency requires Darling to maintain up-to-date information on air emissions to obtain a permit to operate. Neither we nor BAAQMD conducted independent monitoring or data collection to assess the accuracy of Darling's reported emissions data. Based on public information, we identified between 2002-2021 that BAAQMD received numerous public complaints and issued two notices of violation to Darling. BAAQMD issued these violations to Darling's San Francisco facility for emitting noxious fumes and failing to adequately maintain equipment. Importantly, BAAQMD fielded nearly all of these complaints and issued these violations over ten years ago. We identified a decline in complaints since. Greenaction explains that residents have "given up" on filing complaints.

The materials we received from the three agencies did not indicate any non-compliance by Darling with these three agencies' regulations. The BAAQMD's records did not reveal any non-compliance with air regulations. Meanwhile, the Port of San Francisco and the San Francisco Planning Department issue Darling discrete, time-bound permits for individual projects. For instance, in 2008, Darling applied for a permit from the Planning Department to expand its operations to begin biodiesel production. The Department initially granted a categorical exemption, meaning Darling was not required to conduct an Environmental Impact Report (EIR) to assess the health, environment, or quality of life impacts of the expansion. Following public criticism and litigation, the Department completed a supplemental report, which concluded that the expansion would not cause new significant environmental impacts and was thus exempt from a full EIR. However, the supplemental report analyzing the impacts of the biodiesel expansion went unchallenged—and can no longer be challenged.

While the information available to us did not reveal any non-compliance by Darling with the three agencies' regulations, our conclusions suggest a need for stronger enforcement of environmental regulations and more stringent emission limits. We recommend agencies work with the community to develop guidelines for increased transparency and public involvement in enforcement, and fully implement environmental justice policies. If these efforts fail to make sufficient health and environmental improvements, advocates and government agencies may seek Darling's San Francisco facility closure. For that, we recommend adopting a similar plan to that of the successful campaign in Fresno, CA which shut down Darling's 60-year old Fresno rendering facility—now scheduled to close by December 2023.

Finally, we question whether Darling's San Francisco rendering operations align with the sustainability benefits that the City purports Darling's operations bring. We question whether a low-income neighborhood, made up of large communities of Black, Asian-American/Pacific Islander, and Latinx residents, should bear the brunt effects of the rendering facility.

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INTRODUCTION

For over half a century, Darling Ingredients, Inc. (formerly Darling International, Inc.) has operated a rendering facility in the Bayview Hunters Point (BVHP) community, creating a nuisance for the residents of this San Francisco Bay Area community. The odors from this plant's operations, which recycles dead animal parts into animal feed and other products, haunt the facility's neighbors and passersby. While the City of San Francisco touts Darling's operations as environmentally "sustainable" for its production of locally sourced material,¹ the residents of BVHP know Darling for its foul odors and air pollution that cause nausea, headaches, and respiratory illnesses.

Greenaction for Health and Environmental Justice (Greenaction), a grassroots environmental community advocacy organization with members living in BVHP, suspected that Darling was operating without a valid permit and could be emitting pollution into the community beyond allowable limits. This suspicion arose from working with BVHP residents, who, for decades endured the nuisance caused by Darling—and for years filed and documented complaints. It also arose out of Greenaction's concerns regarding an ongoing controversy of the local air district's effectiveness in oversight and enforcement of environmental regulations.

Darling's operations are regulated by the Bay Area Air Quality Management District (BAAQMD), the San Francisco Planning Department (Planning Department), and the Port of San Francisco (Port), as well as other Federal and state agencies that are listed later in this report. These agencies enforce several environmental laws and regulations that apply to Darling's operations, such as the Clean Air Act and the California Environmental Quality Act, as well as the Port's Building Code.² However, state and federal laws are often inadequate at addressing nuisance problems that communities face.³ Thus, we also focus on the BAAQMD's effectiveness in enforcing local nuisance laws.

By analyzing state and local laws, as well as public documents provided by government agencies, this report examines the regulations and relevant permits for which these agencies are responsible, and whether Darling is in compliance with each. First, the report provides an overview of the BVHP community. Next, it lays out air quality regulations to which Darling is subject. Next, it summarizes Darling's compliance with land regulations under the jurisdiction of the Planning Department. It then identifies Darling's compliance with the Port of San Francisco. Finally, in consideration of Greenaction's goals, this report outlines possible approaches the three government agencies can take to protect the BVHP community from Darling's rendering facility operations that disproportionately burden Black, Latinx, and Asian/Pacific Islander communities.

BACKGROUND OF BAYVIEW HUNTERS POINT COMMUNITY AND THE IMPACTS OF DARLING INGREDIENT'S OPERATIONS ON THE COMMUNITY

Bayview Hunters Point is a neighborhood in southeast San Francisco with a long history of experiencing racially disproportionate environmental harms.⁴ The community is made up of a diverse population, with 33% identifying as African American, 33% identifying as Asian/Pacific Islander, and 25% identifying as Latinx.⁵ In contrast, the county of San Francisco is comprised of 5.7% of residents identifying as African American, 37.5% identifying as Asian/Pacific Islander, and 15.7% identifying as Latinx.⁶

Greenaction for Health and Environmental Justice is a nonprofit grassroots organization that fights for health and environmental justice with low-income and working class, urban, rural, and indigenous communities.⁷ Through research, advocacy, organization, and mobilization Greenaction works with communities like Bayview Hunters Point and others that are disproportionately affected by environmental harms.⁸ Greenaction seeks information on the status of Darling's regulatory compliance to share with community members and inform community members of potential advocacy options.

Below, to bring context to how a rendering facility came to operate in the middle of a large urban community, we provide a historical overview—which includes Darling's placement in BVHP, the migration of racial groups into and out of BVHP, and an inventory of pollution sources in BVHP.

Darling's Fit in a Former Butchertown

Darling Ingredients, Inc. is a multinational corporation engaged in animal rendering the process of converting animal tissue into stable, usable materials.⁹ The process involves heating, extracting moisture, and separating fats from raw animal carcasses at temperatures more than 1400 degrees Fahrenheit.¹⁰ The resulting material is primarily used for animal feed, but has applications in other areas such as lubricants, soaps, plastics, cosmetics, and paints.¹¹ Since 1969, Darling has operated in the BVHP community of San Francisco, California.¹² More recently, Darling has expanded its operations to include the production of biofuel for vehicles.¹³

It is no coincidence that Darling is located in BVHP. The story dates back to the late 1860s when there was a large global trend to push slaughterhouses out of urban areas.¹⁴ After the city of San Francisco passed an ordinance banning such commercial businesses, BVHP soon became known as Butchertown—for its concentration of slaughterhouses and later related industries of tanneries, fertilizer plants, and tallow works.¹⁵ The land comprising modern day Bayview was ideal for these industries, built on top of stilts—that took advantage of the tidal lands to wash the businesses' waste materials out to the San Francisco Bay.¹⁶

The migration of these industries during the mid-1800s to BVHP came with residential development, where BVHP relied on rural-agricultural and urban-industrial economies.¹⁷ The residents described Bayview as "pungent" and "fragrant" due to the rat infestation which fed on the fallen offal.¹⁸ These putrid conditions lead to multiple public health crises in BVHP including diphtheria in 1888, and the bubonic plague in 1907.¹⁹ Residents also described Bayview as a "marvelous neighborhood" due to its tight knit community made up of a mixture of ethnicities in the late 1800s and early 1900s—including French, Italian, Maltese and Irish.²⁰ The neighborhood also had a concentration of Chinese commercial shrimp fishers.²¹ However, the slaughterhouse and related industries were heavily impacted by both the 1906 San Francisco Earthquake and the Federal Meat Inspection Act.²² Nonetheless, development expanded the neighborhood by filling in marshland to its modern day limits along the San Francisco Bay.²³ The last slaughterhouse in Bayview closed in 1971—leaving Darling as one of the few remnants of Butchertown.²⁴

BVHP Racial Migration History

From the late 1800s to the 1940s, the BVHP population remained relatively stable comprised of mainly French, Italian, German, Maltese, and Irish residents. During this time, BVHP also had smaller but significant populations of Mexican and Chinese residents, attracted by the farming and shrimp fishing industries.²⁵ In the 1940s, however, the wartime industries that BVHP hosted caused a population boom during World War II. Recruited from the South by U.S. government agencies, African Americans moved to San Francisco—increasing the Black population in the City by 600 percent from 1940-1945.²⁶ The new BVHP residents were attracted by the Hunters Point Shipyard which provided up to 18,000 jobs during the peak years of World War II. As the shipyard workers flocked to Hunters Point, the Navy constructed housing units for their employees.²⁷ Initially, the housing was "barrack-like" for single workers and housed both Black and white people.²⁸ However, after the war, white residents began to leave BVHP for opportunities in the City and suburbs while Black residents, limited by housing and employment discrimination, remained in BVHP in lackluster city-owned housing conditions.²⁹

During the 1940s and 1950s, BVHP and Western Addition were the few neighborhoods in San Francisco that were accepting of African Americans escaping the Jim Crow South. The segregation was not a coincidence. Due to racially restrictive covenants and racially discriminatory housing policies—such as San Francisco Housing Authority's "neighborhood pattern" policy—African Americans were relegated to these neighborhoods.³⁰ In the mid-1950s, a City agency designated the Western Addition as a "blighted neighborhood" causing mass evictions of Black families.³¹ Many of these evicted families, 4000 total, were displaced—and some moved from Western Addition to BVHP.³² By the late 1960s and early 1970s, Black people made up three-quarters of the BVHP community.³³ At its peak in 1980, Black residents made up nearly 80 percent of the total BVHP population.³⁴ Today, African Americans make up around one third of the total BVHP population.³⁵

The exodus of African Americans from BVHP can be attributed to several factors. Since the 1980s, BVHP has seen an influx of in-migration from both the Asian/Pacific Islander and Latinx communities.³⁶ Some attribute the decline of the Black BVHP population to the exorbitant San Francisco cost of living.³⁷ Others attribute the exodus to gentrification caused by recent redevelopment projects in the BVHP community.³⁸

BVHP Environmental Justice History

The BVHP community has long been inundated by many pollution sources and acted as a toxic dumping ground for the city of San Francisco. Although difficult to link pollution sources to health, BVHP has some of the worst health outcomes compared to city and statewide data.³⁹ For instance, health assessments find higher cancer rates in BVHP residents,⁴⁰ higher asthma rates,⁴¹ higher infant mortality rates and low birth weights,⁴² and higher rates of communicable diseases, including rates of COVID-19.⁴³ As a result, BVHP residents can expect to live fourteen years less than their counterparts in the wealthier, predominantly white Russian Hill neighborhood.⁴⁴ Environmental justice advocates have long fought for the closure and mitigation of these pollution sources to bring justice and equity to the community.⁴⁵

One pollution source in particular remains an ongoing danger to BVHP. In 1948, the Navy opened the Naval Radiological Defense Laboratory (NRDL or Lab) on the site of the Hunter's Point Naval Shipyard.⁴⁶ For over twenty years the Shipyard housed several activities that resulted in radioactive waste—including decontaminating ships used in nuclear bomb testing and radiological experiments.⁴⁷ The Navy decommissioned the Lab in 1969, however, the effects of the Lab remain. In 1989, the U.S. Environmental Protection Agency (EPA) designated the Hunters Point Naval Shipyard a superfund site—deeming the site one of the most polluted in the country.⁴⁸

The activities at the Lab and Shipyard contaminated soil, dust, sediments, surface water, and ground water with petroleum fuels, pesticides, heavy metals, polychlorinated biphenyls, volatile organic compounds, and radionuclides.⁴⁹ The EPA ordered the Navy to clean up the site and subsequently the Navy and local government agreed to a transfer of the property— contingent on clean soil samples.⁵⁰ The Navy hired a large nuclear remediation company to clean up the site.⁵¹

Since the start of the remediation, the clean-up has been fraught with controversy.⁵² In 2017, for example, supervisors within the company plead guilty to falsifying soil sample records in the clean-up.⁵³ In 2019, the U.S. Government sued the remediation company for fraud due to the falsified records.⁵⁴ The site remains contaminated with elevated levels of toxins and remains

a sitting target for rising tides due to climate change—threatening the health of BVHP residents.⁵⁵

While the shipyard is one source of pollution the community endured, another source of pollution operated for nearly 80 years—until its recent closure. In 1929, Pacific Gas and Electric (PG&E) began operation of the Hunters Point Power Plant.⁵⁶ The plant originally burned petroleum fuel oil but switched to natural gas in the 1970s.⁵⁷ When it operated, the plant emitted nearly 600 tons of pollutants each year—including nitrous oxide, carbon monoxide, particulate matter, ammonia, volatile organic compounds, and sulfur dioxide.⁵⁸ Also, while the plant operated, BVHP residents' hospitalization rates for chronic illnesses—including asthma, congestive heart failure, and emphysema—were four times higher than the statewide average.⁵⁹ In 1998, PG&E agreed with the city to close the plant when PG&E found power from another source.⁶⁰ Community activists protested at the site—urging its closure until its final days in 2006.⁶¹

Another large pollution source for BVHP is the Southeast Waste Water Treatment facility. The City built the facility in 1952.⁶² In its inception, the plant processed twenty percent of San Francisco City's sewage and storm water runoff, but in 1970 the plant expanded and now processes 80 percent of the City's wastewater.⁶³ After much advocacy, the City decided, in 2018, to upgrade the facility's "1940s technology" due to complaints of foul odors and overflows of partially-treated sewage during rain storms.⁶⁴ The facility emits nitrous oxide, volatile organic compounds, sulfur dioxide,

carbon monoxide, and particulate matter.⁶⁵

Most recently, three concrete plants in BVHP have received renewed attention due to the construction boom in San Francisco.⁶⁶ Golden Gate University Law School's Environmental Law and Justice Clinic exposed the concrete plants' noncompliance with and the BAAQMD's nonenforcement of environmental laws aimed at

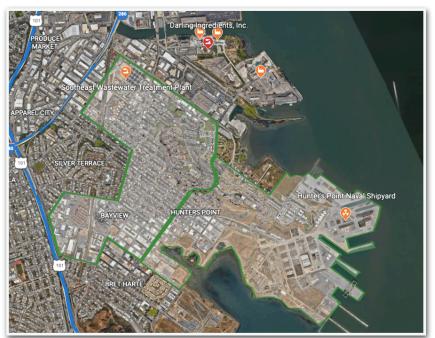


Figure 1. Map of the Bayview Hunters Point Community. The Darling plant is marked with a red icon. Other pollution sources, such as the concrete plants and naval shipyard, are marked with an orange icon. The BVHP community is outlined in green. Source: Google Earth.

protecting BVHP residents.⁶⁷ For instance, the BAAQMD has allowed one concrete plant to operate without a valid air district permit for over 20 years.⁶⁸ Concrete plants have detrimental effects to human health because of their emissions of particulate matter, as well as carcinogenic toxic air contaminants—such as arsenic, chromium, and selenium.⁶⁹ As of May 2020, at least two of the plants operate without a permit or with flawed permits.⁷⁰

The Shipyard, Wastewater treatment facility, and concrete plants are the largest sources of pollution in BVHP. However, additional pollution sources exist—including two major freeway arteries which cordon BVHP off from the rest of the city of San Francisco. Additionally, due to the City's 1920s designation of BVHP as industrial land use,⁷¹ the neighborhood also remains contaminated with over 100 leaking fuel tanks, abandoned waste disposal sites, and over 100 hazardous waste handlers regulated by the E.P.A.⁷² Because the Darling rendering facility is one of many pollution sources in BVHP, we conclude that understanding its effects on the community and its compliance with environmental laws is crucial to ensuring environmental justice for the diverse community.

Darling Complaint Histories

There are two mechanisms of recording environmental violations and complaints in the

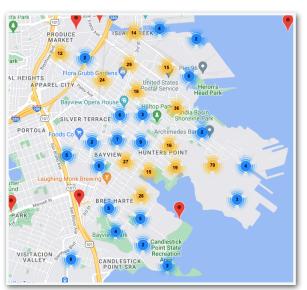


Figure 2. Map of complaints filed through IVAN air monitoring system. Source: <u>BVHP IVAN</u>

BVHP neighborhood. The first is through a network of community-based monitoring systems.⁷³ Between 2015 and 2021, this network has fielded ten complaints regarding foul odors near the Darling facility, with two directly attributed to the facility's operations.⁷⁴

The second method of complaints is through the BAAQMD. Official records reveal that between 2005 and 2010, the BAAQMD fielded twenty complaints against Darling. Of those, three complaints were confirmed by BAAQMD.⁷⁵ These records did not reveal any recent complaints against Darling between the time period of 2010 and 2021.⁷⁶ Greenaction reports that residents have "given up" on filing complaints with the BAAQMD. We conclude that

the recent lack of complaints does not necessarily indicate Darling's compliance. We conclude that the lack of complaints indicates the community's resignation with the noxious odors from Darling's facility.

PERMITTING STRUCTURE FOR AGENCIES

This section covers three agencies that are responsible for issuing permits related to Darling's operations: (1) the BAAQMD, (2) the Port; and (3) the Planning Department. There are seven additional agencies that regulate Darling's operations that are not covered in this report. These agencies include the San Francisco Bay Regional Water Quality Control Board, the San Francisco Public Utilities Commission, the San Francisco Fire Department, and the San Francisco Department of Public Health at the local level; the California Department of Food and Agriculture at the state level; and the U.S. Department of Health and U.S. Environmental Protection Agency at the national level.⁷⁷ Further research should be completed to ensure Darling's compliance with the requirements of these seven agencies.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

1. Responsibilities of the Regulating Agency

The Bay Area Quality Management District (BAAQMD or the District) is responsible for regulating air emissions within the San Francisco Bay Area boundaries, ensuring that the region meets the National and California Ambient Air Quality Standards under the Clean Air Act.⁷⁸ Among other responsibilities, the BAAQMD prepares and updates plans for attaining and maintaining air quality standards, adopts and enforces rules and regulations, issues stationary source permits, inspects stationary sources, and responds to citizen complaints.⁷⁹ The California Health and Safety Code requires Air District plans to achieve a district wide reduction in ozone precursors such as ozone, carbon monoxide, sulfur dioxide, and nitrogen dioxide.⁸⁰ Under the BAAQMD's Clean Air Plan, the District regulates and sets inventory limits on two of these ozone precursors: carbon monoxide ("CO") and nitrous oxide ("NOx").⁸¹ Many stationary sources throughout various industry practices, including commercial boilers,⁸² emit these pollutants which are known to be harmful to human health.⁸³

The BAAQMD calculates inventory limits in its jurisdiction by setting individual limits on stationary sources of air pollution using stationary source permits.⁸⁴ An operator must obtain a permit to operate (PTO) from the BAAQMD if it will operate a machine or equipment that emits air contaminants.⁸⁵ This PTO sets allowable emission limits and subjects the operator to various permit conditions.⁸⁶ A PTO also allows BAAQMD to conduct on-site inspections.⁸⁷ The permit allows the operator to operate for one year, after which the operator must submit a data update to renew its permit.⁸⁸

Permit holders that are authorized to construct or operate new or modified sources must use what is referred to as the Best Available Control Technology (BACT).⁸⁹ The BACT is an emission control device applied at an emission source that is the most stringent emission limitation achieved by an emission control device for the type of equipment comprising such a source.⁹⁰ BAAQMD requires BACT for any source that emits more than 10 pounds per day of the following emissions: precursor organic compounds, non-precursor organic compounds, nitrogen oxides, sulfur dioxide, PM₁₀, PM_{2.5}, and carbon monoxide.⁹¹

2. Overview of Facility

Darling operates four stationary sources that come under the regulation of the BAAQMD:

two offal cookers, a commercial boiler, and a direct flame after burner. BAAQMD has regulations that limit the emissions of CO and NOx from commercial boilers such as those operated by Darling⁹² and enforces the emission limiting regulations through the permit process. Darling's 2020-2021 permit from the BAAQMD allowed Darling to operate this equipment—the permit expired on October 1, 2021.⁹³

Darling also uses various vehicles and vessels to transport raw and cooked material to and from the site which generate an average of 80-180 daily truck trips.⁹⁴ While these vehicles and vessels emit greenhouse gases that are harmful to humans and the environment, Darling does not need a PTO through the BAAQMD to operate them since they are not stationary sources.



Figure 3. A portion of San Francisco Darling's rendering facility. Source: Photo taken by Elias Rodriguez.

Under Darling's PTO from the BAAQMD, the facility is subject to permit conditions #2785, #3657, and #19627. Under permit condition #2785, Darling must limit its fuel oil usage during natural gas curtailment, limit its NOx emissions to 30 PPMV and 40 PPMV dry at 3%, when burning with natural gas or fuel oil, respectively, limit its overall NOx emissions to 9 PPMV dry at 3% oxygen, and limit its CO₂ emissions to 400 PPMV dry at 3% oxygen. Under permit condition #3657, Darling must operate the incinerator at or above 1400 degrees

Fahrenheit and equip the incinerator with a temperature chart for BAAQMD review. Finally, under permit condition #19627, Darling must abate the steam boiler, operate the boiler with natural gas at a firing rate not exceeding 64.6 MMBtu/hr, and limit the NOx and CO emissions to 9 and 400 PPMV dry at 3% oxygen respectively, and NH₃ to 10 PPMV dry at 15% oxygen.

In addition to the permit conditions, the BAAQMD rules prohibit Darling from emitting air contaminants that cause a nuisance or endanger the comfort of the public.⁹⁵ The BAAQMD specifies that three or more violation notices issued within a thirty day period raises a rebuttable presumption that the violations resulted from negligent conduct.⁹⁶ After a citizen makes a complaint, the BAAQMD is required to conduct an on-site inspection of the operations.⁹⁷ For instance, in 2004, the BAAQMD issued a Notice of Violation to Darling for violating regulation 1-301 and Health and Safety Code § 41700, a violation of an odor nuisance.⁹⁸ The violation arose in response to ten complaints made via telephone and in-person to BAAQMD and to onsite inspectors from Darling employees and affiliates.⁹⁹ Based on documents obtained from the BAAQMD through a Public Records Act request, it is unclear if this violation resulted in any agency action.

Darling's rendering facility emits an annual average of 24.7 pounds per day of nitrogen oxide and 19.1 pounds per day of carbon monoxide.¹⁰⁰ These emission levels require Darling to use the BACT mentioned in the previous section. The BAAQMD guidelines require institutional boilers, like those onsite at the Darling facility, to use selective catalytic reduction, low-NOx burners, and flue gas recirculation to control their NOx emissions.¹⁰¹ For Darling's carbon monoxide emissions, the BACT requires an oxidation catalyst.¹⁰² Darling's use of a direct flame afterburner and venturi scrubber, as well as its self-reporting of emissions levels, indicate the facility is not non-compliant with BAAQMD requirements, further explored in the following section.

3. Regulation Compliance

On January 25, 2021, a California Public Records Act (PRA) Request was sent on behalf of Greenaction to the BAAQMD for copies of all documents related to Darling's operational permit for the period between 2008 and 2021. A month later, on February 19, the BAAQMD responded and provided two files. One file contained Darling's current PTO and the other contained documents pertaining to inspections from 2004 - 2016, as well as previous violations. The data from the 2021 PRA request revealed that Darling's 2020-2021 PTO is valid until October 2021. The BAAQMD permit to operate lists Darling's operations as fully compliant.

To obtain a permit to operate, Darling must submit data updates containing self-reported inventories of annual air contaminant emissions.¹⁰³ Although we did not request a copy of Darling's 2021-2022 permit, we obtained copies of Darling's most recently submitted data

updates which reflect similar amounts of emissions from 2020-2021. Based on these numbers and considering the ease of Darling's permit renewal process—we assume Darling is not noncompliant with BAAQMD rules. However, to verify Darling's adherence to BAAQMD rules, we recommend another records request be sent to BAAQMD for Darling's latest permit status.

Additional information in the 2021 PRA request revealed that Darling incurred violations in 2004 and 2006. In 2004, as mentioned above, Darling violated a regulation preventing odors from causing a nuisance to the public. The documents sent by BAAQMD do not reveal the results of this violation. In 2006, Darling received a notice of violation for violating permit condition #03657 for their failure to maintain the oxidizer at 1400 degrees Fahrenheit. As a result, Darling paid an \$11,000 fine for their violation. The documents also reveal that between 2003 and 2011, the BAAQMD received 48 complaints regarding Darling's operations. The BAAQMD confirmed 25 of the 48 complaints.

PORT OF SAN FRANCISCO

1. Responsibilities of Regulating Agency

The Port of San Francisco maintains jurisdiction, in public trust, on 7.5 miles of San Francisco coastline, from the Hyde Street Pier to India Basin. Located on Pier 92, Darling falls within the jurisdiction of the Port due to its location on Port property. The Port is primarily responsible for using, operating, managing, and regulating Port property, as well as ensuring that it takes all necessary actions to fulfill its public trust responsibilities.¹⁰⁴ The Port maintains a separate building code that is based off the California Building Code.¹⁰⁵ The Port Code requires a landowner to apply for a Port Building code permit if the landowner plans to erect, construct, enlarge, alter, repair, move, improve, remove, convert or demolish a building.¹⁰⁶ A permit applicant submits the application to the Port and the application is subject to review by the Chief Harbor Engineer.¹⁰⁷ Once the Port grants a permit, the permit holder must commence construction within 180 days from the issuance of the permit.¹⁰⁸

2. Overview of Facility

On its 195,000 square foot lot, Darling maintains a 12,800 square foot facility¹⁰⁹ which houses the main refining operations and a 9,845 square foot building which houses its biodiesel refining operations.¹¹⁰ Darling also maintains 42 storage tanks on its property to store cooked material, refined biodiesel, and hazardous chemicals for its rendering process. Darling transports the cooked material by truck, rail, and at times, maritime vessels. Most of Darling's recent permit applications and approvals with the Port pertain to structural improvements. For instance, in 2016, Darling applied and was approved for a building permit to complete a conveyor support for a transfer station.¹¹¹ The conveyor support assists in transferring raw material from trucks to the processing area. Other permits approved by the Port include an emergency plumbing permit

due to a gas leak in 2019¹¹² and a permit to install concrete slabs to support storage tanks¹¹³ and a boiler exhaust stack¹¹⁴ in 2016 and 2011.

3. Regulation Compliance

On January 25, 2021, a Public Records Request was sent on behalf of Greenaction to the Port of San Francisco requesting all documents pertaining to permitting between the years 2016

and 2021. On February 19, 2021, the Port responded and attached seventeen files. Most of the files included documents and emails pertaining to the construction of Darling's conveyor support transfer station and installation of a 5,000 gallon storage tank in 2016. Based on this information, we were unable to identify Darling's non-compliance with Port requirements. If Darling plans



Figure 4. Darling's rail line. Source: Photo taken by Elias Rodriguez.

to construct or renovate in the future, Darling must first obtain a permit through the Port permit process—to which the BVHP community should remain attentive.

SAN FRANCISCO PLANNING DEPARTMENT

1. Responsibilities of Regulating Agency

The San Francisco Planning Department is responsible for updating the general, master, and specific plans, approving and enforcing licenses and codes pursuant to the city planning code, and reviewing zoning ordinances.¹¹⁵ The Planning Department is also involved with administrative actions required by the California Environmental Quality Act (CEQA), including overseeing the preparation of environmental review documents.¹¹⁶ CEQA requires environmental review whenever a project involves state agency action, such as zoning amendment ordinances or issuance of a conditional use permit.¹¹⁷

2. Overview of Facility

On July 3, 1969, the Planning Commission approved Conditional Use Application No. CU69.034 to Darling Ingredients (then "Darling International and Royal Tallow and Soap Company") to build its facility at 429 Amador Street, part of Pier 92, for the rendering of

reduction of fat, bones, or other animal materials.¹¹⁸ According to documents available, within the past 10 years, Darling has not made changes to the conditional uses, nor has it engaged in projects that trigger an environmental impact report.

However, Pier 92 and the surrounding areas are governed by the Southern Waterfront Plan. The Plan mentions previous groundwater contamination in 1991 and 1998, by the chemicals toluene and xylene, due to Darling's underground storage tanks.¹¹⁹ The Plan also states that an agency resolved the 1991 contamination issue in 1994 but does not specify the resolution of the 1998 contamination. We did not conduct a comprehensive investigation into the resolution to the 1998 groundwater contamination. Thus, the issues surrounding this leak are ripe for future research. Information surrounding the leak could be found in U.S. E.P.A. documents pertaining to the Resource Conservation and Recovery Act.

In 2008, Darling proposed to expand its operations to include a biodiesel production facility.¹²⁰ The Planning Department initially approved a categorical exemption for the biodiesel project, meaning Darling was not required to conduct an environmental impact report to assess the impact the biodiesel expansion had on the health, environment, or quality of life of the



Figure 5. Satellite photo of Darling's San Francisco facility. The brown cylindrical shapes in the center of the photo are 100,000 gallon storage tanks. Source: Google Maps.

nearby community.¹²¹ The Bayview Hunters Point Community Advocates ("BVHPCA"), represented by the Golden Gate University Law School Environmental Law Clinic, immediately challenged this approval.¹²² BVHPCA claimed that the Planning Department failed to consider key aspects of the biodiesel expansion, which included three to four 100,000 gallon storage tanks, a storage and

recovery system for methanol, a loading system, and a marine fueling station.¹²³ After BVHPCA put pressure on City officials, the Planning Department agreed to complete an Addendum to the Supplemental Impact report for the Waterfront Plan.¹²⁴

The Addendum to the Supplemental Impact Report (SEIR) for this project states that the biodiesel process is one step further into the rendering process and did not produce a significant expansion in Darling's operations. The expansion included installing tanks to hold methanol, a key ingredient in the biodiesel refining process, and finished biodiesel product. The finished

biodiesel product can be sold in pure form or be mixed with regular diesel to produce a fuel that emits fewer diesel particulate emissions.

The Addendum to the SEIR concluded that the project would not cause new significant environmental impacts and was thus exempt from an Environmental Impact Report. It also concluded that no mitigation measures would be necessary to reduce significant impacts. The Addendum to the SEIR also mentions that the lease Darling maintains with the Port of San Francisco includes an Odor Management Plan which requires an Odor Management Coordinator to act as a liaison between Darling, the Port, the local community, and the BAAQMD. The information available did not reveal whether an Odor Management Coordinator has ever been appointed. Further, because of the short statute of limitations period under CEQA, the biodiesel expansion project, and any other past development projects, can no longer be challenged.¹²⁵

3. Regulation Compliance

On January 26, 2021, a Public Records request was sent on behalf of Greenaction requesting all documents relating to permitting between the years 2016 and 2021. The Planning Department responded on February 8, 2021 and attached 39 files. Most files included the planning documents pertaining to the 2008 biodiesel expansion. Past Planning Department decisions cannot be challenged.¹²⁶ Darling has not proposed any plans to the Planning Department to expand its operations or modify its conditional use. However, the Planning Department's original willingness to exempt the biodiesel expansion project from environmental review suggests that the Planning Department values industry needs over the community's needs. For future expansion projects, the Planning Department should consider all of Darling's operational impacts on the BVHP community.

APPROACHES TO ACHIEVE HEALTH AND SAFETY FOR BAYVIEW-HUNTERS POINT COMMUNITY

This section provides recommendations that the government agencies should implement to reduce the harmful effects that Darling's operations have on the community and its air quality. Here, we outline three main approaches with which these agencies may act. First, BAAQMD can take an enforcement approach by bringing Darling under compliance with existing air quality regulations and making use of other existing rules and policies. Second, BAAQMD can take a policy approach by modifying air quality regulations themselves—in particular by reducing allowable emission limits for facilities engaged in operations similar to Darling's rendering facility. Third, if after further research, the facility is found out of compliance with environmental regulations or the facility remains an ongoing nuisance, agencies should take steps to close Darling's San Francisco rendering facility in the BVHP community. Because the BAAQMD regulates Darling's ongoing air emissions, whereas the Port and Planning Department have time-bound, construction-related involvement in Darling's operations, most of the following recommendations focus on the BAAQMD.

1. Enforce Existing Air Quality Regulations, Clarify Complaint Procedures, and Fully Implement Environmental Justice Policies

As explained above, Darling emits various pollutants from its daily operations. These include emissions of carbon monoxide, nitrogen oxide, and ammonia. Darling additionally emits pollutant gases from its daily truck trips. BAAQMD regulates Darling's carbon monoxide, nitrogen oxide, and ammonia emissions which come from Darling's stationary sources but does not regulate Darling's vehicle emissions. According to Darling's 2021 inspection, which BAAQMD completed on February 2, 2021, Darling is compliant with their permit conditions.¹²⁷ BAAQMD's stack testing revealed Darling's actual emissions were 1.6ppm of NOx, 20.2ppm of CO, and 1ppm of ammonia, substantially lower than the allowed limits.¹²⁸ The emission limits for these pollutants are 9ppm, 400ppm, and 10ppm, respectively.

Although Darling is compliant with its permit conditions, it still remains a nuisance due to its odors. In this case, BAAQMD can encourage BVHP residents to report nuisance violations when the noxious fumes become a nuisance. As mentioned in the BAAQMD section above, the BAAQMD restricts any person from emitting air contaminants which cause a nuisance to the public.¹²⁹ The regulations provide that three or more public nuisance violation notices within a thirty day period gives rise to a rebuttable presumption that the violations resulted from negligent conduct.¹³⁰ It is unclear from the rules whether a person can subsequently bring a claim for nuisance in court or whether the BAAQMD can bring an enforcement action based on this rebuttable presumption. Thus, the BAAQMD can clarify its authority to bring enforcement actions to nuisance complaints.

The BAAQMD also posted guidance on the nuisance complaint process.¹³¹ Along with Section 1-301, which gives rise to a rebuttable nuisance presumption after three complaints in a thirty day period, nuisance complaints are also governed by BAAQMD's Regulation 7, which apply when ten or more individuals submit nuisance complaints within a 90-day period.¹³² Complainants must encounter the nuisance "in the normal course of their work, travel, or residence," making it less likely for complaints to be raised by the general public because of Darling's remote location. Once a facility comes under Regulation 7 due to community complaints, and then receives a subsequent complaint, an inspector will obtain a bag sample at the site of the complaint.¹³³ Regulation 7 lays out the limits of dimethlysulfides, ammonia, and other odorous contaminants a facility may emit with which the inspector will verify compliance of the bag sample.¹³⁴ Regulation 7 is unclear of the consequences that result if a facility exceeds these limits. The BAAQMD complaint guidance also is unclear on the results of a Regulation 7 nuisance designation, stating that once a facility falls under Regulation 7, "[t]he District may then allocate staff resources to better address the developing nuisance situation."¹³⁵ Because of the lack of clarity in the process, the BAAQMD should clarify this odor abatement process.

Further, Darling's lease with the Port requires Darling to create and maintain an odor management plan.¹³⁶ The odor management plan requires the appointment of an Odor Management Coordinator that acts as a liaison between the Port, the local community, and the BAAQMD.¹³⁷ The Port should ensure Darling is aware of the nuisance they are causing to the neighborhood by verifying Darling's commitment to appoint an Odor Management Coordinator.

Enforcement of air quality standards, including the use of the nuisance complaint process, will only provide so much relief to the BVHP community. As explained above, the documents provided to us do not indicate any non-compliance by Darling. Yet, it still poses a health risk to BVHP residents—as it contributes to the disproportionate pollution burden of this low-income community of color and negatively impacts the quality of life for residents. There are several state and local policies that focus on environmental justice which, if fully implemented, would protect the health and environment of the BVHP community from the harmful impact of Darling's rendering facility. Some of these policies are outlined below.

Last summer, the BAAQMD issued a statement condemning racial discrimination in American systems of government and acknowledged that community proximity to sources of air pollution is part of this systemic issue.¹³⁸ In that same statement, the BAAQMD affirmed its commitment to changing the systems that disproportionately expose racial minorities to hazardous air pollution.¹³⁹ The BAAQMD's handling of Darling's operations demonstrates, however, that its actions do not reflect these statements. The BAAQMD should reflect on how its handling of Darling's operations conflict with its stated values and goals and abide by its commitment to changing the systems that disproportionately expose racial minorities to hazardous air pollution.

In 2008, when Darling proposed the biodiesel expansion, then-Mayor Gavin Newsom hailed the project as an environmentally sound solution to support the local communities' needs through recycling local waste materials.¹⁴⁰ While some of Darling's products are collected from local business' grease traps, in BAAQMD's most recent inspection, the BAAQMD inspector noted that most of Darling's dead animal carcasses are imported from the Central Valley of California.¹⁴¹ Further, most of Darling's end products are animal feed which do not support the local San Francisco economy.¹⁴² In its future handling of Darling's operations, the BAAQMD should consider the burden the BVHP community is bearing as a result of imported and exported products that bring little benefit to the local economy.

Finally, in 2017, the California State Legislature passed AB 617, to identify the highest priority communities impacted by criteria air pollutants and toxic air contaminants, which the

regional air districts designate as Community Air Risk Evaluation (CARE) communities.¹⁴³ Through this program, the BAAQMD commits to "applying sound scientific methods and strategies to reduce health impacts in [CARE communities]."¹⁴⁴ Further, BAAQMD commits to "engag[ing] community groups and other agencies to develop additional actions to reduce local health impacts."¹⁴⁵ These vague commitments, however, fail to identify concrete solutions to reducing health impacts and do not hold BAAQMD accountable for inaction. Thus, considering BVHP is a CARE community, the BAAQMD should develop "additional actions to reduce local health impacts" since the current regulations are insufficient to reducing local health impacts in BVHP. The BAAQMD should publicly commit to concrete goals to ensure Darling is held accountable for its impacts on a CARE community.

2. Reduce Emissions and Noxious Fumes by Urging BAAQMD to Decrease Allowable Limits

Given that Darling's emissions are well within the limits of BAAQMD's air quality regulations, yet pose health and nuisance risks to the BVHP community, the allowable limits for emissions should be decreased. ¹⁴⁶ As mentioned in the BAAQMD section above, stationary source permit limits are derived from Clean Air Plans developed by the BAAQMD.¹⁴⁷ The BAAQMD adopted its latest Clean Air Plan in 2017.¹⁴⁸ The BAAQMD has not yet announced when the next Clean Air Plan will be adopted but is required to review, revise, and incorporate new data from the 2017 plan every 3 years.¹⁴⁹ To decrease the allowable limits, the BAAQMD should update its Clean Air Plan and continue researching the cumulative effects of carbon monoxide, nitrogen oxide, and ammonia emissions on over-polluted communities.

Additionally, in the BAAQMD's 2017 Clean Air Plan, BAAQMD committed to examining the possibility of further emission reductions from boilers and steam generators.¹⁵⁰ The BAAQMD should follow through with its commitment and complete a study of the strategies to reduce the harm that Darling's commercial boilers are causing to the BVHP community. This might include researching industrial boiler electrification¹⁵¹ or more stringent odor abatement processes.

3. Take Steps Toward the Closure of Darling's San Francisco Facility in the BVHP Community

If local agencies implement the report's recommendations and Darling remains a nuisance to the community, agencies should take steps toward the closure of Darling's San Francisco facility from the BVHP community. The success of another community impacted by Darling's operations may provide hope for the BVHP community. For example, in December of 2023, Darling plans to cease operations in their Fresno rendering facility (Fresno Darling).¹⁵² The

closure comes after a long, protracted battle between residents, the San Joaquin Valley Air District (BAAQMD's Central Valley counterpart), the City of Fresno, and Darling.¹⁵³

The reasons Darling decided to close the Fresno rendering facility are unclear. It appears that Darling decided to close the Fresno facility on its own. However, the decision came after years of community advocacy to bring an end to the noxious odors and the likely health and safety impacts from the facility. City and County officials allowed Fresno Darling to operate for 60 years without a conditional use permit.¹⁵⁴ In 2012, a community group brought suit against Darling and the City of Fresno,¹⁵⁵ and the City eventually negotiated an agreement between the City, Darling, and the community group in which Darling would move its facility from its original location to a more remote location outside of the City.¹⁵⁶ In exchange, the City offered Darling multiple benefits, including tax credits, a land grant, and utility equipment upgrades.¹⁵⁷ Nonetheless, Darling has decided not to pursue the new location and has instead decided to let its current operations come to a close, pursuant to the negotiated agreement.¹⁵⁸ The approach used in Fresno may be valuable.

4. Additional Avenues for Addressing the Nuisance

As previously mentioned, Darling is regulated by seven other agencies at the local, state, and federal levels. This report did not analyze Darling's compliance with these other agencies. Darling's compliance status with these other agencies should be assessed.

First, both the San Francisco Bay Regional Water Quality Control Board and Public Utilities Commission should reveal public documents pertaining to a legally binding agreement. In 2017, the San Francisco Baykeeper secured a legally binding agreement that required Darling to clean up their facility and install a filtration system to remove pollutants from its stormwater.¹⁵⁹ The S.F. Baykeeper also sued the Public Utilities Commission to improve Darling's wastewater discharge permit.¹⁶⁰

Next, the Port should reveal lease documents Darling maintains with the Port. These lease documents were not part of the PRA requests sent on Greenaction's behalf for this report. The lease documents could reveal additional requirements that impact Darling's operations which it may or may not be in compliance with.

Finally, the permitting requirements for the California Department of Food and Agriculture, the U.S. Department of Health, and U.S. Environmental Protection Agency that apply to Darling's facility should be identified.

CONCLUSION

According to concerns raised by Greenaction, the Darling San Francisco rendering facility raises ongoing nuisance concerns for the BVHP community. In light of the ongoing nuisance concerns, and despite the sustainability benefits that the City purports Darling's facility brings, we continue to question whether BVHP should bear the brunt of the effects of the rendering facility. We conclude that Darling's compliance with other agencies mentioned in the report should continue to be investigated. These agencies include the San Francisco Bay Regional Water Quality Control Board, the San Francisco Public Utilities Commission, the San Francisco Fire Department, the San Francisco Department of Public Health, the California Department of Food and Agriculture, the U.S. Department of Health, and U.S. Environmental Protection Agency. We further conclude that local government agencies can implement the strategies outlined in this report to reduce the effects Darling's facility imposes on BVHP residents.



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