

## INITIAL STUDY

*The Department of Toxic Substances Control (DTSC) has completed the following Initial Study for this project in accordance with the California Environmental Quality Act (§ 21000 et seq., California Public Resources Code) and implementing Guidelines (§15000 et seq., Title 14, California Code of Regulations).*

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### I. PROJECT INFORMATION

Project Name: Evergreen Environmental Services, Carson Facility - Series B Standardized Permit

Site Address: 16604 South San Pedro Street

City: Carson State: California Zip Code: 90746 County: Los Angeles

Company Contact Person: Darwin Hall

Address: 2355 Main Street, #230

City: Irvine State: California Zip Code: 94614 Phone Number: (949) 440-8332

### **Project Description:**

#### **DISCRETIONARY ACTION**

In accordance with the Health and Safety Code (H&SC) Section 25201.6, the Department of Toxic Substances Control (DTSC) is considering the issuance of a Series B Standardized Permit to Evergreen Environmental Services - Carson Facility (EES), EPA ID Number CAD 981 696 420, to operate a hazardous waste storage and transfer facility in Carson, Los Angeles County, California, to collect, bulk store and transfer used oil, waste antifreeze, oil contaminated solid waste, and oily water from offsite generators. No recycling or treatment of used oil is allowed under the Standardized Permit and all used oil must be shipped offsite to a permitted hazardous waste transfer, treatment, storage, or disposal facility.

#### **PERMITTING HISTORY**

The California Legislature passed the Hazardous Waste Control Laws in 1972. The U.S. Congress passed the Resource Conservation and Recovery Act (RCRA) in 1976. These two laws require all facilities that treat, store or dispose of hazardous waste to obtain a permit to operate. In August 1991, DTSC received authorization from the United States Environmental Protection Agency (USEPA) to implement the federal RCRA program in California. As such, DTSC became the sole agency conducting comprehensive technical reviews of permit applications for hazardous waste facilities.

In 1992, the California legislature enacted the Wright-Polanco-Lempert Hazardous Waste Treatment Permit Reform Act [Assembly Bill 1772 of 1992] (Act) that made important changes to California laws governing the treatment and storage of hazardous waste. The Act establishes a five-tiered hazardous waste permit program to treat or store hazardous waste. The five tiers include the full permit, the standardized permit, the permit-by-rule, the conditionally authorized and the conditional exempt.

On September 10, 1992, USEPA promulgated a final listing decision for used oils that are recycled and also promulgated standards for the management of used oil under RCRA section 3014. USEPA determined that used oil that is recycled does not have to be listed as a hazardous waste since the used oil management standards being promulgated in the same rulemaking are adequately protective of human health and the environment. Used oil that is disposed of will need to be characterized like any other solid waste and need to be managed as hazardous if it exhibits a characteristic of hazardous waste or if it is mixed with a listed hazardous waste.

California's requirements for used oil are more stringent than federal requirements. The California Health and Safety Code (H&SC), Section 25250.4 requires used oil to be managed as a hazardous waste unless it qualifies for a recycling exclusion or is shown to meet the specifications for recycled oil.

All used oil brought to the EES facility is intended to be recycled at another offsite used oil recycling facility. Therefore, the EES facility and operations are exempted from federal hazardous waste management facility regulations. EES is regulated under the Standardized Permit which is reserved for hazardous waste operations that require a permit under California law but are exempted under federal law.

The EES facility began operations at 16604 South San Pedro in Carson, California in June 1992 under a variance issued by DTSC. EES's operations consist of collecting used oil, waste antifreeze, oily water, and oil contaminated solid waste from offsite generators (gas stations, oil changers, auto repair shops, etc.) and consolidating the waste before shipping it to a permitted recycling/treatment/disposal facility. On March 14, 1994, DTSC issued a Stipulation and Order (Docket Number 93/94-026) in accordance with California Health and Safety Code, Section 25187, allowing continued operations at EES.

In accordance with the terms of the Stipulation and Order, EES submitted a Standardized Permit application to the California Department of Toxic Substances Control (DTSC) dated March 31, 1994 for continued operations of their hazardous waste storage and transfer facility. The application requested continuation of their existing operations authorized by the Stipulation and Order. The application also requested addition of two (2) drum storage areas to store eighty 55-gallon containers of solid oily waste and ten 55-gallon containers of liquid oily waste.

The Standardized Permit application underwent numerous DTSC reviews and required revisions by EES. On November 23, 1999, DTSC determined that EES's Standardized Permit application was technically complete.

DTSC prepared a draft permit and proposed negative declaration in compliance with the California Environmental Quality Act (CEQA) for this project. DTSC issued a public notice on December 7, 1999 to announce the start of a public comment period. The public notice encouraged the public to become involved in the EES permit decision process by requesting comments on the draft permit and proposed CEQA negative declaration. The public comment period ended on January 21, 2000. DTSC received numerous comments during the public comment period including a request for a public hearing. The request was approved. DTSC extended the public comment period and held a public hearing on February 17, 2000 at the Carson Community Center in Carson.

The amount of public comments received and a significant loss of staff at DTSC has resulted in significant delays in issuing a Response to Comments and the final permit decision. DTSC issued the Response to Comments on October 31, 2003; however, DTSC postponed the issuance of a final decision on the EES permit. DTSC recognizes that a significant length of time has elapsed since the end of the previous public comment period. Therefore, DTSC has revised the draft permit, CEQA Initial Study, Negative Declaration, and permit application to address concerns received during the previous public comment period. DTSC is public noticing the revised draft permit and initial study. Additionally, DTSC will hold a second public hearing to solicit comments.

## FACILITY LOCATION

The EES facility is located at 16604 S. San Pedro Street, City of Carson, County of Los Angeles, 33 degrees 52' 52" N latitude and 118 degrees 15' 51" W longitude. The facility site (see Figure 1) is approximately 285 feet by 230 feet (1.65 acres), and is located in a developed area zoned for heavy manufacturing land use (local zoning designation of MH).



**Figure 1. Land Use Around the EES facility**

There are a total of four buildings (a foundry, a large woodworking factory, a machine shop, and a tool manufacturing plant) located immediately north and west of the site (See Figure 2, Aerial Photo of the EES Facility). To the south and east surrounding the site is area zoned open space which includes Vernon Hemmingway Park (designed for recreational use and contains a set of swings, tennis courts, softball diamond, and a small clubhouse). Three Southern California Edison high voltage towers are located on or near the park and the voltage lines cut across one corner of the park. Ralph Bunche Elementary School, located at 16223 S. Haskins Lane, is approximately 0.5 miles northeast of the facility. Amber Avenue Elementary School is located at 319 E. Sherman Drive and is approximately 0.75 miles southwest of the facility. California State University, Dominguez Hills, located at 1000 E. Victoria Street, is approximately 2 miles southeast of the facility, past the Artesian Freeway (State Route 91). Residential housing is located approximately 0.25 miles west of the facility, past Vernon Hemmingway Park. Other residential housing is located approximately 0.5 miles southwest of the facility.

A ten foot high cinder block wall separates the facility site from the 13 acre Vernon Hemingway Park. The driveway leading into the main facility site is lined by a 10 foot cinder block wall on the south and a 10 foot similar type of wall on the north. The remaining western boundary has a 10 foot high chain link fence set on top of a 21 inch high cinder block wall.



**Figure 2. Aerial Photo of the EES Facility**

## **SITE HISTORY**

The facility is located in an area zoned for heavy manufacturing land use. Prior to industrial development (before 1985), one oil well owned by Occidental Petroleum Company (OPC) was drilled on the site. Eight additional oil wells were drilled on adjacent parcels. Five of the wells were owned by OPC and the other three were owned by Western Springs Petroleum Company. All of the nine oil wells were closed under the State's supervision prior to 1985.

On February 22, 1985, GNS Petroleum applied for a transfer station permit to temporarily store used oil waiting to be shipped to other locations. In January 1987, Rutherford Pacific leased the site for the operation of a used oil transfer station. Two years later in January 1989, California Waste Oil Management, a division of the Petroleum Recycling Corporation, leased the property and continued to use the facility for the same purpose.

Conservtech completed a Phase I and II Environmental Site Assessment and a Supplement to the Environmental Site Assessment (Supplement) for Evergreen Holding Inc. prior to EES starting operation. The Phase I Assessment consisted

of a review of public agency records of the site as well as adjacent properties to identify incidents or activities likely to cause or contribute to a release of hazardous substances. In July of 1991, Conservtech conducted an inspection of the site as part of the Phase 1 assessment. Conservtech personnel observed seven (7) aboveground tanks on a concrete pad for the storage of used oil and antifreeze in a central area of the property. Several 55-gallon drums, containing engine oil and transmission fluid, were also observed near the southern edge. An aboveground diesel tank and dispenser was located near the southwest corner of the facility. A sump in the tank pad collected spilled liquid that was pumped into one of the seven tanks. Minor oil stains were evident on the pavement east of the tanks pads; however, Conservtech personnel noted that the grounds surrounding the tanks appeared to be quite clean. All the tanks and containers were emptied and removed during August to September of 1991.

A Phase II Assessment, consisting of soil sampling, was performed to determine if there was presence of any hazardous constituents in the soil. The sample locations were chosen to investigate those areas associated with past oil well development and former storage tanks as well as the perimeter of the property. Four samples were taken in August 1991 and results found elevated concentration of Total Petroleum Hydrocarbons (TPH) in the area of former storage tanks. The highest TPH concentration came from one sample taken at 5 feet below ground surface which showed TPH concentration of 2,500 parts per million (ppm). Another sample taken at 3 feet below ground surface showed TPH concentration of 1,600 ppm. Additional soil sampling was conducted to determine if the August 1991 analytical results were indicative of a broader subsurface problem and to explain the source of the TPH in soils.

On September 26, 1991, four trenches, located near the perimeter of a former concrete pad where seven aboveground used oil storage tanks were situated, were excavated to obtain soil samples. It was noted that a well-defined layer of black material several inches thick was found at a depth of 3.5 to 5.5 feet in the side walls of the four trenches.

The subsurface layer of black material had the general appearance and physical properties of asphalt concrete and appeared relatively uniform in the former tank area. The Supplement suggests that the material was used to build on-site roads that traversed the property during the oil field development. Photographs from 1970 and 1975 showed these roadways. The Supplement concluded that the elevated TPH concentrations reported in several soil samples were obtained at or near the roads which traversed the property prior to the import of fill material (soil).

The assessment did not indicate any groundwater contamination. Groundwater at the site is at least 120 feet below ground surface.

DTSC has reviewed the Environmental Site Assessment submitted by EES as part of its permit application and concluded that no further investigation or corrective action is necessary.

EES received a variance from DTSC to construct a new used oil transfer facility in June 1992. EES started operations in May of 1993 and has been collecting used oil, waste antifreeze, oily water, and oil contaminated solid waste at this location since this date.

### **Project Activities:**

#### **EXISTING AUTHORIZED UNITS**

EES operated under a variance issued by DTSC on May 28, 1993. On March 14, 1994 DTSC granted a subsequent authorization to EES under a Stipulation and Order (Order), Docket Number 93/94 - 026, under H&SC Section 25187, permitting the continued operation of the facility.

Under the Order, EES is authorized to collect, bulk store and transfer used oil, oily water and waste antifreeze from off-site generators, and transport these manifested wastes to the EES facility where it is consolidated before being shipped to a permitted treatment facility.

EES is currently authorized to operate the following units:

- a) Tank Storage Area in Containment Area #1 (Unit #1); and,
- b) Truck to Truck Transfer Unit in Loading/Unloading Area (Unit #4).

The facility operates with a total maximum hazardous waste tank storage capacity of 92,492 gallons. Unit #1 consists of ten aboveground storage tanks (See Figure 3, Aboveground Storage Tanks in Unit #1) and are as follows:

Tank	Permitted Capacity (Gallons)	Content (Common Name)
Tank #1	9,726	Used Oil
Tank #2	9,726	Used Oil
Tank #3	9,906	Used Oil
Tank #4	11,587	Used Oil
Tank #5	9,697	Waste Antifreeze
Tank #6	9,726	Oily Water
Tank #7	5,983	Waste Antifreeze
Tank #8	10,760	Used Oil
Tank #9	10,760	Used Oil
Tank #10	4,621	Waste Antifreeze
Total Capacity of Unit #1	92,492	

Table 1. Aboveground Storage Tanks in Unit #1

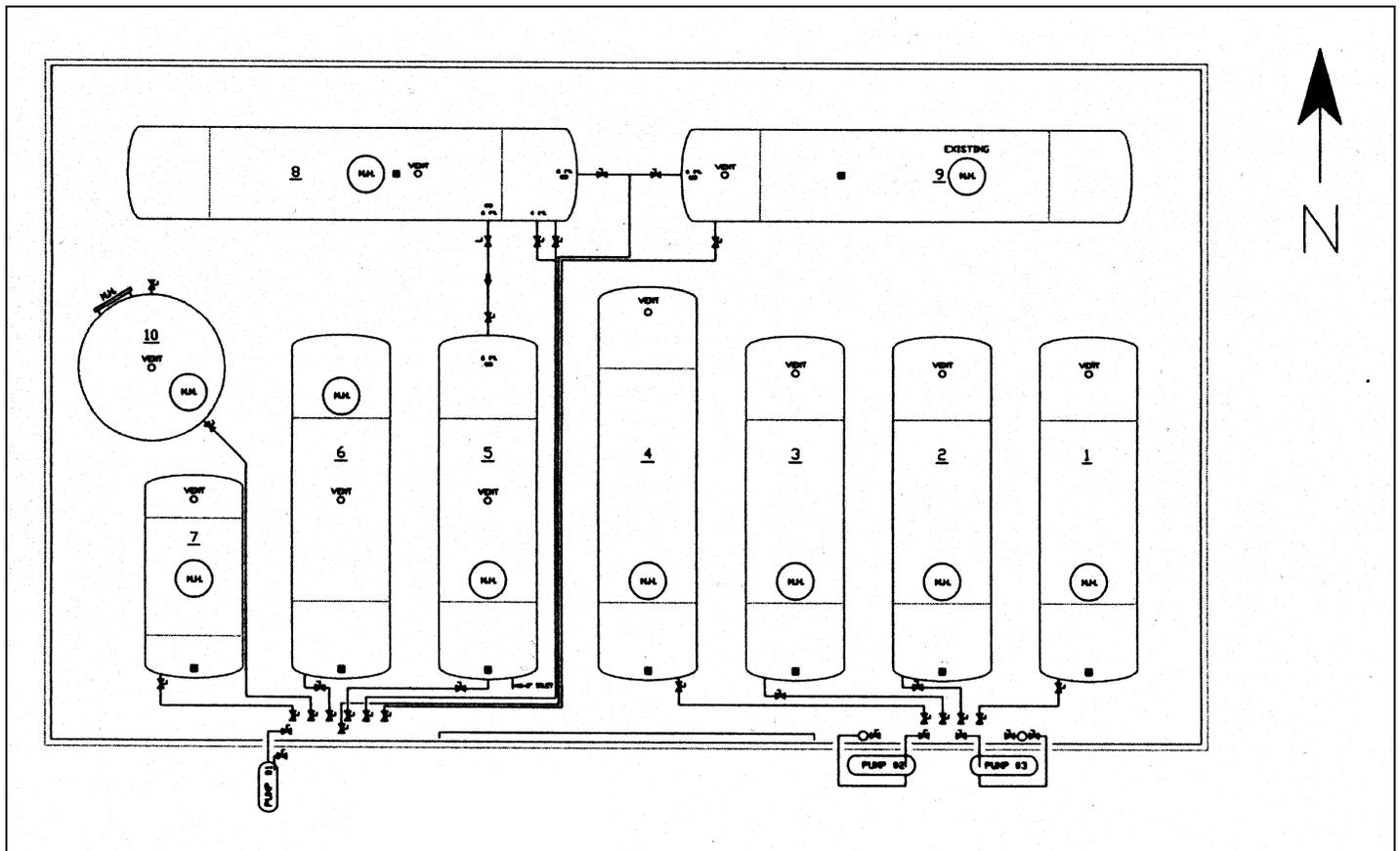


Figure 3. Aboveground Storage Tanks in Unit #1

**Tank Storage Area in Containment Area #1 (Unit #1).** Unit #1 is located (at its closest points) approximately 40 feet from the north perimeter fence line, 60 feet from the east perimeter cinder block wall, 54 feet from the west perimeter fence line and 170 feet from the south perimeter cinder block wall. It is constructed of a reinforced concrete slab 8 inches thick and measures 55 feet by 94 feet. Unit #1 is completely enclosed by a 2 foot high by 8 inch thick berm and its surface has been sealed to provide containment for 45,122 gallons in the event of a release from the existing tanks located within Unit #1 as required by California Code of Regulations, Title 22, Section 264.193.

**Truck to Truck Transfer Unit in Loading/Unloading Area (Unit #4).** Unit #4 is located adjacent to and south of Unit #1. It is constructed of a reinforced concrete slab approximately 8 inches in thickness that measures approximately 50 feet by 100 feet. It is sloped toward the Unit #1 and has a 6 foot by 2 foot by 1 foot deep sump located in the north center edge. This area has a secondary containment capacity of approximately 25,400 gallons which is capable of containing a spill from the largest truck (7,000 gallons) allowed to operate within Unit #4.

#### CURRENT OPERATIONS.

Exempted Operations. EES is a registered hazardous waste transporter and may legally remove packaged or containerized waste from a registered transport vehicle. The waste may then be stored up to 10 days in secured trucks in an appropriate location at the facility in compliance with all local, state and federal requirements pursuant to section 66260.10, Title 22, California Code of Regulations (22 CCR). Additionally, pursuant to 22 CCR 66263.18, EES (a transfer facility) is not subject to the permitting requirements for hazardous waste storage when, during the normal course of transportation, hazardous wastes are held for 6 days or less, or 10 days or less for transfer facilities in areas zoned industrial by the local planning authority, as long as: (a) manifested shipments of packaged or containerized hazardous wastes are only transferred from one vehicle to another, and (b) the packages or containers are the same packages or containers. EES currently accepts both non-RCRA and RCRA hazardous waste on a transfer basis. These hazardous waste must stay in their original DOT-approved containers and the containers must remain closed at all time. The containers also must remain in secured trucks at the facility. The containers may be transfer from truck to truck but are not allowed to be unloaded at any time at the facility.

EES also collects household hazardous waste as part of its exempted operations. The household hazardous waste consists mainly of used oil and waste antifreeze and is done in conjunction with household hazardous waste collection programs conducted by local government agencies. The used oil and waste antifreeze may be pumped into the appropriate storage tanks.

#### Permitted Operations.

##### Used Oil and Oily Water

EES, as a registered hazardous waste transporter, collects used oil, oily wastewater, spent antifreeze, and oil contaminated solid waste from approved customers using 15 bobtail trucks. The trucks are annually inspected by the California Highway Patrol as required for its DTSC hauler registration renewal. When EES picks up used oil and oily wastewater from the waste generator, the driver observes the wastes and performs a waste screening analysis to ensure no halogens, solvents or other non-oil wastes are accepted. EES customers are responsible for disclosing the presence of suspected contaminants. EES accepts wastes primarily from established customers who perform their own engine fluid draining. However, EES may request waste analyses from any customer where the presence of contaminants is suspected.

When a truckload of used oil or oily wastewater enters the EES facility, the load is analyzed for flash point and halogens (Chlor-D-Tect). If the used oil or oily wastewater does not contain halogens at concentration greater than 1,000 parts per million and the flash point is greater than 100°F, it is pumped into the appropriate storage tank within the Tank Storage Unit in Containment Area #1 using a closed system of hoses, pipes, pumps, and valves. Otherwise, the load is transported directly to a permitted hazardous waste treatment facility. In this closed pumping and transfer system, all hose joints and connections are equipped with impervious gaskets.

##### Waste Antifreeze

Similarly, prior to pickup, a grab sample will be taken from the waste antifreeze and screened to assure that the waste antifreeze is acceptable. Customers are responsible for disclosing the presence of contaminants in the waste stream. The pick-up driver observes the waste and performs a visual and odor screening to identify non-antifreeze compounds. EES may request waste analysis from customers suspected of having contaminants prior to accepting the waste. EES accepts waste antifreeze primarily from established customers who perform their own engine fluid draining. At the facility, the waste antifreeze is pumped into the appropriate storage tank using a closed system of hoses, pipes, pumps, and valves. In this closed system, all hose joints and connections are equipped with impervious gaskets.

EES owns and operates EES trucks that pick up and deliver the waste to the facility. The drivers are EES employees and are trained in the operations and safety procedures at this facility. All independent truck drivers operating at the facility are required to be licensed and their trucks registered as a hazardous waste transporter. The loading and unloading

operations conducted by these independent drivers is done in the presence of EES employees.

The fifteen (15) bobtail trucks and 17 independent trucks operating at the facility typically make one round trip per day leaving the facility by 8:00 a.m. and returning between 2:00 p.m. and 6:00 p.m. In addition to the 15 EES bobtail trucks and 17 independent trucks, larger tank trucks (7,000 gallon) enter the facility to pickup waste loads for transport offsite. These large tanker trucks average approximately 2 to 3 round trips to and from the facility per week.

Trucks enter and exit the facility from South San Pedro Street. Trucks enter the site through a driveway which is wide enough for two way traffic. This allows trucks unobstructed entry and exit to and from the site.

At the EES facility, the storage tanks are equipped with sight gauges, which the driver uses to visually measure the capacity of the storage tank to ensure the tank's remaining capacity is sufficient for the contents of the truck. The sight gauges are visible from a location within reach of the valves controlling the flow of waste into the tank. Standard operating procedure at the facility requires the person filling the tank to monitor the operation from a position where both the sight gauge can be seen and the control valve can be reached. Only personnel trained in the proper operation of the gauges and valves are allowed to handle or initiate transfer of waste materials.

Drummed Waste

EES currently has 4 trucks that bring an average of 23 drums of solid oily waste to the facility per week. EES also has 4 trucks that bring liquid waste in drums to the facility. An average 25 drums of liquid waste are brought to the facility per week. Additionally, three independent companies bring drums of liquid waste to the facility. An average of 25 drums per week on 3 trucks is brought to the facility by independent companies. Drums of solid oily waste are handled on a transfer basis. Drums of liquid waste are transferred to the appropriate storage tanks.

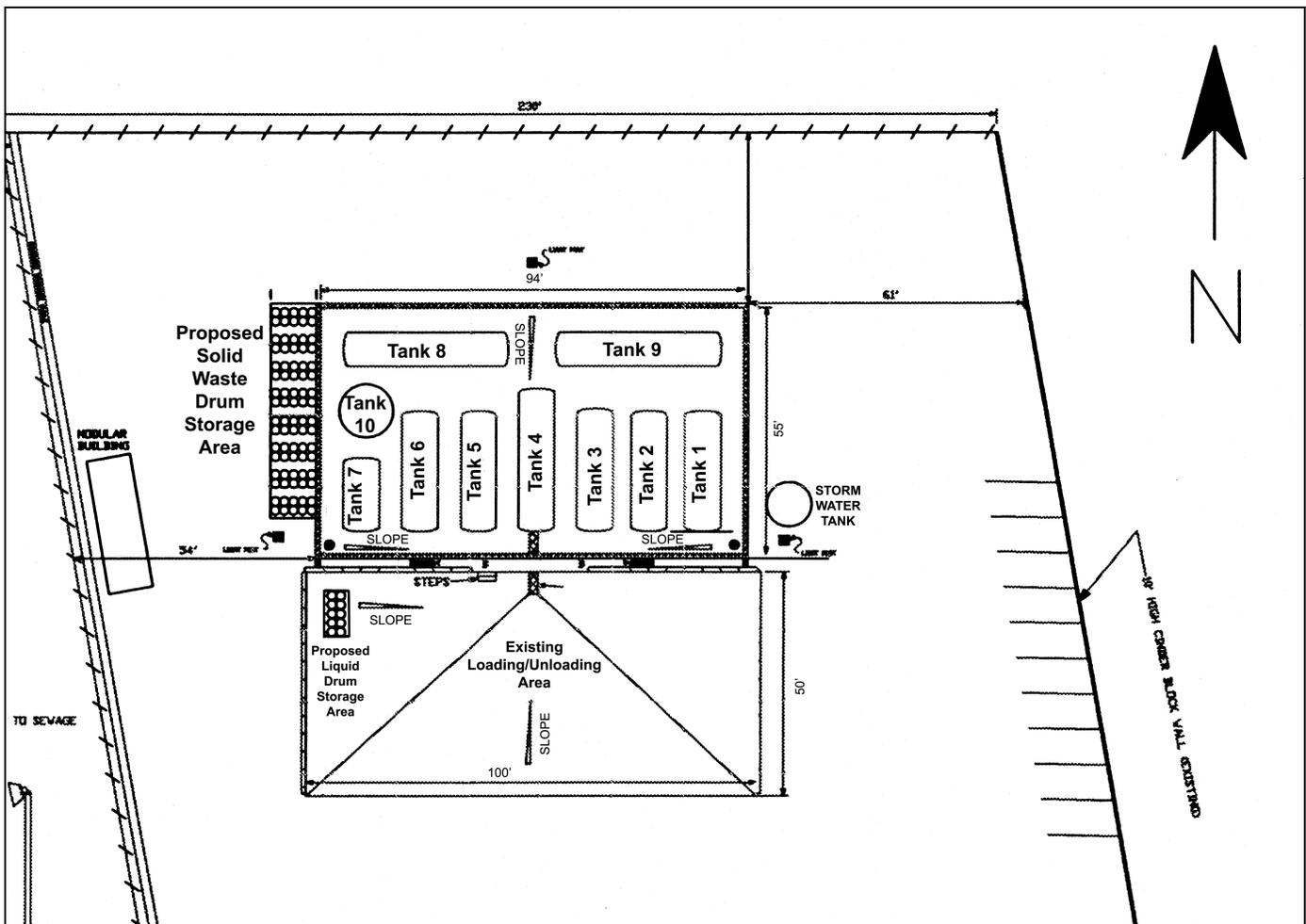


Figure 4. Site Map of Evergreen Environmental Services – Carson

As part of their exempted transfer operations, EES accepts both non-RCRA and RCRA waste in containers. These waste are accepted throughout the week and consolidated in trucks. The trucks carrying exempted transfer operation waste leaves the facility on Mondays.

## PROPOSED ADDITIONAL PERMITTED UNITS AND OPERATIONS

### Proposed Permitted Units

EES is seeking approval of the following proposed additional permitted units:

- a) Solid Waste Drum Storage Area (Unit #2); and
- b) Liquid Drum Storage Area (Unit #3).

Before construction of these proposed units is allowed, EES will be required to obtain the necessary land use authorization (Conditional Use Permit) from the City of Carson.

**Solid Waste Drum Storage Area (Unit #2).** The permit will allow EES to construct and operate a storage area used to store drums containing oil contaminated solid waste. The solid drum storage area (Unit #2) will have a maximum permitted storage capacity of 4,400 gallons or up to eighty (80) drums, whichever is less. The maximum size of the containers will be 85-gallons but the most common containers will be 55-gallons. Unit #2 will be constructed by excavating the existing asphalted area west of the existing tank storage area (Unit #1) to a depth of 6 inches below ground surface (See Figure 4, Site Map of Evergreen Environmental Services – Carson). Unit #2 will consist of a 10 feet by 48 feet by 6 inch thick reinforced concrete pad with a shallow “drive-over” berm and steel barrier posts located at the outside corners as a barrier to vehicle traffic. A concrete sealant will be applied to the entire exposed interior surface area of Unit #2.

**Liquid Drum Storage Area (Unit #3).** The permit will also allow EES to designate the northeast corner area in the existing loading/unloading area (also used for truck-to-truck transfer) for storage and transfer of used oil, oily water and waste antifreeze in DOT approved containers. The liquid waste drum storage area (Unit #3) will have a maximum permitted storage capacity of 550 gallons or up to ten (10) drums, whichever is less. The maximum size of the containers will be 85-gallons but the most common containers will be 55-gallons. Unit #3 will measure 10 feet by 4 feet over the existing 8 inch thick outdoor concrete pad within the loading/unloading area (See Figure 4, Site Map of Evergreen Environmental Services – Carson). The loading/unloading area is graded toward a sump for collecting any spills that potentially could occur during transfer operations and has a secondary containment capacity of approximately 25,400 gallons. The liquid drum storage area is located within the truck loading/unloading area which has been certified by an independent qualified professional engineer, registered in California, that the unit is suitably designed and constructed to achieve the requirements of section 66264.175 of Title 22, California Code of Regulations.

### Proposed Operations

**Solid Waste Drum Storage Area (Unit #2).** Under the proposed Standardized Permit, EES will be allowed to store drummed oil contaminated solid waste. The oil contaminated solid waste will be collected, transported and stored in Department of Transportation (DOT)-approved containers to EES. The drummed solid waste will be placed into Unit #2. The containers of drummed solids will not be stacked more than one (1) container high within Unit #2. Analysis of the oil contaminated solid waste contained in the drums will be conducted before EES collects the waste. Activities allowed within Unit #2 include the transfer of similar and compatible oil contaminated wastes (oily debris, sludge waste) from container to container, and container to truck for the purpose of consolidation. The oil contaminated solid waste collected would include items such as oily rags, cat litter used to absorb small spills at gas stations, etc.

**Liquid Drum Storage Area (Unit #3).** Unit #3 will be used for storing liquid waste (used oil, oily waste water and waste antifreeze collected from household hazardous waste collection events) in drums and other nonleaking, secure containers compatible with the waste material and meeting the requirements of Title 22, California Code of Regulations, section 66263.16. Activities allowed in Unit #3 include the transfer of similar and compatible waste from container to container, container to truck, truck to container and container to tank for the purpose of consolidation. Transfers of liquid wastes will only take place utilizing the containers, trucks and tanks located in only in Unit #1, Unit #3 or Unit #4. Liquid wastes will be transferred to the appropriate tank by using a hose attached to the manifold serving the selected tanks(s); the appropriate intake valve(s) are opened on the manifold; and the selected pump is energized. The transfer shall occur in Unit #3 without placing the containers in Unit #4.

II. DISCRETIONARY APPROVAL ACTION BEING CONSIDERED BY DTSC

- |   |   |   |
|---|---|---|
| <input checked="" type="checkbox"/> Initial Permit Issuance | <input type="checkbox"/> Closure Plan         | <input type="checkbox"/> Removal Action Workplan                                  |
| <input type="checkbox"/> Permit Renewal                     | <input type="checkbox"/> Regulations          | <input type="checkbox"/> Interim Removal  |
| <input type="checkbox"/> Permit Modification                | <input type="checkbox"/> Remedial Action Plan | <input checked="" type="checkbox"/> Other (Specify)<br><u>Standardized Permit</u> |

Program/ Region Approving Project: Standardized Permitting and Corrective Action Branch

DTSC Contact Person: Alfred Wong

Address: 700 Heinz Avenue, Suite 300

City: Berkeley State: California Zip Code: 94710 Phone Number: (510) 540-3946

III. ENVIRONMENTAL RESOURCES POTENTIALLY AFFECTED

The boxes checked below identify environmental resources in the following ENVIRONMENTAL SETTING/IMPACT ANALYSIS section found to be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact."

- |   |  |  |
|---|--|--|
| <input checked="" type="checkbox"/> None Identified | <input type="checkbox"/> Aesthetics                      | <input type="checkbox"/> Agricultural Resources      |
| <input type="checkbox"/> Air Quality                | <input type="checkbox"/> Biological Resources            | <input type="checkbox"/> Cultural Resources          |
| <input type="checkbox"/> Geology And Soils          | <input type="checkbox"/> Hazards and Hazardous Materials | <input type="checkbox"/> Hydrology and Water Quality |
| <input type="checkbox"/> Land Use and Planning      | <input type="checkbox"/> Mineral Resources               | <input type="checkbox"/> Noise                       |
| <input type="checkbox"/> Population and Housing     | <input type="checkbox"/> Public Services                 | <input type="checkbox"/> Recreation                  |
| <input type="checkbox"/> Transportation and Traffic | <input type="checkbox"/> Utilities and Service Systems   |  |

IV. ENVIRONMENTAL IMPACT ANALYSIS

The following pages provide a brief description of the physical environmental resources that exist within the area affected by the proposed project and an analysis of whether or not those resources will be potentially impacted by the proposed project. Preparation of this section follows guidance provided in DTSC's California Environmental Quality Act Initial Study Workbook [Workbook]. A list of references used to support the following discussion and analysis are contained in Attachment A and are referenced within each section below.

Mitigation measures which are made a part of the project (e.g.: permit condition) or which are required under a separate Mitigation Measure Monitoring or Reporting Plan which either avoid or reduce impacts to a level of insignificance are identified in the analysis within each section.

**1. Aesthetics**

*Project activities likely to create an impact:* None

*Description of Environmental Setting:* The project facility consists of an existing hazardous waste storage and transfer facility on a site (see Figure 2) approximately 285 feet by 230 feet (1.65 acres), and is located in a developed area zoned for heavy manufacturing land use (See Figure 1). The City of Carson's zoning designation of this area is MH. There are a total of four buildings (a foundry, a large woodworking factory, a machine shop, and a tool manufacturing plant) located immediately north and west of the site. The facility is separated from these buildings by a 10 foot chain link fence on top of a 21 inch high cinder block fence. To the south and east surrounding the site is area zoned open space which includes

Vernon Hemmingway Park (designed for recreational use and contains a set of swings, tennis courts, softball diamond, and a small clubhouse). The facility is separated from the park by a 10 foot high cinder block fence. Three Southern California Edison high voltage towers are located on or near the park and the voltage lines cut across one corner of the park. The only construction aspect of this project is the construction of one concrete pad and the “drive-over” berm associated with it. This will not change the existing aesthetics at this existing facility. In addition, because the facility is located behind buildings and away from the street, and is behind a 10 feet high wall, the construction of the solid waste drum storage area will not be visible. Therefore, this project will not have any impact on aesthetics and no further analysis of impacts is required.

Analysis of Potential Impacts. Describe to what extent project activities would:

- a. Have a substantial adverse effect on a scenic vista.  
None
- b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and historic buildings within a state scenic highway.  
None
- c. Substantially degrade the existing visual character or quality of the site and its surroundings.  
None
- d. Create a new source of substantial light of glare that would adversely affect day or nighttime views in the area.  
None

*Specific References:* 1, 4

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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## 2. Agricultural Resources

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*Project activities likely to create an impact:* None.

*Description of Environmental Setting:* The City of Carson is approximately 83 percent developed. The project is located in an existing heavy manufacturing zoned area (City of Carson’s zoning designation of this area is MH). There is no land zoned for agricultural use in the City of Carson. Therefore, there will be no impacts to agricultural resources and no further analysis of impacts is necessary.

Analysis of Potential Impacts. Describe to what extent project activities would:

- a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.  
None
- b. Conflict with existing zoning or agriculture use, or Williamson Act contract.  
None

- c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural uses.

None

*Specific References:* 1, 2

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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### 3. Air Quality

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*Project activities likely to create an impact:* Emissions from mobile sources (bobtail truck deliveries) as part of the facility's normal operation and temporary impacts from stationary emissions sources as a result of potential small construction activities.

*Description of Environmental Setting:* The City of Carson is located in the South Coast Air Basin (Basin) and is characterized as having a "Mediterranean" climate (a semi-arid environment with mild winters, warm summers and moderate rainfall). The Basin is a 6,600-square mile area bounded by the Pacific Ocean to the west and south and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Geronio Pass area in Riverside County. Its terrain and geographical location determine the distinctive climate of the Basin, as the Basin is a coastal plain with connecting broad valleys and low hills. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. The usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds. The extent and severity of the air pollution problem in the Basin is a function of the area's natural physical characteristics (weather and topography), as well as man-made influences (development patterns and lifestyle). Factors such as wind, sunlight, temperature, humidity, rainfall and topography all affect the accumulation and/or dispersion of pollutants throughout the Basin.

Moderate temperatures and comfortable humidities characterize the climate with precipitation limited to a few storms during the winter season (November through April). The average annual temperature varies little throughout the Basin, averaging 75 degrees Fahrenheit. However, with a less pronounced oceanic influence, the eastern inland portions of the Basin show greater variability in annual minimum and maximum temperatures. All portions of the Basin have had recorded temperatures over 100 degrees in recent years. January is usually the coldest month at all locations, while July and August are usually the hottest months of the year. Although the Basin has a semiarid climate, the air near the surface is moist because of the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the Basin by off-shore winds, the ocean effect is dominant. Periods with heavy fog are frequent; and low stratus clouds, occasionally referred to as "high fog" are a characteristic climate feature. Annual average relative humidity is 70 percent at the coast and 57 percent in the eastern part of the Basin.

One of the most important climatic factors is the direction and intensity of the prevailing winds. With very light average wind speeds (five to seven miles per hour), the Basin has a limited capability to disperse air contaminants horizontally. Typically, the net transport of air on-shore is greater in the summer, while the net off-shore transport is greater in the winter. Whether there is air movement or stagnation during the morning and evening hours (before these dominant patterns take effect) is one of the critical factors in determining the smog situation on any given day. Carson's location with respect to these flow patterns and the Pacific Ocean results in relatively good air quality. For the most part, the on-shore winds transport pollutants inland. Since the night drainage winds are less intense, only a limited amount of this pollution is returned to the coastal areas during the summer, leaving a significant amount of pollutants in the inland areas.

Winter storms that bring rainfall benefit air quality, since they tend to "scrub" gaseous or particulate pollutants from the air. Precipitation is typically 9 to 14 inches annually in the Basin and is rarely in the form of snow or hail due to typically warm weather. The frequency and amount of rainfall is greater in the coastal areas of the Basin.

Ambient air quality is described in terms of compliance with Federal and State standards. Ambient air quality standards are the levels of air pollutant concentration considered safe to protect the public health and welfare. They are designed to protect people most sensitive to respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. The Federal Clean Air Act, enforced by the U.S. Environmental Protection Agency (US EPA), established National Ambient Air Quality Standards (NAAQS) for human health for six criteria pollutants: sulfur dioxide, carbon monoxide, ozone, nitrogen dioxide, lead and respirable particulate matter (PM<sub>10</sub>). NAAQS represent the maximum levels of background pollution considered safe to protect human health. These standards may not be exceeded more than once per year for an area to be considered in attainment of the NAAQS.

The Federal Clean Air Act also allows states to adopt ambient air quality standards provided they are as stringent as the federal standards. The California Clean Air Act established California Ambient Air Quality Standards (CAAQS). The NAAQS and CAAQS are shown in Table 1. The California Air Resources Board has authority for establishing CAAQS and has designated the South Coast Air Quality Management District (SCAQMD) as the local agency for enforcing the standards for stationary sources. The California Air Resources Board maintains regulatory authority over mobile source emissions statewide.

**TABLE 1**  
**NATIONAL AND CALIFORNIA AIR QUALITY STANDARDS**

Objective	Measurement	National	California
<b>PM<sub>10</sub> - Particulate Matter Less Than 10 Microns</b>			
To improve visibility & prevent health effects	Annual Arithmetic Mean <sup>(2)</sup>	50 micro g/m <sup>3</sup>	20 micro g/m <sup>3</sup>
	24 hour concentration <sup>(3)</sup>	150 micro g/m <sup>3</sup>	50 micro g/m <sup>3</sup>
<b>PM<sub>25</sub> - Particulate Matter Less Than 2.5 Microns</b>			
To improve visibility & prevent health effects	Annual Arithmetic Mean <sup>(2)</sup>	15 micro g/m <sup>3</sup>	12 micro g/m <sup>3</sup>
	24 hour concentration <sup>(3)</sup>	65 micro g/m <sup>3</sup>	-----
<b>Ozone</b>			
To prevent eye irritation and breathing difficulties	One hour concentration <sup>(1)</sup>	0.12 ppm 235 micro g/m <sup>3</sup>	0.09 ppm 180 micro g/m <sup>3</sup>
<b>Nitrogen Dioxide</b>			
To prevent health risk and improve visibility	Annual Arithmetic Mean <sup>(4)</sup>	0.053 ppm 100 micro g/m <sup>3</sup>	-----
	One hour	-----	0.25 ppm 470 micro g/m <sup>3</sup>
<b>Sulfur Dioxide</b>			
To prevent increase in respiratory disease, crop damage, and odor problems	Annual Arithmetic Mean <sup>(2)</sup>	0.03 ppm 80 micro g/m <sup>3</sup>	-----

	24 hour mean concentration <sup>(3)</sup>	0.14 ppm 365 micro g/m <sup>3</sup>	0.04 ppm 105 micro g/m <sup>3</sup>
	One hour mean concentration	-----	0.25 ppm 655 micro g/m <sup>3</sup>
<b>Carbon Monoxide</b>			
To prevent carboxyhemoglobin levels greater than 2%	8 hour mean concentration <sup>(3)</sup>	9 ppm 10 micro g/m <sup>3</sup>	9 ppm 10 micro g/m <sup>3</sup>
	One hour concentration <sup>(3)</sup>	35 ppm 40 micro g/m <sup>3</sup>	20 ppm 23 micro g/m <sup>3</sup>
<b>Lead</b>			
To prevent health problems	30-day	-----	1.5 micro g/m <sup>3</sup>
	3 month mean concentration <sup>(2)</sup>	1.5 micro g/m <sup>3</sup>	-----

ppm - parts per million

micro g/m<sup>3</sup> - micro grams per cubic meter

(1) not to be exceeded on more than one day per year, average over 3years

(2) not to be exceeded

(3) not to be exceeded more than once per year

The California Air Resource Board is required to designate areas of the State as attainment, non-attainment, or unclassified for any State standard. An “attainment” designation for an area signifies that pollutant concentrations did not violate the standard for that pollutant in that area. A “non-attainment” designation indicates that a pollutant concentration violated the standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria. An “unclassified” designation signifies that the data does not support either an attainment or non-attainment status. State and Federal ambient air quality standards have been established for the following pollutants: ozone (O<sub>3</sub>), carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), fine particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) and lead (Pb). For some of these pollutants, notably O<sub>3</sub> and PM<sub>10</sub>, the State standards are more stringent than the Federal standards. The State has also established ambient air quality standards for sulfates, hydrogen sulfide, and vinyl chloride. The above-mentioned pollutants are generally known as “criteria pollutants.”

Despite implementing many strict controls, the Los Angeles portion of the South Coast Air Basin still fails to meet both Federal and State air quality standards for three of the six criteria pollutants: ozone (O<sub>3</sub>), carbon monoxide (CO) and particulate matter (PM<sub>10</sub>). Because these pollution standards have not been achieved, the Los Angeles County portion of the Basin is considered a non-attainment area for Federal and State standards for these pollutants.

The SCAQMD operates several air quality monitoring stations within the Basin. The City of Carson is located within Source Receptor Area (SRA) 4, one of 28 areas under the jurisdiction of the SCAQMD. The communities within an SRA are expected to have similar climatology and subsequently, similar ambient air pollutant concentrations. The ambient air monitoring station within SRA 4 is within the northern portion of the City of Long Beach. The NO<sub>2</sub>, SO<sub>2</sub>, and Lead State and Federal standards have not been exceeded at the North Long Beach station over the last five years. The Los Angeles County portion of the Basin is designated a serious nonattainment area for Federal and State CO standards. The 8-hour and 1-hour Federal and State standard have not been exceeded at the North Long Beach station in the last five years. The entire Air Basin is designated as a serious non-attainment area for State and Federal PM<sub>10</sub> standards. Some exceedances of State standards for PM<sub>10</sub> occurred at local air monitoring stations from 1998 through 2002, ranging from five to 13 times in a given year.

The EES facility collects, stores, and transfers used oil, oily water, and waste antifreeze. These waste streams have low vapor pressures (low volatility) and, therefore, will not emit any significant vapors into the air.

The EES facility uses 15 tanker or bobtail trucks to collect used motor oil, oily wastewater and waste antifreeze from customers located in various parts of the Southern California. The empty trucks, which are parked overnight at the facility, leave the facility site between 0630 and 0800 hours in the morning and return with tanks filled with the used oil, oily wastewater, and waste antifreeze between 1400 and 1800 hours. Approximately 17 Independent trucks also transport used oil, waste antifreeze, and oily wastewater to the facility. These trucks typically make one round trip per day from the facility. In addition to the 15 EES bobtail trucks and 17 independent trucks, larger tank trucks (7,000 gallon) enter the facility to pickup waste loads for transport offsite. These large tanker trucks average approximately 2 to 3 round trips to and from the facility per week.

Upon their return to the facility site, the used oil, oily water and waste antifreeze are pumped from the tanker trucks into the storage tanks using a gasoline powered pump and hoses. The equipment to transfer the waste is designed to reduce the risk of explosion, fire, emission of hazardous vapors and spillage of hazardous materials due to overfilling of tanks or drainage from product transfer systems. The operator is required to stop the transfer operation if leakage is detected. The contents of the drums containing used oil, waste antifreeze, and oily water are also pumped into the tanks. Drums of solid hazardous waste are held at the facility for a limited time. Any drums of solid hazardous waste brought to the facility on a transfer basis may be held for up to 10 days and the drums must remain sealed. The drummed solid hazardous wastes are transferred from one truck to another truck going to the appropriate offsite locations.

Analysis of Potential Impacts. Describe to what extent project activities would:

- a. Conflict with or obstruct implementation of the applicable air quality plan.

No. The EES facility has been in operation since 1993. The most recent Air Quality Management Plan (AQMP) was published by the South Coast Air Quality Management District in 1997. The 1997 AQMP was adopted by the California Air Resource Board on January 23, 1997. Potential air emissions from industrial facilities such as EES have been taken into account in the 1997 AQMP. The facility operations have not changed since its inception. EES has 10 air permits (Nos. D64939 through D64948) issued by the South Coast Air Quality Management District for the operation of the ten storage tanks located on the facility. The project includes construction of a new 10 feet by 48 feet drum storage area. Construction of the drum storage area may involve breaking up the existing asphalt in the area with a jackhammer. One concrete truck will deliver the concrete needed for the drum storage area. All drums containing hazardous wastes are required to be closed, except for adding or removing the hazardous wastes. These activities are not expected conflict with or obstruct implementation of the applicable air quality plan.

- b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation.

No. The project involves the permit determination for continuing operations of a used oil transfer station. EES is currently in compliance with air permits issued by the SCAQMD. Approval of the project will not violate any air quality standard or contribute substantially to an existing or projected air quality violation. The project also involve the construction of a 10 feet by 48 feet drum storage area but this will not result in significant impacts to air quality since the construction activity will be short term (lasting 3-5 days), and requiring two workers and one cement truck delivering approximately 13 cubic yards of concrete.

- c. Result in cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

No. The project involves making a permit determination of an already existing facility with no significant change to existing facility operations. The project also involves construction of a 10 feet by 48 feet drum storage area. The construction activities will generate some dust into the air, however, this activity will last for only 3 to 4 hours and the amount of dust generated will be minimal. Any fugitive dust emission will be control by the additional of water. There is not expected to be any significant increase in the number of truck trips to the facility since drummed solid waste are already being brought to the facility on a transfer basis. The drummed solid waste are currently brought to the facility, transferred to another truck going to the appropriate offsite facility, and shipped within ten days of arrival. All drummed solid waste remains sealed while at the facility. There may even be a decrease in

the number of truck trips leaving the facility since the drum storage area will allow EES have trucks leaving the facility with a full load rather than a lesser load due to the 10 days storage limited for transfer stations.

d. Expose sensitive receptors to substantial pollutant concentrations.

No. Sensitive populations are more susceptible to the effects of air pollution than are the general population. Sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent center, and retirement homes.

The nearest sensitive receptors are the users of Vernon Hemingway Park located adjacent to the EES facility. The EES facility and Vernon Hemingway Park have coexisted since 1993. The EES facility manages used oil, oily water, waste antifreeze, and drummed oily solid waste. These waste are considered to be low hazard. These waste streams have low vapor pressures (low volatility) and, therefore, will not emit any significant vapors into the air. Emissions from truck traffic are limited to the minutes it takes for the trucks to arrive and leave the facility. The operations of the facility are not expected to change if the project is approved. Therefore, approval of the project is not expose sensitive receptors to substantial pollutant concentrations.

e. Create objectionable odors affecting a substantial number of people.

No. The EES facility manages used oil, oily water, waste antifreeze, and drummed oily solid waste. These waste are considered to be low hazard. These waste streams have low vapor pressures (low volatility) and, therefore, will not emit any significant vapors into the air. Emissions from truck traffic is limited to the minutes it takes for the trucks to arrive and leave the facility, and is not different from emissions from cars and trucks traveling along city street. Therefore, the project will not create objectionable odors affecting a substantial number of people.

f. Result in human exposure to Naturally Occurring Asbestos.

No. According to a California Department of Conservation, Division of Mines and Geology report, the EES facility site and surrounding area is not likely to contain naturally occurring asbestos. Additionally, a Phase II Assessment, consisting of soil sampling, was conducted in August 1991. No naturally occurring asbestos was observed during the sampling. On September 26, 1991, four trenches, located near the perimeter of a former concrete pad where seven aboveground used oil storage tanks were situated, were excavated to obtain soil samples. No naturally occurring asbestos was observed during the trenching

In addition, the EES site is completely covered by either asphalt or concrete. Construction of the drum storage area will be limited to disturbance of the asphalt and approximately 6 inches of soil in a 10 feet by 48 feet area.

Since the EES site area is unlikely to contain naturally occurring asbestos and no naturally occurring asbestos have been observed during soil sampling and trenching, the project will not result in human exposure to naturally occurring asbestos.

*Specific References:* 1, 2, 3, 5, 6, 10, 16

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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#### 4. Biological Resources

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*Project activities likely to create an impact:* None.

*Description of Environmental Setting:* The project is an existing facility located on a developed industrialized area zoned for heavy manufacturing and has been operating at this location since 1993. The site is covered entirely by either asphalt or concrete. There are a total of four buildings (a foundry, a large woodworking factory, a machine shop, and a tool manufacturing plant) located immediately north and west of the site. The facility is separated from these buildings by an 10 foot chain link fence on top of a 21 inch high cinder block fence. To the south and east surrounding the site is area

zoned open space which includes Vernon Hemmingway Park (designed for recreational use and contains a set of swings, tennis courts, softball diamonds, and a small clubhouse). The facility is separated from the park by a 10 foot high cinder block fence. There are no threatened or endangered plants or animals within the facility site. The site is completely void of any plant or animal habitat. Based on this information regarding the project, no further analysis of potential impacts is necessary.

Analysis of Potential Impacts. Describe to what extent project activities would:

- a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- None.
- b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- None.
- c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- None.
- d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- None.
- e. Conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- None.
- f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.
- None.

*Specific References:* 1

*Findings of Significance:*

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

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## 5. Cultural Resources

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*Project activities likely to create an impact:* None.

*Description of Environmental Setting:* The City of Carson does not have any historical resources listed on the National Register of Historic Places. There are no paleontological resources within the City of Carson. The area has undergone significant transition and development. Today, Carson is approximately 83 percent built out. During the late 1700s, the Carson area was predominately used for cattle ranching, which severely diminished the ground vegetation in the area. Cattle ranching was replaced by sheep grazing, which was replaced by dairy farming in the early 1900s. Farming was

slowly phased out as residential, commercial and industrial development occurred. Prior to incorporation, much of the area consisted of refuse dumps, landfills and auto dismantling plants.

The project consists of making a permit determination to allow an existing facility to continue used oil storage and transfer operations. The facility is located in a heavy manufacturing zoned area in the City of Carson, California. There are a total of four buildings (a foundry, a large woodworking factory, a machine shop, and a tool manufacturing plant) located immediately north and west of the site. The facility is separated from these buildings by a 10 foot chain link fence on top of a 21 inch high cinder block fence. To the south and east surrounding the site is area zoned open space which includes Hemmingway Park (designed for recreational use and contains a set of swings, tennis courts, softball diamond, and a small clubhouse). The facility is separated from the park by a 10 foot high cinder block fence. The facility site has previously been disturbed with the construction and closure of previously built oil wells and is currently completely covered with either asphalt or concrete. The project includes the construction of a 10 feet by 48 feet drum storage area. For these reasons, no further analysis of potential impacts is required for Cultural Resources impacts.

Analysis of Potential Impacts. Describe to what extent project activities would:

- a. Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5.  
None
- b. Cause a substantial adverse change in the significance of an archeological resource pursuant to 15064.5.  
None
- c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.  
None
- d. Disturb any human remains, including those interred outside of formal cemeteries.  
None

*Specific References:* 1, 2

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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## 6. Geology and Soils

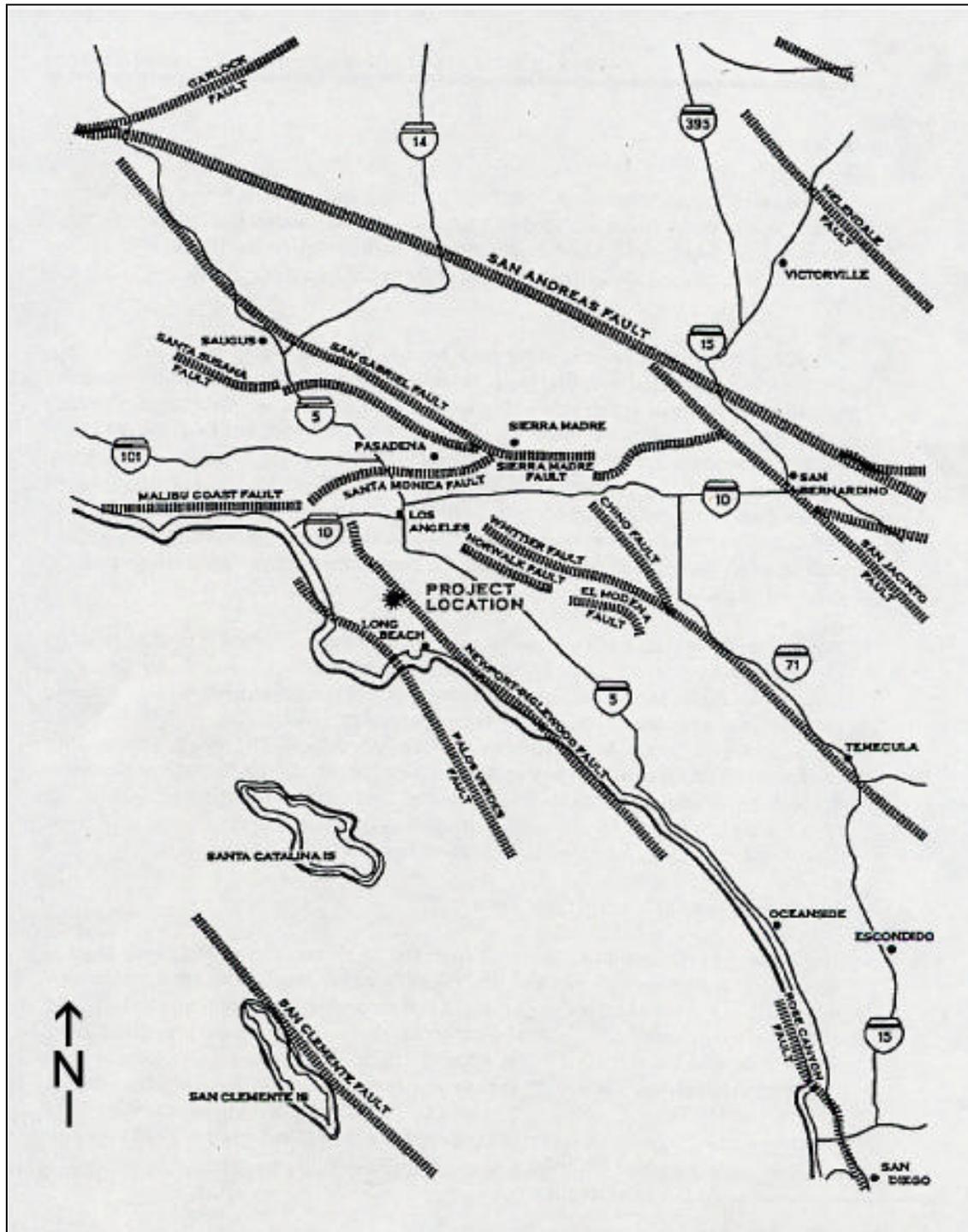
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*Project activities likely to create an impact:* Construction of Drum Storage Area; Used of Aboveground Storage Tanks and Secondary Containment System.

*Description of Environmental Setting:* The City of Carson is located within the northerly end of the Peninsular Ranges geomorphic province. The Peninsular Ranges province extends from the Los Angeles Basin south of the Santa Monica Mountains to the tip of Baja California. It includes the San Jacinto and Santa Ana Mountain Ranges and Santa Catalina Island. This geomorphic province is characterized by elongated northwest trending mountain ranges separated by straight-sided sediment floored valleys. The northwest trend is further reflected in the direction of the dominant geologic structural features of the province, which are northwest trending faults and folds. These include the Newport-Inglewood fault zone, the Paramount syncline, the Dominguez anticline, the Gardena syncline, the Wilmington anticline and the Wilmington syncline. Geologic units of the northern Peninsula Ranges province consist of Jurassic and Cretaceous age basement rocks overlain by as much as 32,000 feet of marine and non-marine sedimentary strata ranging in age from the late Cretaceous to Holocene epochs.

The Southern California region is considered to be seismically active. Earthquakes occur frequently, particularly in the Los Angeles Basin, where numerous faults accommodate the complex tectonic stresses caused by the convergence of

the north American and Pacific Plates. Five major faults or zones present a seismic hazard for Carson: Newport-Inglewood Fault zone; San Andreas Fault zone; Palos Verdes Fault zone; Whittier Fault zone (Elysian Park structure); and Santa Monica Fault zone (See Figure 6-1).



**Figure 6-1. Regional Fault Map**

The Newport-Inglewood fault extends from the southern edge of the Santa Monica Mountains southeastward to an area offshore of Newport Beach. From north to south, the fault segments are:

- Charnock Fault;

- Overland Avenue Fault;
- Inglewood Fault;
- Portrero Fault;
- Avalon-Compton Fault;
- Cherry Hill Fault; and
- Seal Beach Fault.

This zone, commonly referred to as the Newport-Inglewood uplift zone or zone of deformation, can be traced at the surface by following a line of geomorphically young anticline hills and mesas. These hills and mesas include the Baldwin Hills, Dominguez Hills, Signal Hill, Huntington Beach Mesa and Newport Mesa. Recent earthquake focal mechanisms for 39 small earthquakes (1977 to 1985) show faulting along the north segment (north of Dominguez Hills) and along the south segment (south of Dominguez Hills to Newport Beach). The 1933 Long Beach earthquake has been attributed to movement on the Newport-Inglewood fault zone. Based on historic earthquakes, the fault zone is considered active. The Newport-Inglewood fault zone is considered capable of generating a maximum credible earthquake or a magnitude 7.0. The Cherry Hill branch of the Newport-Inglewood fault zone traverses Carson in the area of Dominguez Gap just to the north of Del Amo Boulevard. Movement along the fault is northeast side up, resulting in vertical displacement of waterbearing sediments extending for several miles.

The Avalon-Compton Fault zone, which is part of the Newport-Inglewood Fault zone, has been identified by the California Department of Mines and Geology as the only active fault located in the City of Carson. The Avalon-Compton fault is approximately four miles long and lies immediately east of Avalon Boulevard and north of the Redondo Beach/Artesia Freeway. This fault zone is northwest trending and generally right lateral. Historically, the Avalon-Compton fault/Regional Shear zone has moderate to high seismic activity with numerous earthquakes greater than Richter scale magnitude four. A geological study conducted on this fault concluded that the Avalon-Compton fault and associated Regional Shear zone is seismically active and may exist a depth within this area, but that no Holocene (or even late Pleistocene) ground rupture resultant from the two features exists.

The San Andreas Fault zone is California's most prominent structural feature, trending in a general northwest direction for over 600 miles, encompassing virtually the entire length of California. The fault is divided into segments that have somewhat distinctive behavior patterns. The southern segment is approximately 280 miles long. It extends from the Mexican border into the transverse ranges west of Tejon Pass. Along this segment, there is no single traceable fault line; rather, the fault is composed of several branches. The fault is considered capable of generating a maximum credible earthquake of magnitude 8.25.

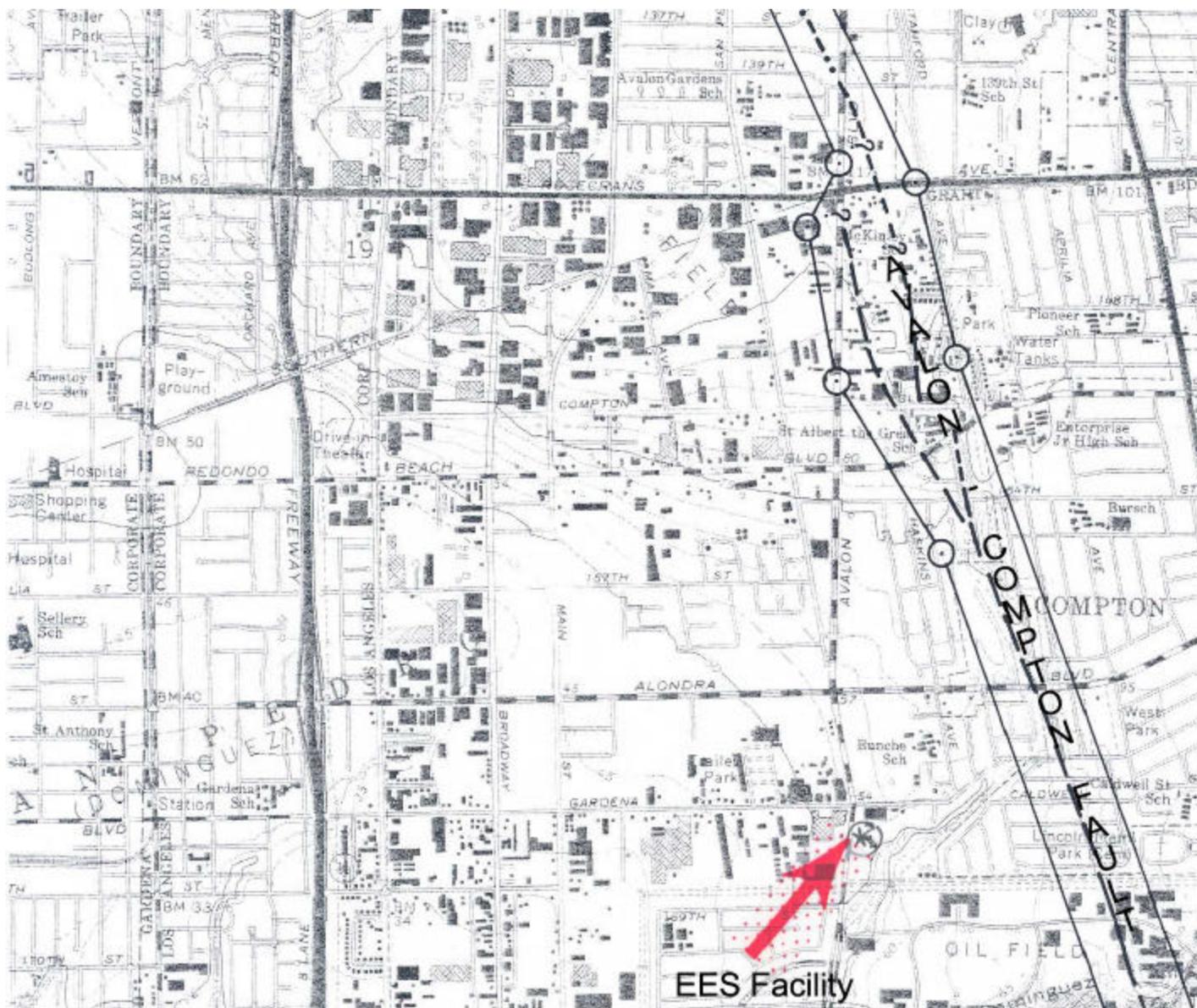
The Palos Verdes fault zone is located southwest of Carson and is traceable in the subsurface along the northern front of the Palos Verdes Hills. It has been reported that early Pleistocene age San Pedro Formation beds are sharply unwarped along the fault trace, but that the fault does not cut materials younger than middle Pleistocene at the surface. Offshore data, consisting of acoustic and reflection profiles, show offset in the base of the Holocene material, suggesting very recent movement along the Palos Verdes Fault. The fault is considered capable of generating a maximum credible earthquake of magnitude 6.6.

The 1987 Whittier Narrows earthquake (Richter magnitude 5.9) has been attributed to subsurface thrust faults (a low angle reverse fault) that are reflected at the earth's surface by a west-northwest trending anticline known as the Elysian Park Anticline or the Elysian Park structure. The axial trace of this structure extends approximately 12 miles through the Elysian Park-Repetto Hills from the Silver Lake area on the west to the Whittier Narrows on the east. The subsurface faults that create the structure are not exposed at the surface, and do not present a potential surface rupture hazard; however, as demonstrated by the 1987 earthquake and two smaller earthquakes on June 12, 1989, the faults are sources of future seismic activity. As such, the structure should be considered an active feature capable of generating future earthquakes. The fault is considered capable of generating a maximum credible earthquake of magnitude 6.75.

The Santa Monica Fault is an east-west trending left reverse fault that extends approximately 24 kilometers within the immediate vicinity of Pacific Palisades, Westwood, Beverly Hills and Santa Monica. The annual slip rate is estimated between 0.27 millimeters (mm) and 0.39 mm per year along the fault. The Santa Monica Fault has the capability to generate between a 6.0 to 7.0-magnitude earthquake. The most recent surface rupture along this fault occurred during the Late Quaternary period (between 700,000 years ago and the present day).

Soils in the City of Carson range from sand to clay loam soil types. According to the Soil Conservation Service of the U.S. Department of Agriculture, no prime agricultural soils exist within the City of Carson. The EES site is located within the

West Coast Hydrologic area of the Los Angeles Drainage Province. Alluvial soils underlying the area comprise Recent and Upper Pleistocene sediments of moderate to high permeability.



**Figure 6-2. Location of EES Facility and Avalon-Compton Fault**

Evergreen Environmental Services – Carson is an existing hazardous waste storage and transfer facility. EES manages used oil, waste antifreeze, and oily water in 10 tanks. The tanks range in capacity from 5,000 gallons to 11,900 gallons and are surrounded by a 2 foot high wall which provides secondary containment. The facility sits on a 8 inch thick concrete foundations. The secondary containment walls are eight inch thick cinder blocks reinforced with #5 rods placed 24 inches on center. All tanks are bolted to the foundation and have received a tank integrity assessment certification, by an independent, qualified, professional engineer pursuant to Title 22, California Code of Regulations, Section 66270.16. The proposed solid waste drum storage area (Unit #2) will be constructed adjacent to the west side of the secondary containment wall. Since only solid waste in drums will be stored in this area, no secondary containment is needed. The drum storage area (Unit #3) will be designated within the existing loading/unloading area which has secondary containment capacity of 25,400 gallons.

Alquist-Priolo Earthquake Hazard Zones identify the locations at which significant ground rupture is expected to occur. The nearest Alquist-Priolo Earthquake Hazard Zone to the project site is the Avalon-Compton Fault. According to the Alquist-Priolo Earthquake Fault Zone Map, "State of California Special Studies Zones, Inglewood Quadrangle, Effective:

July 1, 1986", the Avalon-Compton Fault is approximately 2000 feet east of the EES facility (See Figure 6-2). The expected ground acceleration is 0.47g with a 10% chance of occurrence in 50 years.

Analysis of Potential Impacts. Describe to what extent project activities would:

- a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. (Refer to Division of Mines and Geology Special Publication 42).

It is impossible to eliminate or avoid seismic hazards within Southern California. Earthquakes are a common occurrence in Southern California. Therefore, the project area does not pose any seismic hazard risks that would be considered unusual for the area. Four faults are located within close proximity to the City of Carson: Newport-Inglewood, Whittier, Santa Monica and Palos Verdes Faults. The San Andreas Fault, located further from the City, is considered capable of delivering much larger magnitude earthquakes to Carson.

The California Department of Mines and Geology has identified that the Avalon-Compton fault, which is part of the Newport-Inglewood Fault Zone, is an area designated as an Alquist Priolo Earthquake Fault Zone. The Avalon-Compton fault is approximately 2000 east of the facility.

The hazardous waste management units of the facility consist of 10 storage tanks and 2 drum storage areas. The 10 tanks, ranging in capacity from 5,000 gallons to 11,900 gallons, are located near the center of the property and is surrounded by a 2-foot high cinder block wall to prevent any release of hazardous waste to the environment. Tanks #1 to 9 are horizontal cylindrical tanks and are situated in cradles which are bolted to the 12-inch thick reinforced concrete foundation. Tank #10 is a vertical cylindrical tank, elevated on a series of metal beams bolted to the foundation. The cradles and metal beams are used to elevate the tanks to prevent contact with any accumulated liquids such as rainfall and to facilitate inspection of the tanks for cracks and leaks.

The cradles and metal beams also prevent the tanks from moving in case of an earthquake. The tanks have been certified by an independent, professional engineer, in accordance with Section 66264.191, Title 22, California Code of Regulations. This engineering certification is an assessment that the tanks were designed for its intended used and were constructed in accordance with the California Building Code. The engineering certification also include an assessment that the tanks will not fail due to an seismic event. The seismic analysis took into consideration the possibility of the tank overturning, the buckling potential of the tank shell due to the waste movement during seismic events, and that the tanks were properly install to reduce structural damage to shell, cradle, and support mechanism.

If any waste is released from the tanks, the waste would be contained in the secondary containment system. The secondary containment system consists of a 2-foot high cinder block wall entirely surrounding the tanks. The wall was reinforced with vertical #4 bars at 24 inches on center and two horizontal #4 bars in the center of the wall. The secondary containment system has the capacity to contain 45,122 gallons.

The solid waste drum storage area will be constructed adjacent to the outer west wall of the secondary containment system for the storage tanks. The solid waste drum storage area (Unit #2) will consists of a 10 foot by 48 foot by 6 inch thick reinforced concrete pad with a shallow "drive-over" berm and steel barrier posts located at the outside corners as a barrier to vehicle traffic. A concrete sealant will be applied to the entire exposed interior surface area. No liquid waste will be stored in this area. Waste placed into this areas are stored in DOT approved containers. The drums may tip over in case of a seismic event; however, since the drums are closed and sealed, no waste is expected to be released. If a drum were to open during a seismic event, the content may be released to the environment. Since no liquids are contained in the drums, the waste will be swept up and placed into an new empty drum once the seismic event had subsided.

Another drum storage area (Unit #3) for liquid waste will be designated in the existing loading/unloading area. The loading/unloading area is used for truck-to-truck transfer) for storage and transfer of used oil, oily water and waste antifreeze in DOT approved containers. The liquid waste drum storage area (Unit #3) will have a maximum permitted storage capacity of 550 gallons or up to ten (10) drums, whichever is less. The maximum size of the containers will be 85-gallons but the most common containers will be 55-gallons. Unit 3 will measure 10 feet by 4

feet over the existing 8 inch thick outdoor concrete pad within the loading/unloading area. The loading/unloading area is graded toward a sump for collecting any spills that potentially could occur during transfer operations and has a secondary containment capacity of approximately 25,400. The liquid waste drum storage area is located within the truck loading/unloading area which has been certified by an independent qualified professional engineer, registered in California, that the unit is suitably designed and constructed to achieve the requirements of section 66264.175 of Title 22, California Code of Regulations.

In the event of a seismic event, the drums may tip over and waste may be released. Any release would be contained within the loading/unloading area. Once the seismic event has subsided, any released waste will be pumped into the appropriate storage tank.

No earthquake faults run underneath the facility. The nearest earthquake fault, the Avalon-Compton Fault, is approximately 2000 feet east of the facility. Therefore, the potential impact due to exposing people to a Rupture of a known earthquake fault is less than significant.

- Strong seismic ground shaking.

None. See above discussion.

- Seismic-related ground failure, including liquefaction.

Historically, the City of Carson has demonstrated occurrences of liquefaction throughout significant portions of the central and southeast sections of the City. Liquefaction occurs in areas underlain by water-saturated granular soils, particularly in the alluvial and former slough areas. Historical occurrences of liquefaction have occurred primarily in the center of the City, adjacent to and northeast of the San Diego Freeway (I-405) and in the southeast portion of the City. The EES facility at 16604 South San Pedro Street is not located within a liquefaction hazard zone, according to the Alquist-Priolo Earthquake Fault Zone Map, "State of California Special Studies Zones, Inglewood Quadrangle, Effective: July 1, 1986."

- Landslides.

Landslides and mudflows are associated with slopes that are unstable. The Seismic Hazards Mapping Program of the California Geological Survey identifies Seismic Hazard Zones within the State of California. No landslide areas exist within the City of Carson. Official maps, released March 25, 1999 by the California Department of Mines and Geology, verify that there are no areas known to exist with in the City of Carson where previous occurrence of landslide movement, or local topographic, geological, geotechnical and subsurface water conditions indicate a potential for permanent ground displacements.

The existing facility is located on relatively flat terrain and the project does not involve construction activities which would create or result in landslides which would result in adverse impacts.

- b. Result in substantial soil erosion or the loss of topsoil.

The project facility site is located in an area zoned as heavy industrial use. The site is completely covered with either asphalt or concrete and is on relatively flat terrain. None of the minimal project construction activities will result substantial soil erosion or loss of topsoil.

- c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

Subsidence generally occurs in portions of the City where development has been placed on top of landfills. Areas where landfill activities have occurred may be subject to the generation of organic gases associated with decomposition, which may possibly experience differential settlement as portions of the ground surface collapse inwards. EES is not located on a present or former landfill.

Subsidence has occurred within the City as a result of previous withdrawal of oil within the Wilmington Oil Field. However, Carson has maintained control of any further subsidence within the City. Therefore, less than significant impacts are anticipated in this regard

Also see discussion for 6a.

The project is not located on a geologic unit or soil that is unstable, or that would become unstable. Additionally, the tanks are designed and construction in accordance with the California Building Code. Any liquid releases would be contained in secondary containment system. Therefore, any potential impacts is less than significant.

- d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

See discussion in 6a and 6c.

- e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of water.

The project does not involve use of septic tanks or alternative waste water disposal systems.

- f. Be located in an area containing naturally occurring asbestos.

The project involves making a permit determination on an existing facility. According to a California Department of Conservation, Division of Mines and Geology report, the EES facility site and surrounding area is not likely to contain naturally occurring asbestos. Additionally, a Phase II Assessment, consisting of soil sampling, was conducted in August 1991. No naturally occurring asbestos was observed during the sampling. On September 26, 1991, four trenches, located near the perimeter of a former concrete pad where seven aboveground used oil storage tanks were situated, were excavated to obtain soil samples. No naturally occurring asbestos was observed during the trenching

Specific References: 1, 2, 3, 7, 16

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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**7. Hazards and Hazardous Materials**

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*Project activities likely to create an impact:* Transportation of hazardous wastes to and from the facility; storage and transfer of hazardous wastes at the facility.

*Description of Environmental Setting:* The project involves making a permit determination on the issuance of a Series B Standardized Permit to Evergreen Environmental Services - Carson Facility (EES), EPA ID Number CAD 981696420, to allow continued operations of a hazardous waste storage and transfer facility in Carson, Los Angeles County, California. The Series B Standardized Permit, if approved, would allow EES to continue to collect, store, and transfer used oil, waste antifreeze, oily water, and solid waste contaminated with oil from offsite generators. No recycling or treatment of used oil is currently allowed and will not be allowed under the proposed Standardized Permit. All used oil must be shipped offsite to a permitted hazardous waste transfer, treatment, storage, or disposal facility.

The wastes stored at the EES - Carson facility are used oil, waste antifreeze, oily water, and solid oily waste such as debris contaminated with used oil or antifreeze. These wastes are commonly generated by home/car owners, gasoline stations, automobile repair shops, and oil changers, etc., and are considered to be "low risk." The characteristics of the wastes handled at the EES facility is discussed below:

**Used Oil**

Used Oil (also called used engine or motor oil) is a mineral-based, brown-to-black, oily liquid removed from the engine of a motor vehicle when the oil is changed. It is similar to unused oil except it contains additional chemicals from its use as

an engine lubricant. Examples of used oil are spent lubricating fluids that have been removed from an engine crankcase, transmission, gearbox, or differential of an automobile, bus, truck, vessel, plane, heavy equipment, or machinery powered by an internal combustion engine.

Used oil may also include used industrial oils such as hydraulic oils, compressor oils, turbine oils, bearing oils, gear oils, transformer (dielectric) oils, refrigeration oils, metalworking oils, and railroad oils. However, the majority of the used oil handled at the EES facility is used motor oil.

The chemicals in oil include hydrocarbons, which are distilled from crude oil, and various additives that improve the oil's performance. Used oil also contains chemicals formed when the oil is exposed to high temperatures and pressures inside an engine. It also contains some metals from engine parts and small amounts of gasoline, antifreeze, and chemicals that come from gasoline when it burns inside the engine.

The chemicals found in used mineral-based crankcase oil vary depending on the brand and type of oil, whether gasoline or diesel fuel was used, the mechanical condition of the engine that the oil came from, and the amount of use between oil changes. However, used oil handled by the EES facility must meet the following standard:

Minimum flash point of 100 degrees Fahrenheit;

- Total halogens content of 1000 mg/kg (ppm) or less;
- Total polychlorinated biphenyls (PCBs) concentration of 5 mg/kg (ppm) or less; and
- Has not been mixed with hazardous waste, as defined in Title 22, California Code of Regulations, other than minimal amounts of vehicle fuel.

The health effects of used mineral-based crankcase oil vary depending on the brand and type of oil used and the characteristics of the engine it came from.

Mechanics and other auto workers who are exposed to used mineral-based crankcase oil from a large number of cars have experienced skin rashes, blood effects (anemia), and headaches and tremors. However, these workers are also exposed to other chemicals, which may have caused these health effects.

Volunteers who breathed mists of used mineral-based crankcase oil for a few minutes had slightly irritated noses, throats, and eyes. There are few toxicological studies of animals exposed to mineral-based crankcase oil. Animals that ate large amounts of this oil developed diarrhea. Thus, people who swallow used mineral-based crankcase oil may also have diarrhea.

Studies of rats ingesting large single doses (9,000-22,500 mg/kg) of used mineral-based crankcase oil found no adverse health effects other than diarrhea.

Additional information on the health effects of used oil can be found on the Agency for Toxic Substances and Disease Registry (ASTDR) website:

<http://www.atsdr.cdc.gov/toxprofiles/phs102.html>

The Agency for Toxic Substances and Disease Registry is an agency of the United States Department of Health and Human Services. ASTDR's mission is to serve the public by using the best science, taking responsive public health actions, and providing trusted health information to prevent harmful exposures and disease related to toxic substances

### **Waste Antifreeze**

Antifreeze (commonly ethylene glycol) is added to your radiator to keep the fluid from freezing in winter and overheating in summer. Ethylene glycol is a clear, colorless, slightly syrupy liquid at room temperature. Ethylene glycol has a sweet smell and tastes. Ethylene glycol also has a relatively high boiling point and a relatively low freezing point. Ethylene glycol is not considered reactive, corrosive, or ignitable. Ethylene glycol is also not hazardous due to inhalation toxicity, acute aquatic toxicity, or carcinogenicity.

Ethylene glycol is widely sold in grocery stores and in automobile supply, discount, drug, and other stores throughout the United States for general use as an antifreeze/coolant in automobile radiators. Additionally, it is used in the manufacturing or blending of polyester products; aircraft and runway de-icing fluids; heat transfer fluids used in heating,

ventilation, and air conditioning systems; polyester resins; humectants; alkyd-type resins; plasticizers; electrolytic capacitors; low freeze dynamite; and brake and shock solutions. Ethylene glycol is also used in the production of artificial mists or fogs.

Before use, antifreeze is not considered a hazardous waste. After antifreeze goes through a radiator it may become contaminated with gasoline, oils and metals. Many of these contaminants, particularly metals and benzene (from gasoline), are toxic and can cause the used antifreeze to become strictly regulated as a hazardous waste. Some of the metals commonly found in used antifreeze include lead, mercury, cadmium, chromium, copper, and zinc. However, most waste antifreeze does not contain these contaminants at levels which will exceed federal or state hazardous waste standards.

Information regarding health effects of ethylene glycol following inhalation exposure is limited. Throat and upper respiratory tract irritation was observed after 1.5 minutes of inhalation exposure of volunteers exposed to a concentration of 55 ppm ethylene glycol. Doses above 79 ppm were very irritating and were not tolerated for more than 1 minute. Because of the low vapor pressure of ethylene glycol, however, the potential inhalation hazard in the vicinity of a hazardous waste management facility is considered to be low.

Dermal exposure, through activities such as changing antifreeze, is the most likely route of exposure to ethylene glycol, but dermal exposure is not likely to lead to toxic effects. Only oral exposure, through accidental or intentional ingestion, is likely to lead to such effects, and then only if a sufficient amount is swallowed at one time.

Eating or drinking very large amounts of ethylene glycol can result in death, while large amounts can result in nausea, convulsions, slurred speech, disorientation, and heart and kidney problems.

Female animals that ate large amounts of ethylene glycol had babies with birth defects, while male animals had reduced sperm counts. However, these effects were seen at very high levels and would not be expected in people exposed to lower levels.

Ethylene glycol affects the body's chemistry by increasing the amount of acid, resulting in metabolic problems.

The United States Department of Health and Human Services (DHHS), the International Agency for Research on Cancer (IARC), and the United States Environmental Protection Agency have not classified ethylene glycol for carcinogenicity. Studies with people who used ethylene glycol did not show carcinogenic effects. Animal studies also have not shown ethylene glycol to be a carcinogen.

Additional information on the health effects of waste antifreeze can be found on the Agency for Toxic Substances and Disease Registry website:

<http://www.atsdr.cdc.gov/tfacts96.html>

### **Oily Wastewater**

Oily wastewater is water contaminated with minimal quantities (typically up to 10%) of used oil. Oily wastewater is generated in many types of industrial situations such as washing garage floors, cleaning of engines, etc.

If the quantity of used oil in the oily wastewater is high enough, the health effect will be similar to that of used oil.

### **Oily Solid Waste**

The EES facility is proposing to store oily solid waste such as soil and debris contaminated with oil (e.g., oily rags, cat litter used to absorb small oil spills at gas stations, etc.) in 55-gallon drums.

If the quantity of used oil in the oily solid waste is high enough, the health effect will be similar to that of used oil.

### **EES Facility Operations**

EES collects used oil, oily wastewater, and spent antifreeze from approved customers using 15 bobtail trucks. When EES picks up the used oil and oily wastewater from the waste generator, the driver observes the wastes and performs a waste

screening analysis to ensure no halogen, solvents or other non-oil wastes are accepted. EES customers are responsible for disclosing the presence of suspected contaminants. EES accepts wastes primarily from established customers who perform their own engine fluid draining. However, EES may request waste analyses from any customer where the presence of contaminants is suspected.

When a truckload of used oil or oily wastewater returns to EES facility, the load is analyzed for flash point and halogens (Chlor-D-Tect). If the used oil or oily wastewater does not contain halogens at concentration greater than 1,000 parts per million, it is pumped into the appropriate storage tank within the Tank Storage Unit in Containment Area #1 using a closed system of hoses, pipes, pumps, and valves. Otherwise, the load is transported directly to a permitted hazardous waste treatment facility. In this closed pumping and transfer system, all hose joints and connections are equipped with impervious gaskets.

Similarly, prior to pickup, a grab sample will be taken from the waste antifreeze and screened to assure that the waste antifreeze is acceptable. Customers are responsible for disclosing the presence of contaminants in the waste stream. The pick-up driver observes the waste and performs a visual and odor screening to identify non-antifreeze compounds. EES may request waste analysis from customers suspected of having contaminants prior to accepting the waste. EES accepts waste antifreeze primarily from established customers who perform their own engine fluid draining. At the facility, the waste antifreeze is pumped into the appropriate storage tank using a closed system of hoses, pipes, pumps, and valves. In this closed system, all hose joints and connections are equipped with impervious gaskets.

### **EES Design**

There are ten storage tanks within Containment Area #1 at the EES facility. The tanks are used to storage used oil, waste antifreeze, and oily water and range in capacity from 5,000 gallons to 11,900 gallons and are surrounding by a 2 foot high wall which provides secondary containment. The facility sits on a 8 inch thick concrete foundations. The secondary containment walls are eight inch thick cinder blocks reinforced with #5 rods placed 24 inches on center. All tanks are bolted to the foundation and have received a tank integrity assessment certification, by an independent, qualified, professional engineer pursuant to Title 22, California Code of Regulations, Section 66270.16. The storage tanks are equipped with sight gauges, which the driver uses to visually measure the capacity of the storage tank to ensure the tank's remaining capacity is sufficient for the contents of the truck. The sight gauges are visible from a location within reach of the valves controlling the flow of waste into the tank. Standard operating procedure at the facility requires the person filling the tank to monitor the operation from a position where both the sight gauge can be seen and the control valve can be reached. Only personnel trained in the proper operation of the gauges and valves are allowed to handle or initiate transfer of waste materials.

The proposed solid waste drum storage area (Unit #2) will be constructed adjacent to the west side of the secondary containment wall. Since only solid waste in drums will be stored in this area, no secondary containment is needed. The drum storage area (Unit #3) will be designated within the existing loading/unloading area which has secondary containment capacity of 25,400 gallons.

### **Public Health and Safety**

The facility is enclosed to the north and east by a 10-foot high cinder block wall, a 8-foot fence to the west and a building to the south. Hazardous Waste warning signs are clearly posted. Workers are trained in the proper use of equipment and in the identification of hazards. The pumping equipment is designed to minimize vapor release. The truck loading/unloading area has secondary containment in place to contain any spillage. Spillage will be cleaned up as soon as possible to minimize potential for releases to the environment. Employees are provided with appropriate personal protection equipment. An emergency eye wash and safety shower is located inside the laboratory.

Analysis of Potential Impacts. Describe to what extent project activities would:

- a. Create a significant hazard to the public or the environment throughout the routine transport, use or disposal of hazardous materials.

EES is a registered hazardous waste transporter (Registration #0242). The drivers of the EES registered hazardous waste transporter vehicles are trained in safety procedures and contingency procedures to minimize exposures in case a release does occur from the truck tank. Private registered transporters also bring waste to the facility in trucks. All transporters are required to maintain proper certification of transporting hazardous waste. The certification is issued by the California Highway Patrol. Additionally, pursuant to Department of

Transportation (DOT) regulations (Code of Federal Regulations Title 49), trucks that transport hazardous wastes must pass annual inspections for integrity of the tank and of the vehicle and its operating systems. The owner of the truck must provide \$1,000,000 of procedures and in contingency procedures to minimize exposures in case a release does occur. Facility employees are required to receive training in the appropriate responses in a case of an emergency.

DTSC concludes that the project will not create a significant hazard to the public or the environment throughout the routine transport, use or disposal of hazardous materials. Therefore, the potential for impact is determined to be less than significant.

- b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

The major foreseeable risk of upset or accident at the facility is a spill of used oil or antifreeze from a tanker truck or a hose. These spills can occur due to equipment malfunction or operator error. Design and operational measures are in place to prevent spills or to assure that releases would not affect the environment. The maximum amount that could be released would be approximately 7,000 gallons if the release is occurred from a tanker truck. This is the size of the largest outgoing truck with wastes. The existing storage tanks are built with bermed concrete secondary containment areas to contain spills and releases. The truck loading/unloading area has a capacity of 25,400 gallons. The secondary containment would prevent any releases from running offsite. Additionally, air emissions from the waste would be minimal since used oil and waste antifreeze are not very volatile (low vapor pressures) and the waste would be promptly cleaned up.

EES facility personnel always supervise all waste transfer activities. The facility has a Contingency Plan in place that outlines the response procedures that personnel must utilize in the event of a release. Spill containment equipment will be kept at the facility.

Fire may also create a major risk of upset since used oil accepted at the facility can have flash points as low as 100 degrees Fahrenheit (°F). Flash point is the lowest temperature at which a liquid can form an ignitable mixture in air near the surface of the liquid. The lower the flash point, the easier it is to ignite the material. For comparison, gasoline has a flash point of -40 °F. Most used oil accepted at EES have flash point of 250 to 400 °F. Gasoline can be ignited with a small flame source such as a spark or match. Used oil would have to have a flame applied to it for ignite. Having a low flash point in itself is not a cause for concern. In order for a fire to start, an ignition source would be needed such as an open flame. For a fire to occur, all the following must occur: (1) a significant quantity of used must be spilled; (2) No personnel is available and the spill is not cleaned up; (3) a flame source must be nearby; and (4) the flame source must be applied to the used oil spill. This scenario is not likely since facility personnel or truck driver are required to be present during loading/unloading operations. Any spill is required to be cleaned up. No smoking signs are clearly posted at the facility. There are no flame sources near the hazardous waste management units.

Therefore, DTSC has determined the potential for impacts in the event of upset conditions at the facility to be less than significant.

- c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school.

There are no schools within one-quarter mile of the facility. The nearest school is Ralph Bunche Elementary School, located at 16223 S. Haskins Lane, which is approximately 0.5 miles northeast of the facility.

- d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to public or the environment.

The EES facility, located at 16604 South San Pedro Street, is not listed on the Department of Toxic Substances Control's Hazardous Waste and Substances Site List (also known as the "Cortese List"). The Cortese List is a planning document used by the State, local agencies, and developers to comply with California Environmental Quality Act requirements in providing information about the location of hazardous materials releases.

- e. Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

This is an existing facility and has been in operations since 1993. No significant expansion of the facility is planned and no alterations will be performed around the property boundaries or outside the property site. EES is required to have a Contingency Plan which specifies emergency preparedness and response procedures at the facility. Section 66264.56, Title 22, California Code of Regulations, specifies emergency procedures at hazardous waste management facilities. These procedures include an emergency coordinator being designated prior to beginning facility operation. If there is an imminent or actual emergency situation, the emergency coordinator or their designee shall immediately activate internal facility alarms or communication systems and notify facility personnel. The appropriate State or local agencies with designated response roles are then notified, if needed.

If the emergency coordinator determines there has been a release that could affect human health or the environment outside the facility, the coordinator shall immediately notify the State Office of Emergency Services and assess the need for evacuation of local areas. As appropriate, the emergency coordinator shall immediately notify the appropriate local authorities and be available to help local officials determine areas to be evacuated.

EES is required to submit copy of their Contingency Plan to local Emergency Response agencies and nearby hospitals.

Therefore, the project will not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. The potential impacts is determined to be less than significant.

*Specific References:* 1, 4, 11, 13, 14, 15

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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## **8. Hydrology and Water Quality**

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*Project activities likely to create an impact:* None.

*Description of Environmental Setting:* There are no naturally occurring permanent surface water features within the City of Carson.

The Central Basin and the West Coast Water Basin are the two groundwater basins underlying Carson. The Newport-Inglewood fault zone serves as a water barrier separating the Central Water Basin and the West Coast Water Basin. This groundwater barrier passes through the north-central portion of Carson in a southeast direction. Groundwater flows within the City generally in a southwest direction. The adjudicated rights in the Central and West Coast Basins limit the use of groundwater to 281,836 acre-feet per year (AFY): 217,367 AFY in the Central Basin and 64,468 AFY in the West Coast Basin. Development of the yield of Central Basin is dependent on the use of local storm runoff, imported and recycled water for groundwater recharge and the injection of imported water from the backside of the Alamitos Seawater Intrusion Barrier. The Central Basin is replenished through subsurface flows from the San Gabriel Valley and precipitation that falls directly on the Montebello Forebay and percolates into the Basin.

Groundwater for the West Coast Basin originates from subsurface flow from the Central Basin and injection along the seawater barrier system. Virtually all of the major rivers flowing through the Central and West Coast Basins have been developed into a comprehensive system of dams, flood control channels and percolation ponds for artificially recharging the basins. Los Angeles County studies have indicated that 90 percent of the rain and runoff in the County either percolates naturally into the ground or is captured in the flood control reservoirs for later release to recharge groundwater basins. The replenishment of Central and West Coast Basins with recycled water is becoming an important source of water.

Several aquifers exist in the vicinity of the City of Carson, including the Gage/Gardena, Lynwood, Silverado and Sunnyside aquifers. The Gage/Gardena aquifer occurs at a depth of 180 feet and varies in thickness from 50 to 100 feet. The Lynwood aquifer occurs at a depth of 270 feet. The Silverado aquifer occurs at a depth of 320 to 450 feet and is the

principal groundwater source for the region. Beneath the Silverado aquifer, the Sunnyside aquifer occurs at a depth of 600 feet. These aquifers are primarily replenished by area rainfall.

The Metropolitan Water District of Southern California (MWD) provides supplemental water for Southern California. The MWD service area encompasses approximately 5,200 square miles. MWD is composed of 27 member agencies, including 14 cities, 12 municipal water districts and one county water authority. MWD imports water from the Colorado River through an extensive aqueduct system and from Northern California via the State Water Project. MWD operates several filtration plants to treat both Colorado River and State Water Project water supplies. The two MWD treatment plants that serve Carson are the Weymouth Filtration Plant in LaVerne and the Diemer Filtration Plant in Yorba Linda.

The West Basin Municipal Water District (WBMWD) provides supplemental imported water supplies to local retail water agencies. Imported water is provided in part to supplement existing groundwater supplies in all areas of WBMWD and to provide a barrier, through injection wells, to seawater intrusion into the West Coast Basin. The MWD and WBMWD act cooperatively to conserve both groundwater and surface water resources.

The City of Carson is served by two water supply agencies: California Water Service Company (Cal Water) and the Southern California Water Company (SCWC).

Cal Water is a wholesale agency providing imported water for residential and industrial development. The Dominguez District of Cal Water serves a 35-square mile service area, including most of Carson. Imported water is purchased from the MWD through a member agency, the WBMWD. Cal Water participates in the MWD-sponsored "In-Lieu" Water Programs, whereby water suppliers purchase imported water from MWD at a reduced rate instead of pumping groundwater. The non-pumped groundwater then remains in the two Basins serving Carson for use in the future when imported water may not be as plentiful.

Cal Water's water supply has two principal sources: local groundwater and purchased imported water. It is a major beneficiary of the West Coast and Central Water Basins, with groundwater rights totaling 16,481 acre-feet and ten producing wells. Approximately 18 percent of Cal Water's water supply comes from groundwater resources and approximately two percent is derived from desalinization water. The remaining 80 percent comes from imported water, which is adjusted seasonally as supply varies. In time of high imported water availability (winter), imported water reserves are used, and in times of low water availability (summer), groundwater use is increased. This seasonal demand shifting effectively conserves groundwater as a seasonal storage reservoir, and shifts demand for imported water to the winter months.

Cal Water provides water utility services to 435,000 people through 25 operating districts. Carson is part of the Dominguez operating district, serving 32,800 customers. The number of Cal Water customers is projected to increase approximately 6.2 percent from 1995 to 2015. To meet water demands for the next decade, the company will rely on a mix of ground, imported, desalinated and recycled water sources. Cal Water projections indicate that under normal precipitation conditions, it will have sufficient water supplies to meet annual customer water demand through 2015. This is based on the continuation of conservation programs, on desalinated and recycled water becoming available and on planned efforts to emphasize groundwater supplies and to reduce reliance on imported water sources.

The SCWC is an investor-owned private utility company regulated by the California Public Service Commission. SCWC's service areas are divided into three regions. Carson is part of the Southwest District in Region II. Region II operates seven separate water systems consisting of more than 895 miles of distribution pipelines, meters and hydrants. The Southwest District purchases approximately 80 percent of its water demand from MWD connections located all over the service area. The water is imported from the Colorado River or the Bay Delta in Northern California. Approximately 20 percent of the water demand is produced from company-owned local groundwater wells.

In April of 2000, the Southwest District had approximately 48,276 service connections with average daily demand of 23,300 gallons per day (gpd). At that time, the SCWC had approximately 2,030 service connections within the City of Carson. Currently the Southwest system serves approximately 13 percent of the City of Carson. There are no local groundwater wells within Carson maintained by SCWC. Occasionally Carson may receive groundwater reach, but generally all of the water supplied to Carson by SCWC is purchased from the MWD.

The topography within the City of Carson is generally flat with elevations ranging from sea level to approximately 195 feet above mean sea level (msl) at the top of Dominguez Hills. Carson is divided by the Dominguez Channel, a regional flood control system operated and maintained by the County of Los Angeles Department of Public Works. Flows in the City are conveyed by several networks of large drainage facilities to Dominguez Channel. The southwest portion of the City and

two smaller areas to the northeast do not convey flows to the Dominguez Channel. The Federal Emergency Management Agency (FEMA) is responsible for administration of the National Flood Insurance Program (NFIP). The City of Carson is designated by the NFIP as a Zone "C" City (area of minimal flooding). Up until February 2000, FEMA indicated that roughly the eastern third of the City would be flooded during a 100-year storm event. However, on February 25, 2000, FEMA identified this area as not being within a flood zone. This determination was as a result of work partially completed by the U.S. Army Corps of Engineers (Corps), which included the restoration of a section of the Los Angeles River levee system that provides flood protection for part of four surrounding communities, including the City of Carson.

The completed portion of the restoration project extends along the Los Angeles River from Long Beach Boulevard to the Pacific Ocean, and along Compton Creek from the Artesia Freeway to the Los Angeles River. The Corps completed the entire flood control project in December 2001.

Flooding that would result from a 100-year storm is limited to the Dominguez Channel. Areas outside the 100-year storm limits may also flood due to poor storm drainage. It should be noted that according to FEMA, the entire City would be flooded during a 500-year flood event.

The Clean Water Act (CWA), passed in 1972, established the National Pollutant Discharge Elimination System (NPDES) permit program. The CWA prohibits the discharge of pollutants from point sources to United States (U.S.) waters unless an NPDES permit authorizes the discharge. It requires that municipal NPDES Permits include a requirement to prohibit non-storm water discharges into the storm sewer and controls to reduce the discharge of pollutants in storm water discharges to the maximum extent practicable, including management practices, control techniques, system design and engineering methods and such other provisions that the U.S. Environmental Protection Agency (EPA) or the California State Water Resources Control Board deem appropriate for the control of such pollutants.

The 1987 CWA amendments established a framework for regulating urban storm water runoff. Urban runoff includes dry and wet weather flows from urbanized areas through a storm water conveyance system. Pollutants can be intercepted and deposited into U.S. waters as water flows over streets, parking lots, construction sites and industrial, commercial, residential and municipal areas. If not properly controlled, urban runoff could be a significant source of pollutants in waters of the U.S. National Pollution Discharge Elimination System Stormwater Program.

The NPDES Stormwater Program is a comprehensive two-phased national program for addressing the non-agricultural sources of stormwater discharges adversely affecting the quality of the nation's waters. The Program uses the NPDES permitting mechanism to require control and monitoring measures designed to prevent harmful pollutants from being washed into local bodies by stormwater runoff. The NPDES program requires the owner or operator of any facility, or any person responsible for any activity that discharges waste into the surface waters of the U.S. to obtain a NPDES permit from the Regional Water Quality Control Board, as mandated by the Clean Water Act.

The Clean Water Act allows individual states to operate their own NPDES programs provided such programs meet minimum federal requirements. The Los Angeles Regional Water Quality Control Board issues the municipal stormwater National Pollutant Discharge Elimination System permit. The City of Carson is in the jurisdiction of the Los Angeles Regional Water Quality Control Board, currently operating under Permit No. CAS004001, Order No. 01-182. The Permit was adopted on December 31, 2001 and expires on December 31, 2006.

The objective of Order No. 01-182 is to protect the beneficial uses of receiving waters in Los Angeles County. To meet this objective, the Order requires that the Los Angeles Countywide Storm Water Quality Management Plan (SQMP) specify Best Management Practices (BMPs) that will be implemented to reduce the discharge of pollutants in stormwater to the maximum extent practicable.

The Standard Urban Stormwater Mitigation Plan (SUSMP) was developed as part of the Los Angeles Regional Water Quality Control Board's Municipal Stormwater Program. The SUSMP addresses stormwater pollution from certain types of new development and redevelopment. The SUSMP specifies the minimum required Best Management Practices (BMPs) that must be used for a designated project. Additional BMPs may be required on certain targeted categories of projects based on these regulations at the discretion of the City of Carson. Applicable project applicants are required to incorporate appropriate SUSMP requirements into their development plans.

The general quality of groundwater within the Los Angeles Regional Water Quality Control Board (RWQCB) area has degraded substantially over the years as a result of fertilizers and pesticides; nitrogen and pathogenic bacteria from overloaded or improperly sited septic tanks; storage tanks that have leaked or are leaking hazardous substances into the subsurface; and a variety of other sources or conditions. These conditions can result in health risks to those who rely on

groundwater for domestic supply. In areas with industrial or commercial activities, aboveground and underground storage tanks contain vast quantities of hazardous substances. Thousands of these tanks in the region have leaked or are leaking, discharging petroleum fuels, solvents, and other hazardous substances into the subsurface. These discharges into the subsurface resulting from inadequate handling, storage, and disposal practices can further pollute groundwater.

Seawater intrusion that has historically occurred in the West Coast and Central Basins is under control in most areas through an artificial recharge system consisting of spreading basins and injection wells that form fresh water barriers along the coast. Groundwater in the lower aquifers of these basins is generally of good quality, but large plumes of saline water have been trapped behind the barrier of injection wells within the West Coast Basin, degrading significant volumes of groundwater with high concentrations of chloride. The quality of groundwater in parts of the upper aquifers of both basins is degraded by both organic and inorganic pollutants from a variety of sources, such as leaking tanks, leaking sewer lines and illegal discharges. Leakage primarily consists of gasoline, diesel fuel and used oil. Clean up of these leaking tanks is monitored by the State Water Resources Control Board. As the aquifers and confining layers in these alluvial basins are typically interconnected, the quality of groundwater in the deeper production aquifers is threatened by the migration of pollutants from the upper aquifers.

Results of basin-wide monitoring have confirmed that the quality of groundwater extracted from the Central Basin has been very good. However, there is a continuing problem with industrial solvents contaminating groundwater within limited areas of the Central Basin. These solvents, namely trichloroethylene (TCE) and tetrachloroethylene (PCE), have been detected in several wells in the areas straddling the pressure and nonpressure areas of the basin. Analysis of this situation has revealed that the contamination is most likely a result of local sources of leaking underground storage tanks, illegal disposal and poor handling practices at the point of use rather than replenishment operations.

The Los Angeles County Department of Public Works (LACDPW) is the agency responsible for regional flood control protection within Los Angeles County. LACDPW presently owns and maintains three regional flood control facilities in and around the City of Carson. These facilities are the Dominguez Channel, Compton Creek and Wilmington Channel. Two drainage reaches are classified as unimproved watercourses within the City of Carson. The first reach is aligned through Victoria Golf Course, a Los Angeles County Department of Parks and Recreation facility, and extends from Dominguez Channel to 192nd Street. The second reach is aligned through Carson Harbor Village Mobile Home Park, from Victoria Street to Albertoni Street. The California State Department of Transportation (Caltrans) also operates and maintains several drainage facilities within State operating rights-of-way associated with the Harbor (I-110), Redondo Beach/Artesia (SR-91) and San Diego (I-405) Freeways. In addition, to the above drainage facilities, approximately 130 storm drains exist within the City.

In 1987, the City of Carson, in consultation with Willdan and Associates, developed a Master Plan of Drainage for the City. The Master Plan of Drainage provides an assessment of citywide drainage facilities and establishes a long-range plan for the implementation and development of proposed drainage facilities in the City.

The project is located at 16604 South San Pedro Street near Avalon Boulevard in Carson. At its nearest point, the Dominguez Channel is approximately 1.5 miles southwest of the facility. The Dominguez Channel is the only area within the City of Carson designated as being in a 100-year flood zone. EES manages used oil, waste antifreeze, and oily water in 10 tanks. The tanks range in capacity from 5,000 gallons to 11,900 gallons and are surrounded by a 2 foot high wall which provides secondary containment. Wastes are brought to the facility in tanker trucks or containers. The contents of the tanker trucks and containers are pumped into the storage tanks. During the transfer of wastes from the tanker trucks and containers to the storage tanks, tank capacity and pumping activities are monitored to prevent overflow. The pumping procedure is performed under the supervision of a trained operator. Overflow of the tanks is prevented by first ensuring the tank has adequate capacity to accommodate the content of the truck before beginning the transfer and by visual observation during the transfer. During normal operating conditions, no hazardous waste is discharged from the facility. In the unlikely event that a spill should occur, any spilled material will be captured by the secondary containment system surrounding the storage tanks. This will minimize any potential for violating water quality standards.

Analysis of Potential Impacts. Describe to what extent project activities would:

- a. Violate any water quality standards or waste discharge requirements.

None. During normal operating conditions, no hazardous waste is discharged from the facility. Oily water and wastewater are shipped offsite in trucks to appropriate treatment or disposal facilities. In the unlikely event that a spill should occur, any spilled material will be captured by the secondary containment system surrounding the

storage tanks. Since the project does not discharge any hazardous waste and any spills are captured in the secondary containment system, the project will not violate any water quality standards or waste discharge requirements.

- b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficient in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).

None. The project does not involve pumping of groundwater.

- c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off-site.

None. The project will involve construction of a small drum storage area (10 feet by 48 feet) adjacent to the west side of the secondary containment system. The existing drainage pattern will be slightly altered but only in a very localized area (480 square feet) on the site. Overall drainage pattern of the site will remain unchanged.

- d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site.

None. The project will involve construction of a small drum storage area (10 feet by 48 feet) adjacent to the west side of the secondary containment system. The existing drainage pattern will be slightly altered but only in a very localized area (480 square feet) on the site. Overall drainage pattern of the site will remain unchanged.

- e. Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.

None. The project involve the permit determination on an existing used oil facility and will not create or contribute runoff water which would exceed the capacity of existing or planned storm water discharge systems or provide substantial additional sources or polluted runoff.

- f. Otherwise substantially degrade water quality.

None. During normal operating conditions, no hazardous waste is discharged from the facility. Oily water and wastewater are shipped offsite in trucks to appropriate treatment or disposal facilities. In the unlikely event that a spill should occur, any spilled material will be capture by the secondary containment system surrounding the storage tanks. Since the project does not discharge any hazardous waste and any spills are captured in the secondary containment system, the project will not degrade water quality.

- g. Place within a 100-year flood hazard area structures which would impede or redirect flood flows.

None. The facility is not in a 100-year flood zone.

- h. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

According to the City of Carson's Standardized Emergency Management System (SEMS) Multihazard Functional Plan, the City is not subject to inundation associated with dam failure. Therefore, the facility is also not subject to inundation associated with dam failure.

- i. Inundation by seiche, tsunami or mudflow.

Seismically induced water waves include tsunamis, seiches and waves generated by failure of retaining structures. Tsunamis are generated by earthquake-induced subsea dislocations or landslides, which cause large volumes of water to move in the form of ocean waves. Coastline configuration and tidal influx may cause local amplifying effects. A seiche is a low amplitude wave generated in a restricted body of water due to earthquake motions.

Due to the distance of the City to the Pacific Ocean, Carson has not been vulnerable to storm surge inundation. Therefore, the potential for tsunami effects within the City is negligible. Additionally, the absence of any large bodies of water within Carson, preclude the possibility of damage from seiche effects.

The topography of the facility site and surrounding area is flat. Areas to the north and west of the facility is developed for industrial use. The area to the east and south is designated open area (Vernon Hemingway Park). Since the area is flat and developed, the potential for inundation by mudflow is negligible.

*Specific References:* 1, 2, 4, 7

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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## **9. Land Use and Planning**

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*Project activities likely to create an impact:* None.

*Description of Environmental Setting:* The City of Carson is approximately 83 percent developed. In March 2001, the City contained 24,830 dwelling units on approximately 2,893 acres and approximately 7,283 acres of non-residential areas. Residential uses account for approximately 28 percent of developed land in the City. Industrial uses comprise approximately 5,497 acres, accounting for 54 percent of developed land. Commercial uses and public facilities account for approximately one percent of the remaining developed land.

Evergreen Environmental Services – Carson is located at 16604 S. San Pedro Street, City of Carson, Los Angeles County, California. The facility site is approximately 285 feet by 230 feet (1.65 acres) and is located in a developed area zoned for heavy manufacturing land use (local zoning designation of MH). The area north and west surrounding the facility is zoned heavy manufacturing. There are four buildings covering approximately 75% of the adjacent north and west land area: three one-story and one two-story buildings. The businesses located within these buildings are a foundry, a large woodworking factory, a machine shop, and a tool manufacturing plant.

The south and east area surrounding the facility site is zoned open space which includes Vernon Hemmingway Park. Vernon Hemmingway Park is designated as a neighborhood park by the City of Carson. Neighborhood parks are intended to serve one neighborhood, and are located within walking or biking distance. Vernon Hemmingway Park was designed for recreational use and contains a set of swings, tennis courts, softball diamond, and a small clubhouse. Three Southern California Edison high voltage towers are located on or near the park and the voltage lines cut across one corner of the park. An ten foot high cinder block wall separates the facility site from Vernon Hemmingway Park.

Ralph Bunche Elementary School, located at 16223 S. Haskins Lane, is approximately 0.5 miles northeast of the facility. Amber Avenue Elementary School is located at 319 E. Sherman Drive and is approximately 0.75 miles southwest of the facility. California State University, Dominguez Hills, located at 1000 E. Victoria Street, is approximately 2 miles southeast of the facility, past the Artesian Freeway (State Route 91). Residential housing is located approximately 0.25 miles west of the facility, past Vernon Hemmingway Park. Other residential housing is located approximately 0.5 miles southwest of the facility.

The driveway leading into the main facility site is lined by a 10 foot cinder block wall on the south and a 10 foot similar type of wall on the north. The remaining western boundary has a 10 foot high chain link fence set on top of a 21 inch high cinder block wall.

EES has been operating a used oil transfer facility at this location since 1993. The project would allow EES to continue operating the facility. The current facility would not require a conditional use permit since this facility is consistent with current land use. However, construction of the drum storage area may require EES to obtain a conditional use permit from the City of Carson Planning Department.

*Analysis of Potential Impacts.* Describe to what extent project activities would:

- a. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

None. The current facility is consistent with existing land use. The addition of the drum storage area may require EES to obtain a conditional use permit prior to construction.

- b. Conflict with any applicable habitat conservation plan or natural community conservation plan.

No. There are no habitat conservation or natural community conservation plan within the project site.

*Specific References:* 1, 2, 3

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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## 10. Mineral Resources

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*Project activities likely to create an impact:* None

*Description of Environmental Setting:* The Los Angeles Basin is a major oil-producing district in Southern California. Oil, first discovered in the basin in 1889, occurs chiefly in Pliocene and Miocene strata, with lesser amounts in Pleistocene strata and in fractured schist (cretaceous or older) of the basement complex. The City of Carson is located within the Dominguez and Wilmington oil fields.

The facility is located within the Wilmington oil fields. Prior to industrial development (before 1985), one oil well owned by Occidental Petroleum Company (OPC) was drilled on the site. Eight additional oil wells were drilled on adjacent parcels. Five of the wells were owned by OPC and the other three were owned by Western Springs Petroleum Company. All of the nine oil wells were closed under the State's supervision prior to 1985. Oil production is still conducted in the City of Carson. All facility activities are conducted aboveground with the exception of the construction of a small drum storage area (10 feet by 48 feet). This construction will be limited to disturbance of no more than 8 inches of asphalt and soil. Therefore, the project will not result in any loss of availability of known mineral resources or locally-important mineral resource recovery sites and no further analysis is necessary.

Analysis of Potential Impacts. Describe to what extent project activities would:

- a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

None.

- b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

None.

*Specific References:* 1, 2

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

## 11. Noise

*Project activities likely to create an impact:* Vehicles entering and leaving the facility; Pumps transferring wastes from tanker trucks and containers to storage tanks; Pumps transferring wastes from storage tanks to larger tank trucks. Construction of the drum storage area for solid waste contaminated with oil.

*Description of Environmental Setting:* Decibels (dB) are based on the logarithmic scale. The logarithmic scale compresses the wide range in sound pressure levels to a more usable range of numbers in a manner similar to the Richter scale used to measure earthquakes. In terms of human response to noise, a sound 10 dB higher than another is judged to be twice as loud; and 20 dB higher four times as loud; and so forth. Everyday sounds normally range from 30 dBA (very quiet) to 100 dBA (very loud). The A-weighted sound pressure level is the sound pressure level, in decibels, as measured on a sound level meter using the A-weighted filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound, placing greater emphasis on those frequencies within the sensitivity range of the human ear.

In general, a 1 dBA change in the sound pressure levels of a given sound is detectable only under laboratory conditions. A 3 dBA change in sound pressure level is considered a detectable difference in most situations. A 5 dBA change is readily noticeable and a 10 dBA change is considered a doubling (or halving) of the subjective loudness. It should be noted that a 3 dBA increase or decrease in the average traffic noise level is realized by a doubling or halving of the traffic volume; or by about a 7 mile per hour (mph) increase or decrease in speed. For each doubling of distance from a point noise source, the sound level will decrease by 6 dBA. In other words, if a person is 100 feet from a machine, and moves to 200 feet from that source, sound levels will drop approximately 6 dBA. For each doubling of distance from a line source, like a roadway, noise levels are reduced by 3 to 5 decibels, depending on the ground cover between the source and the receiver.

The predominant community noise rating scale used in California for land use compatibility assessment is the Community Noise Equivalent Level (CNEL). The CNEL rating represents the average of equivalent noise levels, known as Leqs, for a 24-hour period based on an A-weighted decibel with upward adjustments added to account for increased noise sensitivity in the evening and night periods. These adjustments are +5 dBA for the evening, 7:00 p.m. to 10:00 p.m., and +10 dBA for the night, 10:00 p.m. to 7:00 a.m. CNEL may be indicated by “dBA CNEL” or just “CNEL”. Noise barriers can provide approximately a 5 dBA CNEL noise reduction (additional reduction may be provided with a barrier of appropriate height, material, location and length). A row of buildings provides up to 5 dBA CNEL noise reduction with a 1.5 dBA CNEL reduction for each additional row up to a maximum reduction of approximately 10 dBA. The exact degree of noise attenuation depends on the nature and orientation of the structure and intervening barriers.

The Leq is the sound level containing the same total energy over a given sample time period. The Leq can be thought of as the steady sound level, which in a stated period of time, would contain the same acoustic energy as the time-varying sound level during the same period. Leq is typically computed over 1, 8 and 24-hour sample periods.

The Office of Noise Control in the State Department of Health Services has developed criteria and guidelines for local governments to use when setting standards for human exposure to noise and preparing noise elements for General Plans. These guidelines include noise exposure levels for both exterior and interior environments. In addition, Title 25, Section 1092 of the California Code of Regulations sets forth requirements for the insulation of multiple-family residential dwelling units from excessive and potentially harmful noise. The State indicates that locating units in areas where exterior ambient noise levels exceed 65 CNEL is undesirable. Whenever such units are to be located in such areas, the developer must incorporate into building design construction features that reduce interior noise levels to 45 dBA CNEL. Table 11-1, State of California Interior and Exterior Noise Standards, presents criteria used to assess the compatibility of proposed land uses with the noise environment.

Land Use Categories	Uses	CNEL Interior <sup>1</sup>	CNEL Exterior <sup>2</sup>
Residential	Single-Family, Duplex, Multiple-Family	45 <sup>3</sup>	65
	Mobile Home	--	65 <sup>4</sup>
Commercial	Hotel, Motel, Transient Lodging	45	--
Industrial	Commercial Retail, Bank, Restaurant	55	--
Institutional			

	Office Building, Research and Development, Professional Offices, City Office Building		--
	Amphitheater, Concert Hall, Auditorium, Meeting Hall	45	--
	Gymnasium (Multipurpose)	50	--
	Sports Club	55	--
	Manufacturing, Warehousing, Wholesale, Utilities	65	--
	Movie Theaters	45	--
Institutional	Hospital, Schools' Classrooms/Playgrounds	45	65
	Church, Library	45	--
Open Space	Parks	--	45

**NOTES:**

1. Indoor environmental including: Bathrooms, closets, and corridors.
2. Outdoor environment limited to:
  - Private yard of single family Multi-family private patio or balcony which is served by a means of exit from inside the dwelling
  - Balconies 6 feet deep or less are exempt
  - Mobile home park
  - Park's picnic area
  - School's playground
3. Noise level requirement with closed windows. Mechanical ventilating system or other means of natural ventilation shall be provided as of Chapter 12, Section 1205 of UBC.
4. Exterior noise levels should be such that interior noise levels will not exceed 45 dBA CNEL.

**Table 11-1. State of California Interior and Exterior Noise Standards**

Table 11-2, City of Carson Noise and Land Use Compatibility Matrix, indicates standards and criteria that specify acceptable limits of noise for various land uses throughout Carson. These standards and criteria will be incorporated into the City of Carson's land use planning process to reduce future noise and land use incompatibilities.

Section 4101 (unnecessary noises) of Chapter I, Article IV in the Carson Municipal Code, controls any disturbing, excessive or offensive noise which causes discomfort or annoyance to any reasonable person of normal sensitivity residing in the community.

Land Use Category	Community Noise Exposure			
	Ldn or CNEL, dBA			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential – Low Density	50-60	60-70	70-75	75-85
Residential – Multiple Family	50-65	65-70	70-75	75-85
Transient Lodging – Motels, Hotels	50-65	65-70	70-80	80-85
Schools, Libraries, Churches, Hospitals, Nursing Homes	50-60	60-65	65-80	80-85
Auditoriums, Concert Halls, Amphitheaters	NA	50-70	NA	70-85

Sports Arenas, Outdoor Spectator Sports	NA	50-75	NA	75-85
Playgrounds, Neighborhood Parks	50-67.5	NA	67.5-75	75-85
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50-70	NA	70-80	80-85
Office Buildings, Business Commercial and Professional	50-67.5	67.5-77.5	77.5-85	NA
Industrial, Manufacturing, Utilities, Agriculture	50-70	70-80	80-85	NA
Source: City of Carson General Plan Environmental Impact Report				
Notes:				
<p>NORMALLY ACCEPTABLE -Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.</p> <p>CONDITIONALLY ACCEPTABLE - New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but, but with closed windows and fresh air supply systems or air conditioning will normally suffice.</p> <p>NORMALLY UNACCEPTABLE - New Construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.</p> <p>CLEARLY UNACCEPTABLE - New construction or development should generally not be undertaken.</p> <p>NA: Not Applicable</p>				

**Table 11-2. City of Carson Noise and Land Use Compatibility Matrix**

In 1995, Carson adopted the “Noise Control Ordinance of the County of Los Angeles,” as amended, as the City’s Noise Control Ordinance. The adopted noise ordinance sets standards for noise levels citywide and provides the means to enforce the reduction of obnoxious or offensive noises. The noise sources enumerated in the noise ordinance include radios, phonographs, loudspeakers and amplifiers, electric motors or engines, animals, motor vehicles and construction equipment. The noise ordinance sets interior and exterior noise levels for all properties within designated noise zones, unless exempted, as shown in Table 11-3, City of Carson Noise Ordinance Standards

Noise Zone	Designated Noise Zone Land Use (Receptor Property)	Time Interval	Exterior Noise Level	Interior Noise Level
I	Noise Sensitive Area	Anytime	45	---
II	Residential Properties	10:00 pm to 7:00 am (Nighttime)	45	---
		7:00 am to 10:00 pm (Daytime)	50	---
III	Commercial Properties	10:00 pm to 7:00 am (Nighttime)	55	---
		7:00 am to 10:00 pm (Daytime)	60	---
IV	Industrial Properties	Anytime	70	---
All Zones	Multi-Family	10:00 pm to 7:00 am	---	40
	Residential	7:00 am to 10:00 pm	---	45

Source: City of Carson General Plan Environmental Impact Report

**Table 11-3. City of Carson Noise Ordinance Standards**

Carson's noise environment is dominated by vehicular traffic including vehicular generated noise along Interstate 405 (I-405), State Route 91 (SR-91), and primary and major arterial roadways. Additionally, the Compton and Long Beach Airports, as well as railroad operations within the City contribute to the noise environment. Furthermore, a number of other sources contribute to the total noise environment. These noise sources include construction activities, power tools, gardening equipment, loudspeakers, auto repair, radios, children playing and dogs barking. Field noise measurements were taken in 1999 at various locations in the City of Carson to reflect ambient noise levels primarily in the vicinity of sensitive uses (i.e., schools, residences, churches, hospitals, etc.). The noise measurements take into account mobile noise sources (i.e., vehicular and aircraft) and stationary noise sources (i.e., playgrounds, industry, manufacturing). Field monitoring consisted of 30 noise measurements recorded at various locations throughout the City of Carson. Heavy truck traffic was observed on many of the roadways during the field measurements. Noise measurements are taken as time averaged measures (average of two independent measurements). The measured noise levels ranged from 65.9 dBA to 83.2 dBA throughout the City. The noise measurements do not take into account noise attenuation measures (i.e., soundwalls, berms) or setbacks. Therefore, it is anticipated that existing noise levels within residential areas along the roadways are below the ambient noise measurements due to existing soundwalls or physical setbacks from the existing edge of right-of-way.

As is typical of most urbanized areas, the most pervasive noise sources in the City of Carson are motor vehicles, including automobiles, trucks, buses and motorcycles. The noise produced by these sources occurs primarily around roadways and may be of sufficient magnitude to expose various land uses to excessive noise levels. As a general observation, the speed of the vehicle is directly correlated to the noise level; an increase in speed causes an increase in noise levels. The major roadways in the City include: Figueroa Street, Main Street, Avalon Boulevard, Central Avenue, Wilmington Avenue, Santa Fe Avenue, Lomita Boulevard, Sepulvada Boulevard, 223rd Street, Carson Street, Del Amo Boulevard, University Drive, Victoria Street, Gardena Boulevard, Alondra Boulevard and Alameda Street. Noise levels along Alameda Street, also known as the "Alameda Corridor," are often higher than projected due to large volumes of truck traffic and rail line operations. Additionally, I-405, I-110, I-710 and SR-91 generate substantial noise levels within the community. In general, most of the land uses along the major roadways are commercial, open space, and light industrial. However, single and multi-family areas, as well as public facilities, are situated along many of the major roadways indicated above.

The City of Carson is served by three railroads: Union Pacific Railroad (UPRR), Burlington Northern Santa Fe (BNSF) Railroad and the Metro Blue line. The UPRR runs two lines (San Pedro and Wilmington) along the extreme western portion of the City, as it converges on the Los Angeles City container transfer facility, which borders the west side of Long Beach. A UPRR line also runs within the right-of-way of the Dominguez Channel. A BNSF rail line traverses the southern portion of the City from the Alameda Street Corridor to the Harbor Freeway (I-110). The Metro Blue line crosses the extreme eastern section of the City, running north to downtown Los Angeles and south through Long Beach. The San Pedro line, the Wilmington line, and the Dominguez Channel line run within the City of Carson. The San Pedro line carries five trains each day. The Wilmington line, which runs parallel to the Alameda Corridor line and is the preferred route out of the harbor, operates 15 trains each day. The train(s) run approximately every three hours on the Wilmington line. By the year 2003, the San Pedro line will be the only railroad line in operation. However, the Wilmington line will remain in place and serve as an auxiliary line. The Dominguez Channel line carries five trains per day in each direction. However, when the trains are used for shipping coal, the line is utilized 10 to 15 times per day each direction.

The BNSF line is located in the southern portion of Carson and runs from Alameda Street west through light industrial and residential areas to the Harbor Freeway. There are approximately thirty-eight (38) trains that utilize the BNSF rail line on a daily basis within the City of Carson.

The primary source of aircraft noise within the City of Carson is the Compton Airport located immediately north of the City. At its closest distance, the runway is located approximately 3,000 feet from the City's northern boundary. Compton Airport does not generate a significant high level of noise. According to the City of Compton General Plan Existing Airport Noise Contours, the 60 and 65 CNEL contours for the Compton Airport do not extend into the City of Carson.

Industrial land uses have the potential to exert a relatively high level of noise impact within their immediate operating environments. The scope and degree of noise impacts generated by industrial uses is dependent upon various critical factors, including the type of industrial activity, hours of operation, and the sites' location relative to other land uses. Industrial noise sources are located throughout the City of Carson. Delivery trucks, air compressors, generators, outdoor loudspeakers and gas venting are common noise sources associated with industrial land uses. Industrial activities produce noises above the general level of their surroundings, though few exceed the 65 dBA criteria at residential locations.

A variety of stationary noise sources associated with commercial and residential activities exist throughout the City of Carson. Commercial noise sources may include mechanical equipment and engines in non-moving motors such as power tools (i.e., automobile repair shops). Stationary noise sources associated with residential areas are primarily due to air conditioners and pool/spa equipment. Additional stationary noise sources include animals, stereos, musical instruments, sporting events and horns. These noise sources have the potential to temporarily disrupt the quietness of an area.

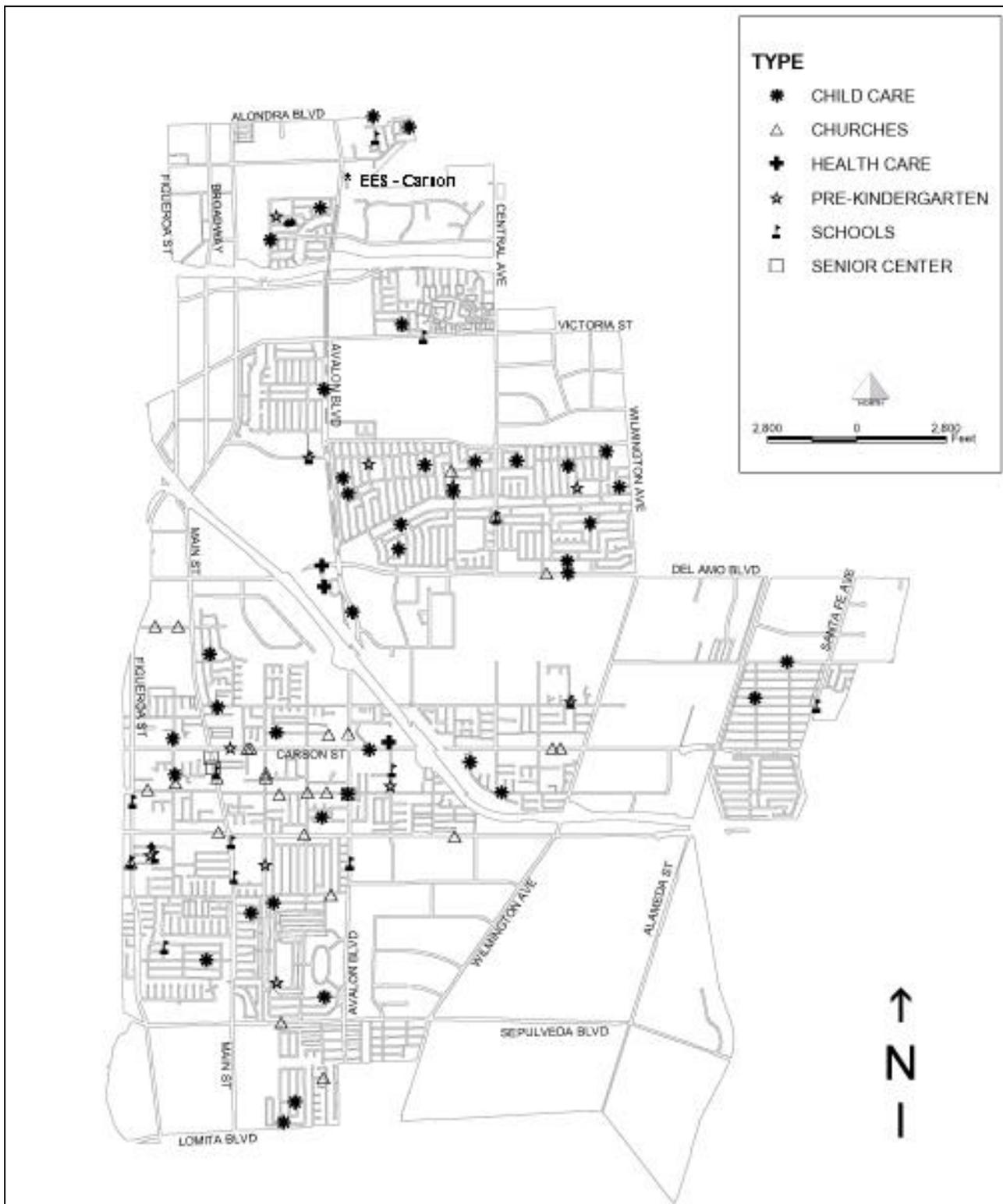
Evergreen Environmental Services – Carson, located at 16604 South San Pedro Street in the City of Carson, is located in a heavy industrial area. The City of Carson's zoning designation for this area is MH (Heavy Manufacturing). EES has been in this location since 1993. The hazardous waste management units (storage tanks, drum storage areas) are situated in the middle of the property. To the north and east of the storage tanks and drum storage areas are 10-foot high 8-inch thick cinder block walls. The cinder block walls not only serve to obstruct the view of the facility from users of Vernon Hemingway Park, but also serve as a soundwalls to attenuate noise levels to offsite receptors. To the south and west of storage tanks and drum storage area are buildings which also serves to attenuate noise to offsite receptors.

The City of Carson has identified residences, public and private school/preschool classrooms, churches, hospitals and elderly care facilities as noise sensitive receptors. Sensitive land uses generally cannot accommodate levels of noise which would, under other circumstances and with regard to other land uses, not be considered intrusive in character. The maximum interior exposure for these land uses is 45 dBA CNEL (maximum exterior exposure is 65 dBA CNEL).

There are no noise sensitive receptors within .5 miles of the EES facility. The nearest noise sensitive receptors, as identified by the City of Carson General Plan Environmental Impact Report, are Ralph Bunche Elementary School which is 0.5 miles northeast of the EES facility and Kurious Kids Child Care which is 0.5 miles southwest of the EES facility.

In 1999, the City of Carson conducted a field noise measurements. Field monitoring consisted of 30 noise measurements recorded at various locations throughout the City. Heavy truck traffic was observed on many of the roadways during the field measurements. One location was at Avalon Boulevard adjacent to Vernon Hemingway Park. This is approximately 200 feet from the EES site boundary and approximately 300 from the hazardous waste activities. Each measurement was recorded for a period of 10 between 5 and 8 minutes on the sidewalk adjacent to the roadways (within the right-of-way). Noise measurements are taken as time averaged measures (average of two independent measurements). The noise level (Leq) measured was 79.4 dBA and does not take into account noise attenuation measures (i.e., soundwalls, berms) or setbacks. This is to be expected since Avalon Boulevard is a primary north/south roadway with 3 lanes in each direction and has been classified as a major highway by the City of Carson. Major highways function to connect traffic from collectors to the major freeway system as well as to provide access to adjacent land uses. They move large volumes of automobiles, trucks and buses, and link the principal elements within the City to other adjacent regions. Avalon Boulevard is also a truck route. The primary source of noise in this area is vehicle traffic.

Residential housing is located approximately 0.25 miles west of the facility, past Vernon Hemingway Park. Other residential housing is located approximately 0.5 miles southwest of the facility.



**Figure 11-1. Sensitive Noise Receptor**

Analysis of Potential Impacts. Describe to what extent project activities would:

- a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

No. Within the EES facility, the primary sources of noise are the vehicle traffic and pumps transferring waste to and from the storage tanks. Sound levels from pumps are estimated to be 70 to 80 dBA; however, due to attenuation due to distance to the offsite receptors, the 10-foot cinder block, and buildings between the source and offsite receptors, the noise level to offsite receptors is expected to be near ambient levels. Additionally, the pumps only operate when necessary to transfer waste. Therefore, any noise from pumps, if any, will be limited in duration.

The facility will normally operate weekdays from 7 A.M. to 7 P.M. Noise associated with vehicle traffic is generally limited to the 7:00 am to 8:30 am and 2:00 pm to 6:00 pm time periods when trucks are leaving the facility to pick up wastes and returning to the facility. Noise levels from these trucks would not be any higher than noise from trucks traveling along Avalon Boulevard. Noise measurement taken by the City of Carson in 1999 shows the noise level to be 79 dBA (Leq) on Avalon Boulevard adjacent to Vernon Hemingway Park. This measurement was the total noise level of all vehicle traffic traveling on Avalon Boulevard during this time period. EES trucks would only be part of this measurement. Noise from EES trucks would be limited to the short time period where the trucks are entering or leaving the facility. Since EES has been operating in this location since 1993, the EES trucks can be considered to be part of ambient noise level. Attenuation due to distances and building would reduce noise level generated by the trucks arriving at and leaving the EES facility to compliance with the City of Carson's Noise Ordinance.

The project will also allow EES to construct a small drum storage area (10 feet by 48 feet) on the site. Source of noise from construction will be limited to jackhammering, pouring of concrete, and vehicle traffic associated with the construction. Impacts from the construction will be limited to the estimated 2 to 3 days needed to complete construction.

Therefore, the project will not expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance.

- b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.

No. The only groundborne vibration or noise would be during the construction of the drum storage area. Jackhammering would be limited to the first day of construction. Construction workers would be required to wear hearing protection during the construction. Distance to offsite receptors, the 10-foot high cinder block wall, and buildings would attenuate noise to ambient level at the receptor's locations.

- c. A substantial permanent increase in ambient noise levels in the vicinity above levels existing without the project.

No. EES has been operating at this location since 1993 and any noise from the facility may be considered to be ambient. Noise sources from the facility would be limited to vehicle traffic and the pumps used to transfer waste. The facility will normally operate weekdays from 7 A.M. to 7 P.M. Noise associated with vehicle traffic is generally limited to the 7:00 am to 8:30 am and 2:00 pm to 6:00 pm time periods when trucks are leaving the facility to pick up wastes and returning to the facility. Noise levels from these trucks would not be any higher than noise from trucks traveling along Avalon Boulevard. Noise measurement taken by the City of Carson in 1999 shows the noise level to be 79 dBA (Leq) on Avalon Boulevard adjacent to Vernon Hemingway Park. This measurement was the total noise level of all vehicle traffic traveling on Avalon Boulevard during this time period. EES trucks would only be part of this measurement. Noise from EES trucks would be limited to the short time period where the trucks are entering or leaving the facility. Attenuation due to distances and building would reduce noise level generated by the trucks arriving at and leaving the EES facility to compliance with the City of Carson's Noise Ordinance.

- d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

No. See answers to 11.b and 11.c above.

*Specific References (a, b, c, etc):* 1, 2, 3, 4

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

**12. Population and Housing**

*Project activities likely to create an impact:* None

*Description of Environmental Setting:* According to 2000 Census data, Carson has a population of 89,730 residents. This represents a population increase of 6.8 percent since 1990. Within a regional context, Carson's population of 89,730 residents in 2000 accounted for less than one percent of Los Angeles County's approximately 9.5 million residents. Los Angeles County represents 57.6 percent of the region's 16.5 million residents.

Carson supplies less than one percent of the County's housing supply of 3,270,909 units. However, housing supply within Carson increased 3.6 percent from 1990 to 2000. In 2000, the City had approximately 25,337 housing units with almost 78 percent of the housing supply being owner occupied and a vacancy rate of 2.7 percent. A majority of Carson's housing units (67.5 percent) were built prior to 1970.

The project consists of making a permit determination to allow an existing facility to continue used oil storage and transfer operations. The site is zoned for heavy manufacturing. Construction would be limited to a 10 feet by 48 feet area on the facility site. No construction will occur offsite. No housing or people would be displaced by this project. EES employs approximately 25 persons for operations at the facility. Approval of the project is expected to neither increase nor decrease the size of the workforce. Therefore, no further analysis is needed.

Analysis of Potential Impacts. Describe to what extent project activities would:

- a. Induce substantial population growth in area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).
- None
- b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.
- None
- c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.
- None.

*Specific References:* 1, 2

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

**13. Public Services**

*Project activities likely to create an impact:* None

*Description of Environmental Setting:* The Los Angeles County Fire Department (LACFD) provides fire protection services to the City of Carson. There are six primary fire stations that provide both fire and emergency medical services

to the City. Four of the stations are located within Carson's boundaries. The closest fire station to the EES facility is Station #116. Station #116 is located at 755 Victoria Street in Carson and is approximately 1.3 miles south of the EES facility. There is also a Fire Prevention Office located at the Carson City Hall.

Each of the primary stations has established an expanded response matrix for its individual jurisdiction, which increases the resources available to help a fire station respond to an emergency. These include additional engine companies, truck companies, paramedic units and hospitals. As 911 emergency calls are processed, a computer dispatching system selects from this matrix to provide the closest available unit that can meet the emergency need. The Los Angeles County Fire Department operates under the 1996 Uniform Fire Code.

The LACFD's current Five-year Fire Station Plan includes a new station in the western part of the City near the 405/110 Freeway interchange. It is identified as a Priority Four (4) project, with one being the highest priority and five the lowest. No site has yet been selected. The LACFD has insufficient funds to allocate to the new station at this time. Paramedic definitive care is provided through squads 36 and 116, located within the City of Carson. Additional paramedic squads are located in the surrounding communities of Lomita, Lawndale, Hawthorne, Lakewood, Paramount and Rolling Hills to augment, providing additional paramedic coverage as needed. Three LACFD helicopters provide air ambulance and paramedic service to the Los Angeles County area including Carson. American Medical Response (AMR) provides ambulance service for the area with units based at East 223rd Street and Lucerne Avenue in Carson. This is approximately 5 miles southeast of the EES facility.

The Los Angeles County Sheriff's Department (LACSD) provides police services for the City of Carson. Carson Sheriff Station is located at 21356 South Avalon Boulevard in Carson and is approximately 3.3 miles south of the EES facility. As of September 2002, total staff for this location includes 187 sworn personnel and 35 civilian personnel staff. There are approximately 2.1 sworn personnel per 1,000 residents.

The City of Carson has responded to increasing crime rates by adding two Community Oriented Policing Teams, a two-person crime suppression patrol unit and a Park Enforcement Team. In addition, the Carson Sheriff Station provides several community oriented programs and services.

The City of Carson is served by the Los Angeles Unified School District (LAUSD) and the Compton Unified School District (CUSD). LAUSD has 14 elementary schools, five middle schools and six high schools that serve the Carson area. CUSD has one elementary school, one middle school and one high school serving the City. In addition to public schools, the City of Carson also has two parochial schools, an adult school and the California State University Dominguez Hills campus.

The City of Carson is served by the County of Los Angeles Public Library system. The Carson and Victoria Park Libraries are located within the City. The Carson Library is located at 151 East Carson Street in Carson and is approximately 5 miles south of the EES facility. The service area for the library has a population of 100,980. The library has a collection of 216,146 library material items consisting of books, audio and video materials, DVD's, pamphlets, periodicals and government documents.

The Carson Library is the West County Regional Headquarters and provides reference back up for community libraries in the West County Region. Victoria Park Library is located at 17906 South Avalon Boulevard in Carson and is approximately 1.4 miles south of the EES facility. The service area for the library has a population of 15,412. The library has a collection of 42,198 library material items consisting of books, audio and video materials, DVD's, pamphlets, periodicals and government documents. Victoria Park Library is the smaller facility in the City.

The project consists of making a permit determination to allow an existing facility to continue used oil storage and transfer operations. The site is zoned for heavy manufacturing. Construction would be limited to a 10 feet by 48 feet area on the facility site. No construction will occur offsite. No housing or people would be displaced by this project. EES employs approximately 25 persons for operations at the facility. Approval of the project is expected to neither increase nor decrease the size of the workforce. Therefore, no further analysis is needed.

Analysis of Potential Impacts. Describe to what extent project activities would:

- a. Result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

- Fire protection  
None
- Police protection  
None
- Schools  
None
- Parks  
None
- Other public facilities  
None

*Specific References:* 1, 2

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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#### **14. Recreation**

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*Project activities likely to create an impact:* None

*Description of Environmental Setting:* Carson's recreation resources include neighborhood and community parks, community centers, schools, golf courses and privately owned recreation centers. The City of Carson has 16 City-operated parks (including four mini parks), one county park (Victoria Park) and two golf courses (Victoria Golf Course and Dominguez Golf Course). In addition, Carson has four public swimming pools and the Carson Community Center that provide additional recreation facilities to the community.

The total amount of park space in Carson is 353.9 acres. This includes Victoria County Park, Victoria Golf Course and Dominguez Golf Course. The ratio of park acres to population required by the State of California is three acres per 1,000 people. According to the 2000 U.S. Census, the City's population is 89,730; thus, 269.19 acres of parkland would be required to maintain the park acres to population ratio. The actual park to population ratio is approximately 3.9 acres per 1,000 people. This ratio does not include public school athletic fields or additional recreational facilities that exist within the City.

A regional park is designed to serve the active and passive recreational needs of the entire community. It is designed for automobile access as well as pedestrian and bicycle access. Carson has one regional park, Victoria Park, which encompasses 36 acres (approximately 10 percent of the total parkland inventory) of land immediately north of Victoria Golf Course. Victoria Park includes ball fields, basketball courts, a swimming pool, gymnasium and tennis courts, play area, recreation building and picnic facilities.

Neighborhood parks are intended to serve one neighborhood, and are located within walking or biking distance. These parks provide a wide range of both passive and active recreational opportunities. There are 12 neighborhood parks in the City, ranging in size between 3 acres to 13 acres and comprise a total of 117.1 acres. Facilities vary at each park, but typically include: ball fields, basketball courts, children's play areas and picnic areas. The nearest park to the EES facility is Vernon Hemingway Park which is directly adjacent (south and east) to EES facility.

Mini parks, also known as “pocket parks” are small, generally passive recreation parks, serving a small area. These parks often serve areas where land is not available for a neighborhood facility, and generally include children’s play areas and picnic areas. There are four mini-parks in Carson: Friendship, Walnut Street, Bonita Street and Perry Street Mini Parks.

The City contains two golf courses: Victoria Golf Course (161.6 acres) and Dominguez Golf Course (39.2 acres). The Victoria Golf Course is an 18-hole public regulation golf course operated by the County. Victoria Golf Course is located at 340 E. 192nd Street in the western portion of the City. Victoria Golf Course is approximately 2 miles southwest of the EES facility. The Dominguez Golf Course is an 18-hole, par 3 golf course that includes a two tier driving range. The Dominguez Golf Course is located at 19800 South Main Street, immediately adjacent to the I-405 Freeway in the western portion of the City. Dominguez Golf Course is approximately 2.7 miles southwest of the EES facility.

The City’s bikeways network is a significant recreation facility for residents in the community. Bikeways provide access to schools, parks and other open space areas within a community. Additionally, bikeways offer opportunities for alternative transportation modes by commuters.

The City of Carson also provides a wide variety of recreation and community services. These include: early childhood classes (preschool), special interest classes that focus on education, hobbies or sports, work-out classes and facilities at the Veterans Sports Complex, an after-school Kids Club, adult sports leagues and tournaments, boxing/weightlifting, park activities, teen activities, recreation for people with special needs, senior recreation and fine arts programs.

The project involves making a permit determination on an existing used oil transfer facility. The project does not include construction or expansion of recreational facilities. Therefore, no further analysis is needed.

Analysis of Potential Impacts. Describe to what extent project activities would:

- a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

None

- b. Include recreational facilities or require construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

None.

*Specific References:* 1, 2

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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## 15. Transportation and Traffic

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*Project activities likely to create an impact:* Vehicle traffic carrying wastes and workers to and from the facility.

*Description of Environmental Setting:* The transportation plans related to the City of Carson are:

- Transportation Element of the City of Carson General Plan
- The Congestion Management Program (CMP)
- Regional Transportation Plan
- Long Range Transportation Plan
- Regional Mobility Plan
- Southern California Association of Governments (SCAG) 1989 Air Quality Management Plan (AQMP)

The purpose of the Transportation Element of the City of Carson General Plan is to document the methods and results of the analysis of the existing and projected future circulation conditions in the City of Carson. As part of the General Plan, this document outlines Transportation and Infrastructure System policies and describes the future circulation system needed to support the Land Use Element

In June 1990, California voters approved Proposition 111 to fund transportation-related improvements statewide. In order to be eligible for the revenues associated with Proposition 111, the Congestion Management Program (CMP) legislation (originally AB 471, amended to AB 1791) requires urbanized counties in California to adopt a Congestion Management Program. For the County of Los Angeles, the authorized CMP agency is the Los Angeles County Metropolitan Transportation Authority (MTA). The goal of the CMP is to promote a more coordinated approach to land use and transportation decisions. The Congestion Management Plan (CMP) for Los Angeles County is comprised of a specific system of arterial roadways plus all freeways. The CMP requires that the traffic impact of individual development projects of a potential regional significance be analyzed. The CMP also requires traffic studies to analyze all CMP freeway monitoring locations where the proposed project adds 150 or more trips in either direction during the AM or PM peak hours. In the City of Carson, the Artesia Freeway (SR-91), the Harbor Freeway (I-110), the San Diego Freeway (I-405) and the Long Beach Freeway (I-710) are freeways in Carson that are designated for monitoring in the CMP.

Transportation planning for Los Angeles County at the regional level is the responsibility of the Southern California Association of Governments (SCAG), which is the designated Metropolitan Planning Organization for a six-county region, including Imperial, Orange, Riverside, San Bernardino, Ventura and Los Angeles Counties. Under Federal law, SCAG must prepare a Regional Transportation Plan (RTP). The RTP demonstrates how the region will meet federal mandates, particularly air quality requirements, and must be approved by federal agencies in order to continue to receive Federal transportation funds. The MTA, as the state-designated planning and programming agency for Los Angeles County, submits recommended projects and program to SCAG for inclusion in the RTP.

The Long Range Transportation Plan (LRTP) contains the transportation needs and challenges that Los Angeles County will face over the next 25 years. The plan helps decision-makers understand the options that are available for improving the transportation system, and how different options contribute toward improving mobility. The adopted LRTP becomes the blueprint for implementing future transportation improvements in Los Angeles County. The LRTP recommends a balanced transportation program with a strong emphasis on public transit to meet growth in travel.

The primary goal of the Regional Mobility Plan (RMP) is to improve transportation mobility levels. The RMP is part of an overall regional planning process and is linked directly to SCAG's Growth Management Plan, the Housing Allocation Process, and the South Coast Air Quality Management District's Air Quality Management Plan.

The goal of Southern California Association of Governments (SCAG) 1989 Air Quality Management Plan (AQMP) is to set forth a 20-year action program for meeting improved National Air Quality Standards in the South Coast Air Basin by the year 2007.

The existing street network in the City of Carson is essentially a modified grid system of north/south and east/west roadways. The primary north/south roadways are Figueroa Street, Broadway, Main Street, Avalon Boulevard, Central Avenue, Wilmington Avenue, Alameda Street, and Santa Fe Avenue. The primary east/west streets are Alondra Boulevard, Gardena Boulevard, Artesia Boulevard, Albertoni Street, Walnut Street, Victoria Street, University Drive, Del Amo Boulevard, Carson Street, 223rd Street, Sepulveda Boulevard and Lomita Boulevard.

There are no specific counts of trucks as opposed to other types of vehicles on City streets, but it is estimated that trucks make up 10 to 25 percent of the vehicles over 24 hours. The volume of trucks, the impacts of truck traffic on land uses, and the conflict between trucks and other vehicles are major issues for Carson. The City of Carson has designated truck routes where vehicles in excess of three tons may travel. The purpose of regulating truck routes is to provide access for large trucks on streets designed to accommodate them and to protect residential streets from unwanted truck traffic. Avalon Boulevard, near the EES facility, is a truck route.

The freeways located near the EES facility are: the Artesia Freeway (SR-91) is south of the EES facility; the Long Beach Freeway (I-710) to the east; the Harbor Freeway (I-110) to the west; the Century Freeway (I-105) to the north; and the San Diego Freeway (I-405) to the west and south. These freeways provide regional access to the EES facility. Access to the freeways is provided via an extensive freeway ramp system connecting the City of Carson's major arterials to the freeways.

Level of Service (LOS) terms are used to qualitatively describe prevailing conditions and their effect on traffic. The LOS concept denotes any one of a number of differing combinations of operating conditions that may take place as a roadway is accommodating various traffic volumes. The LOS is related to the volume-to-capacity ratio (V/C). To determine the V/C ratio, the peak hourly traffic volume on a particular roadway link is divided by the link capacity. There are six defined Levels of Service, A through F which describe conditions ranging from “ideal” to “worst” as defined in Table 15-1, Level of Service Descriptions.

Level of Service	Description of Operation	Range of V/C Ratios
A	Describes primarily free-flow conditions at average travel speeds. Vehicles are seldom impeded in their ability to maneuver in the traffic stream. Delays at intersections are minimal.	0.0 - 0.6
B	Represents reasonably unimpeded operations at average travel speeds. The ability to maneuver in the traffic stream is slightly restricted and delays are not bothersome	0.61 – 0.70
C	Represents stable operations, however, ability to change lanes and maneuver may be more restricted than LOS B and longer queues are experienced at intersections.	0.71 – 0.80
D	Congestion occurs and a small change in volumes increases delays substantially.	0.81 – 0.90
E	Severe congestion occurs with extensive delays and low travel speeds occur.	0.91 -1.00
F	Characterizes arterial flow at extremely low speeds and intersection congestion occurs with high delays and extensive queuing.	> 1.00

**Table 15-1. Level of Service Descriptions**

The major streets near the EES facility are Avalon Boulevard (adjacent to South San Pedro Street), Gardena Boulevard (to the north), Artesia Blvd (to the south) and Main Street (to the west). An analysis of the existing AM and PM peak volumes on arterial operating conditions was conducted by comparing the peak traffic volumes and estimated capacity for each roadway. The results of this analysis showed that all major arterial within 0.5 miles of the EES are at a Level of Service (LOS) A. The only roadway segments in Carson currently operating at LOS E or F:

- Wilmington Avenue from 223rd Street to I-405 Freeway (AM/PM Peak);
- Wilmington Avenue from Carson Street to 213th Street (AM Peak);
- 213th Street from Avalon Street to Chico Street (PM Peak); and
- 223rd Street from Wilmington Avenue to Alameda Street (PM Peak).

The EES facility is located at 16604 South San Pedro Street in Carson. South San Pedro Street is a “side” street just off of Avalon Boulevard. South San Pedro Street, approximately one city block long, deadends into a parking lot for Vernon Hemingway Park on one end and feeds into Avalon Boulevard at the other end (See Figure 15-1). Avalon Boulevard is a primary north/south roadway in Carson with 3 lanes in each direction and has been classified as a major highway by the City of Carson. Major highways function to connect traffic from collectors to the major freeway system as well as to provide access to adjacent land uses. They move large volumes of automobiles, trucks and buses, and link the principal elements within the City to other adjacent regions. Major highways typically handle inter-city vehicular trips in the magnitude of 25,000 or more vehicles per day. Typically, curb parking is prohibited during peak periods. Bicycle traffic would travel with vehicular flow or be separated by a path behind the curb. Raised medians to separate opposing flows are typical and access control, (i.e., driveways and minor intersecting streets) is often minimized.

The EES facility uses 15 tanker or bobtail trucks to collect used motor oil, oily wastewater and waste antifreeze from customers located in various parts of the Southern California. The empty trucks, which are parked overnight at the facility, leave the facility site between 0630 and 0800 hours in the morning and return with tanks filled with the used oil, oily wastewater, and waste antifreeze between 1400 and 1800 hours. Approximately 17 Independent trucks also transport used oil, waste antifreeze, and oily wastewater to the facility. These trucks typically make one round trip per day from the facility. In addition to the 15 EES bobtail trucks and 17 independent trucks, larger tank trucks (7,000 gallon) enter the facility to pickup waste loads for transport offsite. These large tanker trucks average approximately 2 to 3 round trips to and from the facility per week. The EES driveway is wide enough for two way traffic and provides direct access to south San Pedro Street. Trucks enter and exit the site on South San Pedro Street. Traffic from the facility would then feed into existing patterns on Avalon Boulevard without disrupting the north/south traffic flow. Avalon Boulevard provides convenient north-south access to the Artesian (SR-91) Freeway. The Artesian Freeway is located less than one mile from the project site. An optional route for project traffic is to head west on Gardena or Redondo Beach Boulevard from Avalon

to enter the Harbor (I-110) Freeway. Both routes to the freeway travel through areas containing developed manufacturing and commercial areas without requiring entry into residential neighborhoods.

Parking is provided for in the front of the facility and in the parking area adjacent to Vernon Hemingway Park. All trucks are parked within the facility. No EES trucks are parked on the street or in the parking area adjacent to Vernon Hemingway Park.

Analysis of Potential Impacts. Describe to what extent project activities would:

- a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).

No. Evergreen Environmental Services is an existing facility and has been in operation since 1993. The project does not involve a substantial expansion of the facility or its operations.

Level of Service (LOS) terms are used to qualitatively describe prevailing conditions and their effect on traffic. The LOS is related to the volume-to-capacity ratio (V/C). To determine the V/C ratio, the peak hourly traffic volume on a particular roadway link is divided by the link capacity. The ground traffic counts provide the roadway segment volumes used in the existing conditions analysis of the volume-to-capacity ratio for the roadway level of service. The assumed capacities on roadway links were based on the standards used by the County of Los Angeles and modified for special conditions in Carson. The capacities reflect the maximum number of vehicles per hour that can reasonably be carried on the roadway under prevailing traffic conditions. Avalon Boulevard near the facility has 3 lanes in each direction and is designated LOS A. The capacity of Avalon Boulevard in each direction is 750 vehicles per lane per hour or a total of 2250 vehicles per hours. A traffic count conducted in 2002 shows a vehicle count of 1013 in the northbound direction and 1074 in the southbound direction. The corresponding V/C ratios are 0.45 and 0.48, respectively.

EES currently uses 15 trucks to collect waste from customers. An additional 17 trucks bring used oil to the EES each day. This traffic has already been included in the vehicle count and thus, the Level of Service. EES has no plan to substantially expand the facility. However, if one wants to assume that EES will double the number of vehicles delivering waste, this will add an additional 32 vehicle trips and in the worst case scenario, all trucks are assumed to arrive at the facility within the same hour. The V/C ratio would then be 0.46, assuming all trucks come from the south, and 0.49, assuming all trucks come from the north. The Level of Service on Avalon Boulevard near the facility would remain at LOS A. Since this is an existing facility and no expansion is planned, traffic to and from the facility is expected to remain essentially unchanged. Any impacts from slight increases in traffic would be less than significant. Therefore, the project would not cause an increase in traffic which is substantial in relation to existing traffic load and capacity of the street system.

- b. Exceed, either individually or cumulatively, a level of service standard established by the country congestion management agency for designated roads or highway.

No, the project will not exceed, either individually or cumulatively, a level of service standard established by the country congestion management agency for designated roads or highway. See discussion on 15.a above.

- c. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

No. The project involves making a permit determination on an existing used oil facility. The facility has been operating since 1993. The hazardous waste management units are in the center of the facility site. Construction activities would be limited to construction of a small drum storage area adjacent to the west wall of the secondary containment system. The project does not involve making any alterations to areas along the property boundaries nor any streets or roadways near the facility. Therefore, no potential impacts are expected from the project which would substantially increase hazardous due to a design feature.

- d. Result in inadequate emergency access.

No. The project involves making a permit determination on an existing used oil facility. The facility has been operating since 1993. The hazardous waste management units are in the center of the facility site. Construction

activities would be limited to construction of a small drum storage area adjacent to the west wall of the secondary containment system. The project does not involve making any alterations to areas along the property boundaries nor any streets or roadways near the facility. Therefore, no potential impacts are expected from the project which would result in inadequate emergency access.

e. Result in inadequate parking capacity.

No. The project is an existing facility. It has been operating since 1993. Parking is provided for in the front of the facility and in the parking area adjacent to Vernon Hemingway Park. All trucks are parked within the facility. No EES trucks are parked on the street or in the parking area adjacent to Vernon Hemingway Park. There is current adequate parking. If the project is approved, EES does not anticipate any increase in the number of employees. EES also does not anticipate any significant increase in the number of trucks entering the site since no major expansion of the operations is planned. Therefore, no potential impacts are expected from the project which would result in inadequate parking capacity.

f. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

No. EES is an existing and has been in operation since 1993. All vehicles entering and leaving the facility are privately owned. No significant expansion of the facility is planned. Therefore, the project will not conflict with adopted policies, plans, or programs supporting alternative transportation

*Specific References:* 1, 2, 3, 4, 5, 7

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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## 16. Utilities and Service Systems

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*Project activities likely to create an impact:* None.

*Description of Environmental Setting:* Water service is provided to the City of Carson by the California Water Service Company (Cal Water) Dominguez District and by Southern California Water Company (SCWC) Southwest District. SCWC serves approximately 13 percent of the City of Carson with the other 87 percent served by Cal Water. Water is provided to the City from groundwater sources and treated surface water purchased from the Metropolitan Water District (MWD).

The City of Carson owns the local sanitary sewers within the City. The sewers are constructed of vitrified clay pipe, which have a normal service life in excess of 75 years. The Los Angeles County Department of Public Works Consolidated Sewer Maintenance District (CSMD) maintains these sewers lines. The CSMD collects user fees for operation and maintenance of existing local sewer lines. The trunk lines and treatment plant within the City are owned and operated by the County Sanitation Districts of Los Angeles County (CSDLAC). Wastewater generated within the City is treated at the Joint Water Pollution Control Plan (JWPCP) located at 24501 Figueroa Street in Carson. The JWPCP has a design capacity of 385 million gallons per day (mgd) and processes an average flow of 329.3 mgd. The design capacities of the Districts' wastewater treatment facilities are based on regional growth forecasts adopted by the Southern California Association of Governments (SCAG). All expansion of Districts' facilities must be sized and service phased in a manner that would be consistent with SCAG's regional growth forecasts. The available capacity of the Districts' treatment facilities would be limited to levels associated with the approved growth identified by SCAG.

Landfill sites throughout California are nearing capacity. New landfill sites are difficult to locate due to limited land resources. In 1989, the State legislature passed AB 939, the California Integrated Waste Management Act. AB 939 required all cities and counties within the State to prepare integrated waste management plans to attain solid waste reduction goals of 50 percent by the end of 2000. The plans were to include components for source reduction, recycling and composting. In 1996, Carson prepared and adopted a source reduction and recycling element (SRRE). Recycling programs adopted in Carson include residential curbside recyclable collection, residential green-waste collection and

commercial on-site recycling collection. The City of Carson has five centers for used oil recycling. According to the California Integrated Waste Management Board, Carson achieved an approved diversion rate of 56 percent in 1998. Preliminary diversion rates for 1999 and 2000 are 71 percent and 72 percent, respectively. Waste Management Incorporated provides residential, commercial and industrial waste collection service for the City of Carson. Waste Management Inc. collects approximately 34,000 tons from residential customers, 40,750 tons from commercial customers and 26,600 tons from industrial customers per year. The disposal service uses traditional methods of solid waste collection using standard trash trucks and crews.

The service also includes pickup of sorted recyclable materials, which are taken directly to a company to separate and sell. Solid waste collected by Waste Management is taken to the company's transfer station at 321 W. Francisco Street in Carson, where it is sorted. The 10-acre facility has a permitted capacity of 5,300 tons per day. After the materials are sorted, special wastes such as tires, green waste, steel and wood are sent to facilities for disposal or recycling while the remaining waste materials are loaded onto trailers and taken to the Bradley Landfill in Sun Valley.

The permit for the Bradley Landfill facility was issued November 10, 1999. The permit allows for acceptance of 10,000 tons of waste per day and a total maximum landfill capacity of 14,629,100 cubic yards. According to the California Integrated Management Board (CIWMB) the landfill has a remaining capacity of 4,881,000 cubic yards.

Southern California Edison, Compton Service Center, provides electric service to the Carson area. Electricity can be generated from a combination of oil, natural gas, hydroelectric, nuclear or renewable sources (wind and solar). There are three major substations with the Carson boundaries: 1) Carson Substation at Alameda Street and Johns Manville Street, 2) Nola Substation at South Broadway and Victoria Street and 3) Neptune Station at 213th Street and Grace Avenue. There are approximately one dozen transmission facilities (66kV) that extend along Wilmington Avenue and Alameda Street that feed the SCE service area or distribute directly to select high voltage customers. There are also numerous high voltage easements, ranging from 120 kV to 500 kV, that traverse the City of Carson.

Southern California Gas Company, Pacific Region, supplies natural gas to the City of Carson. As a public utility, the Southern California Gas Company is under the jurisdiction of Federal and State regulatory agencies. A medium and high-pressure distribution pipeline system and a high-pressure transmission pipeline system transect the Carson boundaries.

SBC provides telephone service to the City of Carson. The telephone service facilities consist of both fiber and copper facilities. A light span technique that enhances service is in use in the Carson area. A sonnet ring provides improved service to the general South Bay area. There are both aerial and underground lines within the City of Carson.

The project involves making a permit determination on an existing used oil transfer facility. Utility hookups already exist. No new utilities or alterations of existing facilities will be required as a result of this project. The facility does not discharge wastewater or oily water into a wastewater treatment facility. All wastewater and oily water is shipped offsite to an authorized facility.

Analysis of Potential Impacts. Describe to what extent project activities would:

- a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

None. The project does not discharge wastewater or oily water to any wastewater treatment facility. Any rainfall collected in the secondary containment system will be managed in accordance with the Regional Water Quality Control Board requirements.

- c. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

None. The project does not discharge wastewater or oily water to any wastewater treatment facility. Any rainfall collected in the secondary containment system will be managed in accordance with the Regional Water Quality Control Board requirements.

- d. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

None. The project involves an existing used oil transfer facility. The project will not result in any need to increase storm water drainage facilities or expansion of existing facilities. Current stormwater drains in the area have been

adequate to handle any rainfall runoff from the facility. Any rainfall collected in the secondary containment system will be managed in accordance with the Regional Water Quality Control Board requirements.

- e. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.

Yes. This project involves making a permit determination on an existing used oil transfer facility. The facility has been operating for 10 years. The water supply is currently supplied by the California Water Service Company. Water is used at the facility for restroom facilities and washing of trucks and equipment. The water supply is currently adequate for EES's needs. There are no plans to use or request additional water supplies.

- f. Result in determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments.

None. The project does not discharge wastewater or oily water to any wastewater treatment facility.

- g. Be served by a landfill with sufficient permitted capacity to accommodate the projects solid waste disposal needs.

Yes. This is an existing used oil transfer facility. All non-hazardous solid waste are managed by Waste Management Inc. and brought to the appropriate facilities. All solid waste contaminated with oil are shipped to permitted authorized disposal or treatment facilities. Although the project will allow for the construction of a small drum storage area (10 feet by 48 feet), the number of drums managed at the facility will remain constant. Drums of solid waste contaminated with oil are currently handled at the facility on a transfer basis and must be shipped offsite within 10 days. The drum storage area will allow EES to accumulate enough drums to ship fully loaded trucks rather than partially filled trucks.

- h. Comply with federal, state, and local statutes and regulations related to solid waste.

Yes. All non-hazardous solid waste are managed by Waste Management Inc. and brought to the appropriate facilities. All solid waste contaminated with oil are shipped to permitted authorized disposal or treatment facilities. DTSC inspectors will audit EES's manifests to ensure any hazardous waste are shipped to permitted authorized disposal or treatment facility as required by law.

*Specific References:* 1, 2

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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## 17. Mandatory Findings of Significance

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Analysis of Potential Impacts. Describe to what extent project activities would:

- a. Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.

As discussed in Section 4, Biological Resources, the project is an existing facility located on a developed industrialized area zoned for heavy manufacturing and has been operating at this location since 1993. The site is covered entirely by either asphalt or concrete. There are a total of four buildings (a foundry, a large woodworking factory, a machine shop, and a tool manufacturing plant) located immediately north and west of the site. There are no threatened or endangered plants or animals within the fenced area of the facility and is completely void of any plant or animal habitat.

Also as discussed in Section 5, Cultural Resources, the City of Carson does not have any historical resources listed on the National Register of Historic Places. Additionally, there are no paleontological resources within the City of Carson.

Therefore, the project would not result in any significant impacts to fish, wildlife, plant species or important examples of major periods of California history or prehistory.

- b. Have impacts that are individually limited but cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

The impacts on individual resources were examined and discussed in this Initial Study. DTSC concluded that there would be no impacts to the following resources: Aesthetics, Agricultural Resources, Biological Resources, Cultural Resources, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, and Utilities and Services Systems. See the appropriate section above for details of the analysis.

Impacts to the following resources were found to be less than significant: Air Quality, Geology and Soils, Hazards and Hazardous Materials, Noise, and Transportation and Traffic.

In certain instances, a project may have possible environmental effects which are individually limited but cumulatively considerable. In accordance with Section 15130 of the CEQA Guidelines, this Initial Study analyzes the cumulative impacts that could occur with the EES project. Cumulative impacts, (e.g., two or more individual effects which, when considered together, compound or increase the environmental impact of a proposed project) can result from individually minor but collectively significant projects taking place over a period of time.

The DTSC's cumulative analysis consists of examining the conclusions reached in existing environmental documents for related projects in the general vicinity and the conclusions reached in each resource analysis in this Initial Study to determine if a "nexus" can be established among resource impacts that could lead to a significant cumulative impact in the project area. No analysis will be performed on resources which have been determined not to be impacted (See list above). DTSC performed a search of the relevant environmental documents through the State Clearinghouse's CEQAnet Database. No related projects were found in the general vicinity of the EES project. Projects not related to hazardous waste management but may have a cumulative impact are:

- **National Training Center.** The lead agency is the California State University Trustees. An Environmental Impact Report was prepared for this project. The project would be located on the western portion of California State University, Dominguez Hills, in Carson, California, near the intersection of Victoria Street and Avalon Boulevard. This project is one mile south of the EES facility past the Artesian Freeway. If fully developed, the National Training Center would consist of several major components. Two adjacent stadiums would be constructed on an approximately 85 acre site along with associated support facilities and parking. One stadium would serve as the home of the Galaxy, Los Angeles' Major League Soccer team, as well as a women's professional franchise, and would have permanent seating for approximately 20,000 people, expandable to 27,000 seats. The other proposed stadium would serve major tennis tournaments and would have permanent seating for approximately 8,000 people, expandable to 13,000, and might include 18 new tennis courts.
- **Carson Terminal Expansion.** The lead agency is the City of Carson. An Environmental Impact Report was prepared for this project. Kinder Morgan Tank Storage Terminals LLC, a subsidiary of Kinder Morgan Energy Partners, L.P. (KMEP) is proposing to increase the storage capacity of their Carson Terminal, located adjacent to the southeast intersection of Alameda Street and Sepulveda Boulevard in the City of Carson, California. This project is 7.2 miles southeast of the EES facility and includes the installation of new tankage and supporting piping, pumps and ancillary equipment. The new tanks would meet the current demand for product storage and add capacity for future growth.

DTSC analyzed each resource for which the EES project may have impacted in relation to the above projects and concluded:

### **Air Quality**

Since the hazardous wastes managed at the facility have a low vapor pressure (low volatility), the potential for emissions of vapors into the air is also low. The used oil, oily water and spent antifreeze are typically handled using hoses to load and unload from trucks to tanks, which minimizes the possibility for spills and air releases. When wastes are transferred, they are pumped into the appropriate storage tank using a closed system of hoses, pipes, pumps, and valve. This also prevents air emissions from being released into the atmosphere. EES is currently in compliance with the South Coast Air Quality Management District permits. Any air quality impacts are less than significant.

The Carson Terminal Expansion Draft Environmental Impact Report determined that impacts to air quality were less than significant using a threshold of significance based on the South Coast Air Quality Management District standards..

The National Training Center EIR acknowledges significant impacts to air quality from the construction and operation of the stadiums. Impacts from air quality will be short term and limited to the construction phase. Significant impacts from operations are to remain during operation of the stadiums. These impacts are due to vehicle traffics for events at the stadium. Most events would be held in the evenings and weekends when the EES facility is closed. Air impacts would be limited to the vicinity of the stadiums; however, these impacts would not be compounded by the EES project.

Although significant air impacts have been identified in the environment document for the National Training Center, the air impacts will not be compounded by the EES project. Therefore, any cumulative air quality impacts contributed by the EES project would be less than significant.

### **Geology and Soils**

Impacts to geology and soils from the EES project were limited to the project site and deemed to be less than significant. No impacts were anticipated for any area away from the project site. Since the National Training Center is located one mile from the EES facility and the Carson Terminal Expansion is more than 5 miles from the EES facility, any cumulative geology and soils impacts would be less than significant.

### **Hazards and Hazardous Materials**

Hazardous wastes managed at the facility are considered to be low-risk. In terms of potential for health effects from exposure, used oil and waste antifreeze are relatively benign. Even occasional direct contact with waste oil would not be expected to produce any discernable reaction. Waste management practices, safe operating procedures and an inspection program in the facility operation plan will help to ensure that there are no releases to the environment. Any impacts from hazards and hazardous waste will be less than significant.

The National Training Center and the Carson Terminal Expansion does not involve hazardous waste. The environmental documents for these two projects concluded that impacts from hazards and hazardous materials are less than significant. The Carson Terminal Expansion Draft Environmental Impact Report also included mitigation measures to further reduce the less-than-significant impacts. Therefore, due to the low risk and health effects of the waste and management practices to prevent accidents, the cumulative impacts from hazards and hazardous materials are less than significant.

### **Noise**

Noise levels measurements taken approximately 200 feet outside the facility shows that the noise level to be approximately 79 dBA and can be thought of as ambient for the area. Most of the noise is due to traffic and not from the EES facility. Noise from EES trucks would limited to the short time period where the trucks are entering or leaving the facility. Attenuation due to distances and structures would reduce noise level generated by the trucks arriving at and leaving the EES facility to compliance with the City of Carson's Noise Ordinance. Any impacts from noise would be less than significant. Additionally, sound level decreases exponentially with distance. Since the National Training Center is located one mile from the EES facility and the Carson Terminal Expansion is more than 5 miles from the EES facility, any cumulative noise impacts would be less than significant.

### **Transportation and Traffic**

The EES facility is an existing facility and has been in operations since 1993. Traffic conditions for streets in the vicinity of the EES facility operated at LOS A. EES operations are not expected to increase and any additional would not impact the level of services for any street near the facility. Traffic leaves the facility onto South San Pedro which would merge onto Avalon Boulevard. Avalon Boulevard provides easy access to the Artesian Freeway (SR-91) to the south and the Century Freeway (I-105) to the north. DTSC concluded that any potential traffic impacts would be less than significant.

The National Training Center EIR concluded that LOS would decrease at several study area intersections, especially during events held at the proposed project. However, the mitigation measures identified in EIR would mitigate these impacts to less-than-significant levels. The study area intersections are at least one mile away from the EES site and most events are expected to be in the evenings and weekends when the EES facility is closed.

The Carson Terminal Expansion project is more than 5 miles away from the EES facility and is located in the far south section of Carson. Traffic from the EES facility would not have to travel through any streets impacted from the Carson Terminal Expansion project.

The environmental documents for the National Training Center and the Carson Terminal Expansion projects both concluded that traffic impacts would be less than significant. Therefore, DTSC expects any cumulative traffic impacts to be less than significant.

### **Conclusion**

DTSC's examination of the conclusions reached in each of the identified environmental documents suggests that resource-specific and cumulative impacts associated with each project would be less than significant, insignificant or having no impact on the environment. In addition, the conclusions reached within this Initial Study also suggest that environmental resource-specific impacts would be less than significant, insignificant or having no impact. As a result, a nexus could not be established between any resource associated with these projects and the EES project which could lead to a significant cumulative impact in the project area.

As a result of the forgoing examination of available information, DTSC concludes that this project will not result in a significant cumulative impact on the environment when viewed in conjunction with other related projects in the area.

- c. Have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly.

The proposed project would not have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly. No significant adverse impacts have been identified for the proposed project.

*Specific References:* 1, 2, 3, 4, 5, 6, 7, 8, 9, 12, 13, 14, 15

#### *Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

#### **V. FINDING OF DE MINIMIS IMPACT TO FISH, WILDLIFE AND HABITAT (Optional)**

Prepared only if a Finding of De Minimis Impact to fish, wildlife and habitat is proposed in lieu of payment of the Department of Fish and Game Notice of Determination filing fee required pursuant to section 711.4 of the Fish and Game Code.

Instructions

A finding of “no potential adverse effect” must be made to satisfy the requirements for the Finding of De Minimis Impact as required by title 14, California Code of Regulations, section 753.5. “No potential adverse effect” is a higher standard than “no significant impact” and the information requested to provide substantial evidence in support of a “no potential adverse effect” is not identical in either its standard or content to that in other parts of the Initial Study.

In the *Explanation and Supporting Evidence* section below, provide substantial evidence as to how the project will have **no potential adverse effect** on the following resources:

- a) Riparian land, rivers, streams, watercourse, and wetlands under state and federal jurisdiction.
- b) Native and non-native plant life and the soil required to sustain habitat for fish and wildlife.
- c) Rare and unique plant life and ecological community’s dependent on plant life.
- d) Listed threatened and endangered plant and animals and the habitat in which they are believed to reside.
- e) All species of plant or animals as listed as protected or identified for special management in the Fish and Game Code, the Public Resources Code, the Water Code, or regulation adopted there under.
- f) All marine and terrestrial species subject to the jurisdiction of the Department of Fish and Game and the ecological communities in which they reside.
- g) All air and water resources the degradation of which will individually or cumulatively result in a loss of biological diversity among the plants and animals residing in that air and water.

Explanation and Supporting Evidence

The project, located at 16604 South San Pedro Street in Carson, is an existing facility located on a developed industrialized area zoned for heavy manufacturing and has been operating at this location since 1993. The site is covered entirely by either asphalt or concrete. There are a total of four buildings (a foundry, a large woodworking factory, a machine shop, and a tool manufacturing plant) located immediately north and west of the site. The facility is separated from these buildings by an 10 foot chain link fence on top of a 21 inch high cinder block fence. To the south and east surrounding the site is area zoned open space which includes Vernon Hemmingway Park (designed for recreational use and contains a set of swings, tennis courts, softball diamonds, and a small clubhouse). The facility is separated from the park by a 10 foot high cinder block fence. There are no riparian land, river, streams, watercourse, and wetlands on or near the site. There are no threatened or endangered plants or animals on the facility site. The site is completely void of any plant or animal habitat.

Finding

Based on the explanation and supporting evidence provided above, DTSC finds that the project will have no potential for adverse effect, either individually or cumulatively on fish and wildlife, or the habitat on which it depends, as defined by section 711.2 of the Fish and Game Code.

VI. DETERMINATION OF APPROPRIATE ENVIRONMENTAL DOCUMENT

On the basis of this Initial Study:

I find that the proposed project COULD NOT have a significant effect on the environment. A NEGATIVE DECLARATION will be prepared.

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED DECLARATION will be prepared.

I find that the proposed project MAY HAVE a significant effect on the environment. An ENVIRONMENTAL IMPACT REPORT will be prepared.

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DTSC Project Manager Signature		Date
Alfred Wong	Senior Hazardous Substances Engineer	( 510 ) 540-3946
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DTSC Project Manager Name	DTSC Project Manager Title	Phone #

<hr/>		<hr/>
DTSC Branch/Unit Chief Signature		Date
Mohinder S. Sandhu	Chief, Standardized Permitting and Corrective Action Branch	( 510 ) 540-3974
<hr/>	<hr/>	<hr/>
DTSC Branch/Unit Chief Name	DTSC Branch/Unit Chief Title	Phone #

**ATTACHMENT A**  
**INITIAL STUDY REFERENCE LIST**

For

**Evergreen Environmental Services - Carson**

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1. Evergreen Environmental Services, Carson Waste Oil Storage and Transfer Facility, Standardized Permit Application, Revised January 2004.
  2. RBF Consulting, City of Carson General Plan Environmental Impact Report (Volume II), October 30, 2002.
  3. RBF Consulting, City of Carson General Plan Environmental Impact Report (Volume II), Revised Sections, July 11, 2003.
  4. City of Carson Property Information System, City of Carson Website, <http://ci.carson.ca.us/>
  5. Yahoo! Maps, <http://maps.yahoo.com/>
  6. Waterfront Gateway Development Project, Initial Study/Mitigated Negative Declaration, November 2003.
  7. Terry A. Hayes Associates, National Training Center Final Environmental Impact Report, April 2001
  8. State of California, State Clearinghouse CEQAnet Database, <http://www.ceqanet.ca.gov/>
  9. Los Angeles Harbor Department Environmental Management Division, Waterfront Gateway Development Project, Mitigated Negative Declaration, November 2003.
  10. Air Quality and Emissions, California Air Resources Board website, <http://www.arb.ca.gov/html/age&m.htm>
  11. Hazardous Waste and Substances Site List (Cortese List), Department of Toxic Substances Control website, [http://www.dtsc.ca.gov/database/Calsites/Cortese\\_List.cfm](http://www.dtsc.ca.gov/database/Calsites/Cortese_List.cfm)
  12. EIP Associates, Kinder Morgan Tank Storage Terminals, Draft Environmental Impact Report, November 2003.
  13. Public Health Statement for Used Mineral-based Crankcase Oil, September 1997, Agency for Toxic Substances and Disease Registry (ASTDR) website, <http://www.atsdr.cdc.gov/toxprofiles/phs102.html>
  14. Toxicological Profile for Ethylene Glycol and Propylene Glycol, September 1997, Agency for Toxic Substances and Disease Registry (ASTDR) website, <http://www.atsdr.cdc.gov/toxprofiles/tp96.html>
  15. ToxFAQs™ for Ethylene Glycol and Propylene Glycol, September 1997, Agency for Toxic Substances and Disease Registry (ASTDR) website, <http://www.atsdr.cdc.gov/tfacts96.html>
  16. California Department of Conservation, Division of Mines and Geology, A General Location Guide for Ultramafic Rocks in California - Areas More Likely to Contain Naturally Occurring Asbestos, August 2000.
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