

MEMORANDUM

September 4, 2008

TO: MEMBERS, PORT COMMISSION
Hon. Kimberly Brandon, President
Hon. Rodney Fong, Vice President
Hon. Michael Hardeman
Hon. Ann Lazarus
Hon. Stephanie Shakofsky

FROM: Monique Moyer
Executive Director

SUBJECT: Request Approval of First Amendment to Lease No. L-12090 with Darling International, Inc., for premises located at Seawall Lot 344 and Pier 92

DIRECTOR'S RECOMMENDATION: Approve First Amendment to Lease L-12090

Background

Darling International, Inc. (“Darling International” and “Darling”) operates a rendering facility located at 429 Amador Street, on two parcels of land at Seawall Lot 344 and Pier 92 under Lease L-12090 (Exhibit A). Parcel A is comprised of 116,438 sq. ft. of land and includes bulk liquid storage tanks and a transfer facility, and a 475 foot long by ten foot wide easement from the transfer facility to the wharf at Pier 92. Parcel B includes 78,408 sq. ft. of land, including the rendering plant and a separate office building.

On July 19, 1996, the Port Commission approved Lease L-12090, consolidating a rendering operation (Darling International) and a bulk liquid storage and transfer facility (Baker Commodities, Inc.) under a single tenancy. Under Lease L-12090, Darling International pays \$0.13/sq. ft. plus annual adjustments based on CPI increases and monthly rent increases of \$500, with rent credits for wharfage and dockage not to exceed one half of the base rent for the same lease year. The term of the agreement is 30 years, ending in 2028, with special conditions (such as no termination option for Port projects). Darling International’s current rent is \$37,804.00/month or \$0.19/square foot.

Darling proposes, and Port staff recommends, a first amendment to Lease L-12090 to authorize the construction of a 10 million gallon capacity biodiesel production facility for the purpose

THIS PRINT COVERS CALENDAR ITEM NO. 10B

of converting of fats, oils and grease to ASTM D 6751 B100 biodiesel, as further described in this report. ASTM D 6751 is a standard published by the American Society for Testing and Materials that is the benchmark used by the U.S. biodiesel industry for fuel quality.

Rendering and Trans-Shipments Operations

Rendering involves crushing food processing industry by-products such as fat, bone and offal, heating these materials to remove water and separating the remaining fat (tallow) and solids (meat and bone) into finished products. Rendering produces different grades of tallow, depending on factors such as the concentration of free fatty acid (FFA), color, moisture and impurities. High-grade tallow is often used for soap manufacture, while lower grades are used for animal feed and in the Oleo chemical industry. Solids from rendering operations are ground for use in animal feed and fertilizer as the finished product meat and bone meal.

At its Seawall Lot 344 facility, Darling International receives feedstock via its collection fleet of approximately 45 trucks that operates throughout the Bay Area. Darling International's fleet collects food related by-products from regional dairies and livestock operations, meat packing facilities, butchers, grocers, and restaurants. Darling also collects and recycles used cooking oil from restaurants, and provides grease trap services. The Darling facility also has direct rail access, and receives shipments of feedstock and finished tallow for export by rail.

Darling International is the Port's largest maritime exporter. In 2007, Darling accounted for 12 vessels trips, exporting 21,731 liquid tons. Darling's export activity is sensitive to the value of the dollar and global economic conditions; Darling maintains U.S. markets for its tallow products when economic conditions do not favor export.

Odor Control

Darling operates its Seawall Lot 344 facility under an air quality permit issued by the Bay Area Air Quality Management District ("BAAQMD"). The BAAQMD is the lead regulatory agency for purposes of permitting odor control equipment for industrial operations such as Darling's and for receiving and investigating public complaints associated with such operations.

The processes associated with the rendering industry have the potential to produce nuisance emissions. This nuisance potential can be reduced with scrubbers and incinerators; the BAAQMD considers the installation of either of these technologies to represent best available control technology. The Darling facility is equipped with both technologies.

According to the BAAQMD complaint records, until mid-2005, Darling's Seawall Lot 344 facility had an inconsistent track record of odor control. From 2003 to 2007, the facility had 28 confirmed odor complaints, and 30 unconfirmed odor complaints, with one Notice of Violation, which was issued in July 2004. The majority of the complaints occurred in 2004; 2006 and 2007 saw one confirmed complaint per year.

Darling International reports that in 2006, it changed the main chemical used in its scrubbing process and repaired portions of the roof of its rendering plant, resulting in significantly improved odor

management. The review of the regulatory history and anecdotal reports from members of the Bayview community support this contention.

As part of an Odor Abatement System Upgrade Plan, Darling recently hired an odor management consultant, Integrated Environmental Services (“IES”), to assess the plant's odor abatement system. IES made several recommendations in its June 2008 assessment report which Darling will implement. A key recommendation is the installation of a second wet scrubber to process an additional 30,000 cubic feet per minute of air from the rendering building. This would elevate the hourly air changes in the building toward the consultant’s target of 20 per hour. Other recommendations include repairing doors and vents, ducts, hoods, and installation of equipment such as flow meters. Following implementation, IES will perform a follow-up assessment with additional recommendations as necessary.

Darling has also prepared a written Odor Management Plan for its Seawall Lot 344 plant that includes several additional recommendations by Port staff. Key features of the Plan include the designation of an on-site Odor Management Coordinator, who will assume responsibility for the plant's compliance with the Plan, a complaint hotline to receive complaints, and a form and process for investigation and follow through. Other features include routine inspections, logs, and identifications of patterns and problems.

Biodiesel Production

In late 2007, Darling International approached the City’s Department of the Environment with a proposal to construct a biodiesel production facility at its Port premises, and formally approached the Port in March of 2008.

According to Darling International, “[b]iodiesel is produced from the reaction of triglycerides with an alcohol, most commonly methanol which produces long chain mono alkyl esters, or biodiesel. These chemicals are also referred to as fatty acid methyl esters or FAME. Fats are triglycerides (a combination of three free fatty acids molecules held together by a glycerin backbone). This reaction [which is catalyzed by a base such as lye] is call trans-esterification.” Exhibit B contains the biodiesel process description submitted by Darling International to the Port for purposes of environmental review pursuant to the California Environmental Quality Act.

Darling International proposes facility upgrades within the existing footprint of its facility, as shown in Exhibit C. The company plans to construct a biodiesel production facility with a 7.5-10 million gallon annual production capacity. Darling intends to pursue BQ 9000 certification and U.S.E.P.A Section 211 certification for the facility. BQ 9000 is a standard for biodiesel production facility construction and operation published by the National Biodiesel Accreditation Program¹. Darling estimates the value of the proposed improvements at \$7-10 Million.

This biodiesel production facility would be the first such biodiesel production facility constructed and operated by Darling in the country. Nationally, Darling International is well-positioned to

¹ The National Biodiesel Accreditation Program is a cooperative and voluntary program for the accreditation of producers and marketers of biodiesel fuel called BQ-9000. The program is a unique combination of the ASTM standard for biodiesel, ASTM D 6751, and a quality systems program that includes storage, sampling, testing, blending, shipping, distribution, and fuel management practices.

become a major biodiesel producer, given its control of a major source of recycled fats, oils and grease as feedstock. While biodiesel manufactured from crops (such as corn) has come under recent criticism for potential impacts on the pricing and availability of food, biodiesel manufactured from recycled sources such as Darling’s Seawall Lot 344 facility has no similar impacts and also enjoys a significantly lower carbon footprint compared to biodiesel made with crops.

Given the size and scope of Darling International’s national and California operations, Darling has a choice of locations to site the proposed facility. Darling selected San Francisco as its preferred location due to a variety of market factors, including the City’s commitment to use biodiesel in its own diesel fleet.

Proposed First Amendment to Lease L-12090

The following proposed terms have been negotiated by Port staff and Darling International representatives over the past several months. Table 1 below shows the major terms of the existing lease L-12090 and the proposed First Amendment to Lease L-12090. In addition to authorizing the biodiesel production use at the Premises, the emphasis of the negotiations has been:

- odor control;
- site beautification;
- environmental financial assurances and insurance requirements to address potential hazards arising from Darling’s industrial operations; and
- maintenance of a strong maritime connection for the facility.

<p>Table 1: Comparison of Lease Terms († Indicates a Darling requirement triggered all or in part by issuance of permits for the proposed biodiesel production facility)</p>

Lease Terms	Current 1996 Lease	Proposed First Amendment
Use:	Assembly, distribution and storage transference to maritime cargo vessels and ground and maritime trans-shipment of bulk liquid and dry cargo and a recycling and rendering plant servicing the red meat, poultry and fish industries, the restaurant, retail food and grocery trade; and other organic waste sources.	Add: Construction and operation of a BQ-9000 (or equivalent) certified 10 million gallon capacity biodiesel production facility, certified under section 211 of the Clean Air Act (40 CFR, part 80), for the purposes of converting fats, oils and grease, including fats, oils and grease rendered at the Premises, into ASTM D 6751 (or equivalent) B100 biodiesel via transesterification, including storage facilities for feedstocks such as methanol and lye and storage facilities for biodiesel and waste by-products. The Permitted Uses include uses incidental to the foregoing described in the Operations Plan. Tenant shall conduct all operations within the Premises and the Permitted Uses in compliance with the Operations Plan attached hereto as Exhibit A.
Lease Number:	L-12090	Same

Lease Terms	Current 1996 Lease	Proposed First Amendment
Premises:	Two parcels at Seawall Lot 344: Parcel A comprised of 116,438 sq. ft. of land and including bulk liquid storage tanks and a transfer facility, and a 475 foot long by ten foot wide easement from the transfer facility to the wharf at Pier 92. Parcel B comprised of 78,408 sq. ft. of land, including the rendering plant and a separate office building.	Same
Lease Commencement Date:	1998	2008
Lease Expiration Date:	2028	Same
Monthly Base Rent:	\$37,804.00/month + CPI + \$500 month increase every five years	Same
Security Deposit:	2 months Base Rent	Same, plus Letter of Credit
Environmental Oversight Deposit:	None	\$10,000 Cash
Southern Waterfront Community Benefits:	None	<p>† Tenant will develop a site beautification plan for its Premises, at its sole cost, subject to approval by the Port's Executive Director.</p> <p>When the Port upgrades the Amador Street sewer infrastructure, Tenant, at its sole cost, shall reroute its stormwater discharge to the City's combined sewer system.</p> <p>† No later than December 21, 2010, for as long as Tenant is in commercial production of biodiesel at the Premises, Tenant shall use its best efforts to use B20 biodiesel or a product with a higher biodiesel component in its fleet of owned or leased vehicles used in connection with Tenant's operations at the Premises, as long as such use is economically competitive and technologically feasible. When replacing owned or leased vehicles that regularly deliver materials to and from the Premises, Tenant agrees to evaluate engine technologies and emission control technologies that result in reduced emissions, including but not limited to electric vehicles and other zero-emission vehicles and to purchase and</p>

Lease Terms	Current 1996 Lease	Proposed First Amendment
		use such engine or emission control technology to the extent such engine and emission control technology is cost competitive with and the functional equivalent to other available technology.
Tenant’s Maritime Commitment	Implied	Maritime Tenancy. Port acknowledges that Tenant’s production of biodiesel could diminish its maritime trans-shipments of bulk liquids (tallow and yellow grease) and that fluctuations in the commodities markets for tallow and yellow grease and biodiesel may affect the degree to which Tenant produces either and the associated manner of shipment. Nevertheless, Tenant acknowledges that it operates and must continue to operate a Port maritime facility. In order to maintain its status as a maritime Tenant, Tenant shall continue to engage in maritime trans-shipment activities and comply with the requirements of the [Marine Fueling Station] Section.
Multi-Modal Marine Biodiesel Fueling Station	NA	<p>† Marine Fueling Station. Tenant shall cooperate with Port in the design, engineering and permitting of a maritime or multimodal, including marine fueling, biodiesel fueling station (“Fueling Station”), in accordance with the following:</p> <p>(a) Tenant shall be available to Port for consultation in connection with the investigating the feasibility of locating a Fueling Station at Pier 92 or on other Port property designated by the Port and permitting for such Fueling Station, including, without limitation, California Environmental Quality Act review; and</p> <p>(b) Tenant will pay for the cost of permitting, conceptual design, and engineering plans for a Fueling Station, up to a maximum cost to Tenant of One Hundred Twenty-Five Thousand Dollars (\$125,000). Port shall retain a design/engineering firm(s) to design and engineer the Fueling Station.</p> <p>The Parties agree that a third party or third parties may finance, construct and operate a Fueling Station under a separate Port lease or other agreements.</p> <p>Tenant shall have ninety (90) days from Port’s written notice to negotiate a multi-year supply contract for ASTM 6751 B-100 (or equivalent) unblended biodiesel at market prices with the prospective Fueling Station tenant. If Tenant is unable to execute such a contract, Port</p>

Lease Terms	Current 1996 Lease	Proposed First Amendment
		shall refund Fifty Thousand dollars (\$50,000) to Tenant.
Operations Plan:	None	Prior to execution of this First Amendment, Tenant will submit, and Port's Executive Director will approve in her sole discretion, an Operations Plan that documents its procedures consistent with law, industry standards, best management practices and good house-keeping and provides a detailed description of Tenant's industrial activities and equipment, facility housekeeping, vector control, air quality and odor control and monitoring measures, water quality and stormwater pollution prevention measures, noise control measures, hazardous materials and waste management practices, and other best management practices as well as an Odor Management Plan (OMP), including odor abatement system improvements.
Insurance:	\$5 Million Commercial General Liability \$1 Million Automobile Liability (owned and hired vehicles) \$1 Million Workers Compensation & U.S. Longshore and Harborworker's Act	\$10 Million Commercial General Liability (which will cover Tenant's contractors) \$1 Million Automobile Liability (owned, non-owned and hired vehicles) Property Insurance, full replacement value, for office building ‡\$5 Million Pollution Legal Liability, including sudden and accidental release of pollutants Builders Risk Insurance, 100% value of completed construction, for projects in excess of \$50,000 Boiler and Machinery Insurance, including odor control equipment, full replacement value <i>all in a form subject to approval by the City Risk Manager</i>
Letter of Credit	None	‡\$500,000, to cover Tenant's obligations related to Hazardous Materials
City Requirements:	City requirements existing as of 1996: Non-Discrimination; MacBride Principles; Tropical Hardwood Ban; Tobacco Products Advertising Ban; Burma (Myanmar) Business Prohibition.	The lease amendment includes provisions requiring Tenant to comply with all additional applicable City laws (including, but not limited to, First Source Hiring, Health Benefits Coverage, Limitation on Contributions, Prevailing Wages and other applicable laws).

Regulatory Approvals

The Planning Commission approved Conditional Use Application No. CU69.034 on July 3, 1969, to permit a plant at 429 Amador Street for the rendering or reduction of fat, bones, or other animal

material. Darling International has obtained a letter of determination from the Zoning Administrator that adding the necessary equipment and storage to the subject facility for the purpose of further refining animal fats, oils, and greases into biodiesel fuel is permitted under Conditional Use Application No. CU69.034 and does not require a new Conditional Use Authorization per Planning Code Section 178(c).

The Port and Darling International expect to obtain a CEQA finding of Categorical Exemption from the City Planning Department for the use and improvements contemplated in the proposed First Amendment to Lease L-12090.

Darling will be required to obtain a permit from the Bay Area Air Quality Management District and the Port’s Engineering Division for the construction of the proposed biodiesel production facility. Exhibit C contains a list of the required permits and plans for Darling’s operation at the Amador Street Premises, including those required for biodiesel production contemplated by the proposed lease amendment.

Southern Waterfront Advisory Committee

On Wednesday, August 27, 2008, Port staff and Darling representatives presented the proposed First Amendment to Lease L-12090 to the Port’s Southern Waterfront Advisory Committee.

There was strong consensus support for Darling’s proposed biodiesel production use; clear recognition that Darling has taken steps over the past several years to improve odor control; and strong positive feedback about Darling’s commitment to work with Young Community Developers and its various unions to recruit Bayview residents to fill vacant positions at its San Francisco operation.

Air Emissions Reductions Associated with Biodiesel

Table 2 below compares the emissions reductions associated with B100 and B20 biodiesel compared to diesel. B20 biodiesel is a mixture of 20% B100 biodiesel and 80% diesel.

Table 2: Comparison of Diesel, B100 Biodiesel and B20 Biodiesel Air Emissions			
Diesel emission	Environmental Impact	B100 Biodiesel Reduction	B20 Biodiesel Reduction
Nitrogen Oxides	Contributes respiratory disease and smog	2-5%	0 % (<i>average</i>)
Sulfur Oxides	Causes respiratory disease and contributes to acid rain	100%	20%
Particulate matter	Black soot and smoke exhaust, toxic air contaminant	47% (<i>40-60%</i>)	10-17%
Carcinogens	Cancer causing materials	94%	19%
Carbon Dioxide (CO2)	Primary greenhouse gas contributing to global warming	78%	16%
VOCs	Volatile organic compound, air pollutant	85%	17%
Carbon Monoxide (CO)	Toxic Gas	48%	10%

1. Source: U.S. Environmental Protection Agency. *Figures in italics* are from Dr. Robert McCormick, National Renewable Energy Laboratory, 2007.
2. Because use of low-sulfur and ultra low-sulfur diesel is now standard, the comparison of sulfur-oxide emissions (diesel vs. biodiesel) is no longer meaningful.

Related City Policies

The proposed First Amendment to Lease L-12090 meets or fosters several City policies designed to promote the use of alternative fuels and/or reduce harmful vehicle emissions, including:

- The Healthy Air and Smog Prevention Ordinance (Environment Code, Ch.4), which established the Clean Air Program and requires all new purchases or leases of passenger vehicles and light duty trucks must either be rated as ultra-low emission vehicle (ULEV) or zero emission vehicles (ZEV) if their cost was within one and a half times the cost of a conventional vehicle. This ordinance also requires the City to build the necessary alternative fuel infrastructure to support clean vehicles. If the feasibility analysis shows the need for a marine, multi-modal biodiesel fueling station and such a station is ultimately approved and constructed, this would meet the goals of this ordinance.
- The Clean Construction Ordinance (Administrative Code 6.25 and Environment Code, Section 411) requires City contractors to adopt clean construction practices including biodiesel fuel and emissions control within two years of the adoption of the ordinance (May 2009) and allows City departments that are authorized to award public works contracts to compare bids on the basis of clean construction practices. By expanding the availability of biodiesel in the City, including fueling infrastructure designed to serve industrial corridors, the First Amendment promotes the goals of this ordinance.
- The Climate Ordinance (Environment Code, Chapter 9), establish City greenhouse gas targets and departmental action plans, with the following targets for greenhouse gas emissions (GHG):
 - by 2008, determine 1990 City GHG emissions
 - by 2017, reduce GHG emission 25% below 1990 levels
 - by 2025, reduce GHG emission 40% below 1990 levels
 - by 2025, reduce GHG emission 80% below 1990 levels

Mayor Newsom has taken strong action to increase the use of alternative fuels for City fleets. Mayoral Executive Directive 05-103: Alternative Fuel Vehicles, requires 75% of new purchases for non-emergency passenger automobile fleet to be comprised of alternative fuel vehicles and 90% of the non-emergency passenger automobile fleet to be comprised of either alternative fuel vehicles or high efficiency vehicles. Mayoral Executive Directive 06-02: Biodiesel for Municipal Fleets, required 100% implementation of B20, a blend of 80% petroleum diesel and 20% biodiesel, by December 31, 2007, for the City's 1,500 diesel vehicles and pursuit of further increases through the use of greater than B20 blends and/or neat biodiesel (B100). The proposed First Amendment will assist with the implementation of these policies by introducing a local biodiesel production facility that relies on the local grease cycle.

Backlands

In June 2007, in conjunction with the Mayor's Office of Economic and Workforce Development, the San Francisco Public Utilities Commission, the City Administrator, the Department of Public Works, and the Department of the Environment, Port staff conducted a workshop with the Southern Waterfront Advisory Committee and the Maritime Commerce Advisory Committee to discuss

leasing options for the Backlands. A major focus of the discussion was leasing all or a portion of the Backlands for purposes of developing an Eco-Industrial Park, combining the following possible uses (subject to Port Commission approval) that utilize materials generated by Port industrial tenants and maximize environmental efficiencies:

1. Biodiesel manufacturing, including a marine biodiesel fueling station.
2. Southeast Treatment Plant biosolids handling, including methane recapture for power generation.
3. Food waste digesters, utilizing state-of-the-art technology to digest in-City food waste and capture methane for power generation.
4. Solar power generation, as part of new development, and a training center for residents of the Southeast Community to become solar installers.
5. An asphalt plant, concrete batching plant and construction materials recycling center (which produces sand and gravel that can be used in either concrete or asphalt production) could be co-located in a localized area to foster easy recycling and reuse of materials. The development of a new asphalt plant requires closing the City's older asphalt plant, which has limited recycling capacity and older emission controls.
6. Natural-based stormwater management swales, and related landscaping improvements, such as improvements being planned by the Redevelopment Agency and the Port along Cargo Way, to beautify the area.

In early 2008, the National Association of Industrial and Office Properties, San Francisco Chapter, conducted its 19th annual real estate challenge with a focus on development options for the Port's Piers 94-96 Backlands, in consultation with Port staff. Student teams from the U.C. Berkeley Haas School of Business and the Stanford Graduate School of Business participated in the challenge. The U.C. Berkeley team won the challenge with its Eco-Equity Park proposal, which included a biodiesel production facility utilizing material from Darling's facility.

The First Amendment establishes an anchor Port tenant for a potential future Eco-Industrial Park on the Port's Piers 94-96 Backlands.

Staff Recommendation

Port staff recommends approval of the First Amendment to Lease L-12090.

Prepared by: Brad Benson, Special Projects Manager
Rich Berman, Regulatory Specialist

**PORT COMMISSION
CITY AND COUNTY OF SAN FRANCISCO**

RESOLUTION NO. 08-61

WHEREAS, Charter Section 4.114 grants to the Port Commission the authority and duty to use, conduct, operate, maintain, regulate and control the lands within the Port jurisdiction; and

WHEREAS, Darling International, Inc., a Delaware corporation, (“Darling International”) operates a rendering and bulk liquid transfer facility at Seawall Lot 344 under Lease L-12090 with the Port; and

WHEREAS, Darling International proposes to construct and operate a biodiesel production facility in the existing footprint of its facility at Seawall Lot 344; and

WHEREAS, The Port and Darling International have completed lease negotiations and propose to enter into a First Amendment to Lease L-12090 (“First Amendment”) on the terms outlined in the Staff Report accompanying this Resolution and described in the proposed lease on file with the Port Commission Secretary (“Lease”); and

WHEREAS, The Planning Commission approved Conditional Use Application No. CU69.034 on July 3, 1969, to permit a plant at 429 Amador Street for the rendering or reduction of fat, bones, or other animal material; and

WHEREAS, Darling International has obtained a letter of determination from the Zoning Administrator that adding the necessary equipment and storage to the subject facility for the purpose of further refining animal fats, oils, and greases into biodiesel fuel is permitted under Conditional Use Application No. CU69.034 and does not require a new Conditional Use Authorization per Planning Code Section 178(c); and

WHEREAS, The Port and Darling International obtained a CEQA finding of Categorical Exemption from the City Planning Department for the use and improvements contemplated in the proposed First Amendment; now, therefore, be it

RESOLVED, That the Port Commission approves the First Amendment to Lease L-12090 and authorizes the Executive Director or her designee to execute the First Amendment, in substantially the form on file with the Port Commission Secretary; and, be it further

RESOLVED, That the Port Commission authorizes the Executive Director to enter into any additions, amendments or other modifications to the First Amendment that the Executive Director, in consultation with the City Attorney, determines are in the best interests of the Port, do not materially increase the obligations or liabilities of the City or Port, and are necessary or advisable to complete the transactions which the First Amendment contemplates and effectuate the purpose and intent of this Resolution, such determination to be conclusively evidenced by the execution and delivery by the Executive Director of the First Amendment, and any such amendments thereto.

RESOLVED, That the Port Commission authorizes the Executive Director to approve Darling International's operations plan, odor management plan and site beautification plan, all in substantially the form on file with the Port Commission Secretary and such future amendments to the operations plan that the Executive Director, in consultation with the City Attorney, determines are in the best interests of the Port, do not materially increase the obligations or liabilities of the City or Port, and are necessary or advisable to protect the Port's interests, such determination to be conclusively evidenced by the execution and delivery by the Executive Director of the Lease, the operations plan, the odor management plan and the site beautification plan, and any such amendments thereto.

I hereby certify that the foregoing resolution was adopted by the Port Commission at its meeting of September 9, 2008.

Secretary

Exhibit A:
Darling International Lease L-12090 Premises
429 Amador Street, Sewawall Lot 344

Exhibit B:
Biodiesel Process and Project Description
(prepared by Darling International, Inc.)

Darling International, Inc. ("Darling") operates a rendering facility at 429 Amador Street on property leased from the Port of San Francisco (the "Port") at Pier 92 in San Francisco (the "Property"). The facility has operated pursuant to an approved conditional use permit ("CUP") for nearly 40 years. Darling proposes to add equipment within its existing facility to further refine finished fats, oils and greases into biodiesel, which is an environmentally-friendly renewable fuel.

It is Darling's understanding, based on preliminary conversations with the Zoning Administrator, that the additional process to further refine its existing finished products into biodiesel falls within the existing Planning Code use classification and within the terms of the existing CUP. Although Darling believes that the additional process is also consistent with its existing lease, Darling has voluntarily agreed to seek Port Commission approval of an amendment to its existing lease to add specific authorization for this additional process.

The Property is located within an M-2 Heavy Industrial zoning district. A CUP is required under Planning Code Section 226(8)(u) for the rendering or reduction of fat, bones or other materials. A CUP was approved for the rendering facility on the Property by Resolution No. 6398, adopted by the Planning Commission on July 3, 1969 (attached). The rendering facility has been operating under this CUP for approximately 38 years and has provided valuable service to the City of San Francisco consistent with the CUP. Darling will continue to operate its rendering process the same way it does today except the currently-produced finished fats, oils and greases will be refined one step further into biodiesel.

Biodiesel is produced from the reaction of triglycerides with an alcohol, most commonly methanol which produces long chain mono alkyl esters, or biodiesel. These chemicals are also referred to as fatty acid methyl esters or FAME. Fats are triglycerides (a combination of three free fatty acids molecules held together by a glycerin backbone). This reaction is call trans-esterification.

The biodiesel manufacturing process will incorporate the following stages:

- Pretreatment of fat prior to trans-esterification: The fats and oils which will be stored in existing tanks will be processed using traditional vegetable oil refining processes. Impurities which will interfere with conversion of fats and oils to quality biodiesel will be removed. The process will utilize small amounts of water, common acids and alkalis. Products from the pretreatment process are free fatty acids, waste water, and small quantities of spent silica.
- Transesterification: The pretreated fat will be converted to methyl esters utilizing methanol and an alkali as a catalyst, yielding ASTM² quality biodiesel, glycerin, and excess methanol. The products are not miscible and the FAME can be recovered by simple sedimentation, or using more efficient mechanical separators such as washing columns or centrifuges.
- Finished product loadout: A truck loadout facility for the biodiesel and glycerin mix will be located next to the biodiesel processing and storage facility.

² The American Society of Testing and Materials (ASTM) is the premier standard-setting organization for fuels and fuel alternatives.

The facility will be capable of producing high quality biodiesel (ASTM 6751), will be EPA 211 certified and will seek compliance with BQ-9000 manufacturing standards.³

The additional refining step will not result in any noticeable impacts on the surrounding community. The additional refining step will utilize a contained process so there will be no additional odors or volatile organic compound emissions. There will be no additional noise impacts because the process equipment associated with biodiesel production does not generate noise except for the electric motors which are not expected to add to the already low noise level from the existing operation. The additional refining step will not require an expansion of building floor area.

The shipment of biodiesel will replace current shipments of existing finished products (fats, oils and greases) with only a small, marginal increase in the overall volume of material transported to and from the facility. It is currently anticipated that the production of biodiesel will result in approximately four to six additional truck trips per day.

The biodiesel manufacturing process will make limited use of the available open paved area next to the existing building for the construction of three to four 100,000 gallon above-ground storage tanks (AST's) for finished biodiesel and four to five 10,000 gallon AST's for process chemicals. Depending on the final design, the process could also include a small methanol recovery vessel and a small fat refining vessel (columns a few feet in diameter and less than forty (40) feet high).⁴ A loading and unloading system will also be provided in connection with the AST's. The subject building and associated AST's are located adjacent to an existing tank terminal. This terminal includes approximately 30 existing AST's ranging in size from approximately 2,500 to 270,000 gallons as shown in the attached Figure 1. The proposed AST's will occupy an area of approximately 1,500 square feet, and will not displace any existing uses, parking, loading areas, or have a negative impact on fire lanes. The added AST's will be smaller in size than the majority of the existing AST's, and will result in less than a 5% increase in the overall AST footprint and less than a 3% increase in the overall operational footprint of the facility.

Further, because none of the chemicals will be "putrescible" at the concentration that they will be stored at in these tanks and vessels, the biodiesel manufacturing process will be consistent with CUP Condition No. 4 which requires putrescible material (material liable to become decomposed and foul-smelling or rotten) to be stored inside.

Construction impacts will be negligible. On-site construction activity is expected to require approximately five to six months. The project is expected to be complete and operational by the summer of 2010.

³ To receive BQ-9000 accreditation from the National Biodiesel Accreditation Program, Darling must pass a rigorous review and inspection of its quality control processes by an independent auditor to ensure that quality control is fully implemented.

⁴ These vessels will not produce any odors. The methanol recovery vessel is fully contained with no emission points other than a small non-condensable vent which is controlled by a scrubber. The fat refining vessel will always be under a vacuum preventing any discharge to the atmosphere.

**Exhibit C:
Darling International, Inc.
Permits and Regulatory Requirements for San Francisco Plant**

- 1 Licensed Renderer
California Department of Food and Agriculture
- 2 Inedible Kitchen Grease Renderer
California Department of Food and Agriculture
- *3 Hazardous Materials Unified Program Agency Permit, including Hazardous Materials
Business Plan
San Francisco Department of Public Health
- *4 Spill Prevention Control and Countermeasure Plan
San Francisco Department of Public Health and
United States Environmental Protection Agency
- *5 Facility Response Plan
United States Environmental Protection Agency
- *6 Stormwater Pollution Prevention Plan
San Francisco Bay Regional Water Quality Control Board
- *7 Air Permit To Operate
Bay Area Air Quality Management District
- *8 Wastewater Discharge Permit
San Francisco Public Utilities Commission

*These permits and plans will require updates to reflect biodiesel production and related processes.