

CHAPTER 3: IMPACT ANALYSIS

E. TRANSPORTATION/CIRCULATION

ENVIRONMENTAL SETTING

The regional highway network surrounding the Refinery is shown in Figure 2-1. Two major freeways provide access to the project site: Interstate 5 and 605 generally run north-south to the west of the Refinery and provide access to other major freeways in the Southern California region. The area also is served by a number of railroads.

The Refinery is located generally between Florence Avenue to the north, Bloomfield Avenue to the east, Lakeland Road to the south, and Norwalk Boulevard to the west. The characteristics of these roadways are described below.

Florence Avenue: Florence Avenue is 100 foot wide, east-west street designated as a Major Highway in the City of Santa Fe Springs General Plan. Florence Avenue represents the northern boundary of the Refinery. Florence Avenue has two lanes in each direction and a raised median with left-turn pockets at its intersections with Bloomfield Avenue and Norwalk Boulevard. Traffic counts indicate an Average Daily Traffic (ADT) count of about 30,000 on Florence Avenue, between Bloomfield Avenue and Norwalk Boulevard.

Bloomfield Avenue: Bloomfield Avenue is 100 foot wide, north-south street designated as a Major Highway in the City General Plan. Bloomfield Avenue has two lanes in each direction and a raised median with left-turn pockets at its intersections with Florence Avenue and Lakeland Road. Traffic counts indicate an ADT of about 11,500 on Bloomfield Avenue, between Lakeland Road and Florence Avenue.

Norwalk Boulevard: Norwalk Boulevard is a 100-foot wide, north-south street designated as a Major Highway in the City General Plan. Norwalk Boulevard has two lanes in each direction and a raised median with left-turn pockets at its intersections with Florence Avenue and Lakeland Road. The ADT is about 12,000 on Norwalk Boulevard.

Lakeland Road: Lakeland Road is a 75-foot wide, east-west street designated as a Secondary Highway in the City General Plan. Lakeland Road is located along the southern boundary of the Refinery. Lakeland Road has one lane in each direction, and a continuous median left-turn lane between Bloomfield Avenue and Norwalk Boulevard. Traffic counts reported by the City indicate an ADT of about 5,000 on Lakeland Road within these limits.

Other major roadways in the City include Telegraph Road, Pioneer Boulevard, Shoemaker Avenue, Imperial Highway, Los Nietos Road/Painter Avenue and Carmenita Road. Telegraph Road is a major six lane divided east-west roadway. Pioneer Boulevard is a major four lane divided roadway that runs generally north-south. Shoemaker Avenue is a secondary four lane undivided roadway that runs generally north-south. Imperial Highway is a major six lane divided east-west roadway. Los Nietos Road/Painter Avenue is a secondary four lane undivided roadway that runs generally north-south. Carmenita Road is a major four lane divided north-south running roadway. These roadways will not be discussed in detail in the

traffic analysis. As traffic dissipates further away from the Refinery, the number of construction and operational related vehicles becomes smaller and the impacts negligible. Therefore, the traffic analysis is conducted only for the roads and intersections in the immediate vicinity of the Refinery.

The operating characteristics of an intersection are defined in terms of the level of service (LOS), which describes the quality of traffic flow based on variations in traffic volume and other variables such as the number of signal phases. Intersections with LOS A to C operate well with no traffic delays. LOS C normally is taken as the design level for intersections in urban areas outside a regional core. LOS D typically is the level for which a metropolitan area street system is designed. LOS E represents intersection volumes at or near the capacity of the highway that will result in possible stoppages or momentary duration and fairly unstable traffic flow. LOS F occurs when an intersection or street is overloaded and is characterized by stop-and-go (forced flow) traffic with stoppages of long duration. Table 3-21 summarizes the definitions of the various levels of service.

TABLE 3-21

LEVELS OF SERVICE FOR URBAN AND SUBURBAN ARTERIAL STREETS

LEVEL OF SERVICE	DESCRIPTION
A	Free flow (relatively); if signalized, conditions are such that no approach phase is fully utilized by traffic and no vehicle waits through more than one red indication. Very slight or no delay. Level of service range: 0.00-0.60
B	Stable flow; if signalized, an occasional approach phase is fully utilized; vehicle platoons are formed. This level is suitable operation for rural design purposes. Slight delay. Level of service range: 0.61-0.70.
C	Stable flow or operation; if signalized, drivers occasionally may have to wait through more than one red indication. This level is suitable operation for urban design purposes. Acceptable delay. Level of service range: 0.71-0.80.
D	Approaching unstable flow or operation; queues develop but are quickly cleared. Tolerable delay. Level of service range: 0.81-0.90.
E	Unstable flow or operation; the intersection has reached ultimate capacity; this condition is not uncommon in peak hours. Congestion and intolerable delay. Level of service range: 0.91-1.00
F	Forced flow or operation; intersection operates below capacity. Jammed. Level of service range 1.00+

Source: Highway Capacity Manual. HRB Special Report 87 in South Coast AOMD, 1993.

Table 3-22 shows the existing level of service and the peak hour volume-to-capacity ("V/C") ratios. Traffic data for the 1995 baseline conditions were not directly available and would not fully reflect existing conditions from non-Refinery traffic. Therefore, the existing level of service was calculated using traffic studies from 1998 and 1999, which were conducted at a time that the Refinery's operations were suspended, and adjusting the data by adding traffic

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associated with the Refinery's level of operations in 1995. The available traffic data for the Florence Avenue/Norwalk Boulevard, Lakeland Road/Bloomfield Avenue, and Florence Avenue/Bloomfield Avenue intersections were from traffic studies completed by the City of Santa Fe Springs in 1998. The City's traffic study did not include the Lakeland Road/Norwalk Boulevard intersection. Therefore, traffic counts for this intersection were taken in February 1999. The Refinery estimates that there were about 372 employees, 45 to 68 visitors and other miscellaneous trips, and 117 to 249 truck trips at the Refinery in 1995. The LOS analysis assumes that there were 2 shifts per day with 44 workers each operating the Refinery between 7:00 a.m. and 7:00 p.m., and 7:00 p.m. to 7:00 a.m. Approximately 198 employees worked during the day shift of 8:00 a.m. to 5:00 p.m. The LOS analysis assumed that each truck was equal to 3 passenger vehicle equivalents and that 10 percent of the truck traffic occurred during the peak traffic hours.

TABLE 3-22

CENCO REFINING COMPANY EXISTING LEVEL OF SERVICE ANALYSIS AND VOLUME-TO-CAPACITY RATIOS

	BASELINE ⁽¹⁾			
	A.M LOS	Peak Hour V/C	P.M LOS	Peak Hour V/C
Norwalk Boulevard and Florence Avenue	C	0.791	F	1.081
Bloomfield Avenue and Lakeland Road	A	0.574	A	0.516
Bloomfield Avenue and Florence Avenue	C	0.781	E	0.904
Norwalk Boulevard and Lakeland Road	A	0.524	A	0.468

Notes:

- (1) = based on 1998 and 1999 traffic data adjusted by Refinery's 1995 traffic.
- V/C = Volume to capacity ratio (capacity utilization ratio)
- LOS = Level of Service

A V/C ratio of 1.0 indicates the roadway segment is operating at its designed capacity. Values above and below 1.0 indicate increasingly congested or improved flow conditions, respectively. The V/C ratio for the *p.m. peak hour traffic* at Norwalk Boulevard/Florence Avenue is above 1.0 (LOS F) during the evening peak hours, which means there is forced traffic flow. The V/C ratio for the *p.m. peak hour traffic* at Bloomfield Avenue and Florence Avenue is at LOS E, indicating *these intersections are near capacity and have a fairly unstable traffic flow*. The traffic at all other intersections is within the design criteria for the intersection (i.e., LOS of D or better).

Three railroad lines traverse the City of Santa Fe Springs: two Southern Pacific Corridors and one Santa Fe Rail Corridor. The most heavily used railroad line is the Atchison, Topeka, and Santa Fe/AMTRAK Railroad mainline, which runs through the City north/south. The daily total of trains that use this line is about 35. More than half of the trains travel at a rate of about 50 miles per hour. Railroad undercrossings at Carmenita Road, Florence Avenue, Imperial Highway, Telegraph Road, and Santa Fe Springs Road have been helpful in an effective circulation system within the City, eliminating delays and safety hazards associated with at-grade railroad crossings. The locations of railways near the Refinery are shown in Figure 3-2.

Regulatory Background

Los Angeles County has developed a Congestion Management Program (CMP) to meet the requirements of Section 65089 of the California Government Code. Among the effects of such a large, diverse, and growing population are serious problems with traffic congestion lasting many hours daily. Since automobiles produce over half the air pollution in the South Coast Air Basin, traffic congestion further aggravates air quality. The CMP was created to: 1) link land use, transportation and air quality decisions; 2) develop a partnership among transportation decision makers on devising appropriate transportation solutions that include all modes of travel; and 3) propose transportation improvement projects which are eligible to compete for State gas tax funds.

The City's General Plan transportation goals that apply to industrial and commercial development include (City of Santa Fe Springs, 1993):

Goal 1, Policy 1.5: *Provide for the safe and expeditious transport of hazardous materials.*

Goal 2, Policy 2.4: *Require that proposals for major new developments include a future traffic impact analysis which adheres to the City's Congestion Management Plan.*

Goal 3, Policy 3.1: *Pursue transportation management strategies that will maximize vehicle occupancy and optimize average trip length.*

Goal 3, Policy 3.4: *Encourage industry to use flextime, staggered working hours and other means to lessen peak commuter traffic.*

Goal 4, Policy 4.4: *Work with local, regional and State agencies involved in mitigating truck traffic impacts on the region, e.g., scheduling truck traffic flow into/out of the area to provide the least impact on commuter traffic.*

Goal 7: *Promote sufficient, well-designed and convenient off-street parking facilities throughout the City.*

Goal 7, Policy 7.4: *Periodically review City parking requirements to make certain that all development provides sufficient on-site parking.*

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Goal 8, Policy 8.2: Comply with adopted performance standards for acceptable levels of service. Maintain a citywide LOS for links not to exceed LOS "C" for Secondary arterials and Local streets, and not to exceed LOS "D" for Major arterials.

Goal 8, Policy 8.6: Require the driveway access points onto arterial roadways be limited in number and location to ensure the smooth and safe flow of vehicles and bicycles.

SIGNIFICANCE CRITERIA

Impacts of the proposed project to transportation and circulation will be considered significant if the following criteria are met:

A major roadway is closed to all through traffic and no alternate route is available.

Peak period levels on major arterials within the vicinity of the proposed project site are disrupted to a point where LOS is reduced from Levels A, B, C or D to Levels E or F for more than one month.

An intersection's volume to capacity ratio increases by 0.02 (2%) or more when the LOS is already E or F. (A 0.01 increase can result from rounding factors and, therefore, would not be significant.)

The above significance criteria is sufficient to determine whether traffic impacts will have a significant impact. Transportation and Circulation is regulated on a State level through the California Department of Transportation (Caltrans). On a local level Caltrans regulations have been adopted in the City of Santa Fe Springs General Plan. The goals and policies in the General Plan that relate to Transportation and Circulation are listed under Regulatory Background in this section of the EIR. The significance criteria have been developed using guidance provided in the California Environmental Quality Act guidelines, Appendix G (Title 14 California Code of Regulations 15000 et seq.) and policies of the City.

PROJECT IMPACTS

The transportation impacts analysis for the proposed project was conducted by evaluating the impacts of project-related traffic on the existing roadway conditions in the area. Project related activities that could impact transportation and circulation in the project vicinity include: 1) worker vehicles commuting to and from the project site during construction and operation; 2) transporting equipment and materials during construction and operation.

This section addresses the impacts of vehicular and truck traffic associated with the proposed project. Attention is focused primarily on roadway conditions in the immediate vicinity of the project area. All construction activities are assumed to take place at the project site where public access is restricted.

CONSTRUCTION IMPACTS

Construction and modification of the proposed project at the Refinery is expected to take about 8 months. During that time, the LOS analysis assumes 393 workers plus 20 existing employees will be commuting to the site, during peak construction activities. It is estimated that 12 construction trucks will travel to the site each day to transport the construction equipment, process equipment, and construction materials to the site. Project construction anticipates 8-hour shifts per day for five days per week, Monday through Friday, with shifts running from 6:30 am to 3:30 p.m. The LOS for the construction traffic impacts did not include the a.m. peak hour because construction activities are scheduled to begin prior to the a.m. peak hour (7:00 to 9:00 a.m.). Therefore, the construction traffic associated with the Refinery modifications will avoid the peak hour traffic conditions eliminating the potential for traffic impacts during the morning. Based on the hours of construction, if all 393 workers left prior to 4:00 p.m., peak hour traffic conditions would also be avoided. In order to predict a "worst case" scenario, the LOS analysis assumes that 25% of the workers/employees will leave after 4:00 p.m. and, therefore, impact the evening peak hour. *CENCO's work hours conform with the desired transportation system management strategy that peak traffic periods are to be avoided whenever possible. Some of the potential construction impacts are avoided by the staggering of work hours.*

Table 3-23 shows the predicted proposed project LOS analysis and volume to capacity ratios due to peak construction activities. This table indicates that the volume to capacity ratio does not increase at any intersection for a.m. or p.m. peak hours during construction. Note that the estimated traffic associated with the Refinery under baseline conditions is higher than during the project. This is generally because more workers were employed under the baseline conditions than are predicted to be hired during either project construction or operation. Therefore, the V/C ratios associated with the project impacts tend to be lower than the baseline conditions and no significant traffic impacts are expected during the construction period.

Construction will require contractor parking areas, equipment laydown and materials stockpiling areas, and a warehouse. Most of the parking for project construction will be in areas currently used for contractor parking. If necessary, a temporary construction staging area could be established east of Bloomfield Avenue adjacent to the coke shed or at the old Waker property. The warehouse site and laydown areas will be located on sites within the Refinery that are currently vacant.

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TABLE 3-23

CENCO REFINING COMPANY CONSTRUCTION TRAFFIC IMPACTS LEVEL OF SERVICE ANALYSIS AND VOLUME-TO-CAPACITY RATIOS

	BASELINE (1)				IMPACTS			
	A.M LOS	Peak Hour V/C	P.M LOS	Peak Hour V/C	A.M LOS	Peak Hour V/C	P.M LOS	Peak Hour V/C
Norwalk Boulevard and Florence Avenue	C	0.791	F	1.081	C	0.770	F	1.072
Bloomfield Avenue and Lakeland Road	A	0.574	A	0.516	A	0.455	A	0.468
Bloomfield Avenue and Florence Avenue	C	0.781	E	0.904	C	0.755	D	0.863
Norwalk Boulevard and Lakeland Road	A	0.524	A	0.468	A	0.440	A	0.453

Notes: (1) = based on 1998 and 1999 traffic data to estimate 1995 traffic conditions.
V/C = Volume to capacity ratio (capacity utilization ratio)
LOS = Level of Service

OPERATIONAL IMPACTS

Vehicle traffic associated with operation of the CENCO Refinery will include the transportation of workers to the facility as well as the delivery of equipment and materials to the site. Operating conditions at the CENCO Refinery will require two 12 hour shifts. The LOS analysis assumes the 2 shifts operate (7 a.m. - 7 p.m. and 7 p.m. - 7 a.m.) with 44 workers and that 160 employees work the day shift (8:00 a.m. to 5:00 p.m.). The LOS analysis assumes that 68 visitors will visit the site each day and that a maximum of 255 trucks per day will travel to the site. The LOS analysis assumes that each truck is equal to 3 passenger vehicle equivalents. Only a portion of the Refinery traffic (160 employees) would impact the morning and evening peak traffic hours.

Table 3-24 shows the projected LOS and volume to capacity ratios due to the operational phase of the project. The traffic associated with the Refinery would not significantly change the LOS at the local intersections from baseline conditions (see Table 3-24). Therefore, the traffic associated with the operation of the proposed project is expected to be less than significant.

TABLE 3-24

**CENCO REFINING COMPANY
OPERATIONAL TRAFFIC IMPACTS
LEVEL OF SERVICE ANALYSIS AND VOLUME-TO-CAPACITY RATIOS**

	BASELINE (1)				IMPACTS			
	A.M LOS	Peak Hour V/C	P.M LOS	Peak Hour V/C	A.M LOS	Peak Hour V/C	P.M LOS	Peak Hour V/C
Norwalk Boulevard and Florence Avenue	C	0.791	F	1.081	D	0.803	F	1.095
Bloomfield Avenue and Lakeland Road	A	0.574	A	0.516	A	0.540	A	0.540
Bloomfield Avenue and Florence Avenue	C	0.781	E	0.904	C	0.798	E	0.920
Norwalk Boulevard and Lakeland Road	A	0.524	A	0.468	A	0.550	A	0.485

Notes: (1) = Based on 1998 and 1999 traffic data to estimate 1995 traffic conditions.
V/C = Volume to capacity ratio (capacity utilization ratio)
LOS = Level of Service

CENCO may construct a warehouse and administration building on the old Walker property. This would transfer some of the traffic associated with worker vehicles at the Refinery to the old Walker property. The total number of workers under this scenario is expected to remain the same; however, the traffic and parking would be distributed differently, i.e., more vehicles would travel to the old Walker property. A traffic analysis was completed that evaluated the impacts of the revised distribution of traffic, assuming that a warehouse and administration building are constructed at the old Walker property (see Appendix C). The results of the analysis indicate that the traffic impacts would remain less than significant if additional worker vehicles traveled to the old Walker property.

The proposed project will not increase the rail traffic to/from the Refinery. Therefore, no impacts on the railroad system or railroad circulation are expected.

MITIGATION MEASURES

No mitigation measures are proposed for the traffic and circulation impacts during construction or operation since no significant impacts on traffic are expected.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The proposed project impacts on traffic would be considered less than significant.

to be less than one so that no significant impacts associated with non-carcinogenic compounds are expected.

Mitigation Measures

- 5-3 Mitigation measures for construction activities include spraying water to minimize dust emissions, confining the size of the construction activities, preparation of Transportation Management Plans, and limiting truck deliveries to off peak hour times. Impacts related to the construction of the cumulative projects are considered to be temporary and will cease following the construction period.

Level of Significance

Cumulative impacts on air quality during the Refinery construction phase and the construction phase of other nearby projects are expected to remain significant following mitigation. Cumulative impacts on air quality during the operational phase of the project are not expected to be significant *so that mitigation measures are not required.*

Cumulative Transportation/Circulation Impacts

Construction Impacts

Cumulative impacts from construction and modification of the proposed project and cumulative projects at the Refinery are expected to last about 8-12 months. During that time, the LOS analysis assumes 570 construction workers plus 20 existing employees will be commuting to the site, during peak construction activities. It is estimated that 20 construction trucks will travel to the site each day to transport the construction equipment, process equipment, and construction materials to the site. Cumulative impacts from project construction anticipates one 8-hour shift per day for five days per week, Monday through Friday, with shifts running from 6:30 a.m. to 3:30 p.m. The LOS for the construction traffic impacts did not include the a.m. peak hour because construction activities are scheduled to begin prior to the a.m. peak hour (7:00 a.m. to 8:00 a.m.). Therefore, the construction traffic associated with the Refinery modifications will avoid the peak hour traffic conditions eliminating the potential for traffic impacts during the morning.

The p.m. peak hour also should be avoided because construction activities are scheduled to end by 3:30 p.m. However, it is possible that some construction activities may extend later in the day. In order to predict a "worst case" scenario it is assumed that 25% of the workers will leave after 4:00 p.m. Table 5-3 shows the predicted LOS analysis and volume to capacity ratios due to peak construction activities for the cumulative Refinery projects, assuming that 25% of all the vehicles leave during peak hour. The p.m. LOS at the Norwalk Boulevard/Florence Avenue intersection is F, indicating forced flow, and intersection operating below capacity. However, cumulative construction traffic would not significantly impact this intersection. Therefore, no significant traffic impacts are expected during the cumulative Refinery projects construction period.

Sufficient data are not available to estimate the construction traffic related to the cumulative local projects. The cumulative projects that are currently under construction are expected to be completed prior to the commencement of construction at the CENCO Refinery. Specific building plans have not been developed for the other cumulative projects. The construction of the CENCO cumulative projects is not expected to occur at the same time as construction of the other local cumulative projects. Therefore, cumulative traffic impacts during the construction phase are not expected.

TABLE 5-3

**CENCO REFINING COMPANY
CONSTRUCTION TRAFFIC IMPACTS
LEVEL OF SERVICE ANALYSIS AND VOLUME-TO-CAPACITY RATIOS**

	BASELINE ⁽¹⁾		CUMULATIVE IMPACTS	
	P.M LOS	Peak Hour V/C	P.M LOS	Peak Hour V/C
Norwalk Boulevard and Florence Avenue	F	1.081	F	1.073
Bloomfield Avenue and Lakeland Road	A	0.516	A	0.471
Bloomfield Avenue and Florence Avenue	E	0.904	D	0.870
Norwalk Boulevard and Lakeland Road	A	0.468	A	0.455

Notes: (1) = Based on 1998 and 1999 traffic data to estimate 1995 traffic conditions.
V/C = Volume to capacity ratio (capacity utilization ratio)
LOS = Level of Service

Operational Impacts

The proposed project will have little to no impact on transportation/circulation during the operational phase. Compared to the baseline/environmental setting, the proposed project will result in the same number of workers on each of two twelve-hour shifts (44), approximately 38 fewer employees working the day shift (160 instead of 198), and about the same peak truck traffic (255 instead of 249 trips per day) (see Chapter 3). These changes did not change the level of service at the local intersections from baseline conditions. Therefore, pursuant to CEQA Guidelines Section 15130(a)(1), there is no need to discuss cumulative impacts on transportation/circulation during the operational phase because any cumulative impact would not result in part from the proposed project. Alternatively, pursuant to CEQA Guidelines Section 15130(a)(4), the contribution of the proposed project would be considered de minimus and thus not significant because environmental conditions would essentially be the same whether or not

the proposed project is implemented. Notwithstanding Section 15130, in the interest of the fullest disclosure, a discussion of cumulative impacts follows.

An LOS analysis was completed for the intersections surrounding the Refinery to estimate cumulative impacts in the year 2020. The analysis included traffic associated with general growth and the cumulative projects identified in the EIR. The Pacific Theaters project did not have any peak hour traffic due to its hours of operation. Therefore, traffic counts for this project were not included in the cumulative LOS analysis presented in Table 5-4. These data are based on estimated traffic conditions in 1999 that have been increased by a one-percent per year growth rate to the year 2020 plus the estimated traffic from the cumulative projects. Traffic associated with regional growth is over and above the traffic associated with projects identified in this EIR. The LOS analysis associated with growth plus the identified cumulative projects is shown in Table 5-4. Details of the traffic modeling are included in Appendix C.

Table 5-4 shows the year 2020 cumulative impact analysis which takes into account both the projected growth increases and those of the cumulative projects, for both a.m. and p.m. peak hours. Table 5-4 indicates that the traffic volumes associated with growth and cumulative projects are expected to be significant at the intersections of Bloomfield Avenue/Florence Avenue and Norwalk Boulevard/Florence Avenue during both the a.m. and p.m. peak hours. Volume to capacity ratio increases by more than 0.02 are estimated at the intersection of Norwalk Boulevard/Florence Avenue as a result of cumulative projects during both the a.m. and p.m. peak hours. Table 5-4 also shows that the volume to capacity ratio increases by more than 0.02 at the intersection of Bloomfield Avenue/Florence Avenue as a result of cumulative projects. Therefore, there is a significant impact on traffic at these two intersections resulting from general growth and cumulative projects, although not from the proposed project. The traffic at all other intersections is within the design criteria for the intersection (i.e., LOS of D or better).

Mitigation Measures

Mitigation measures have been developed for the Refinery projects and will be implemented as part of the cumulative Refinery including the following:

- 5-4 CENCO will develop a transportation management plan, which shall be approved by the City Traffic Engineer prior to beginning construction activities. The plan shall address traffic control, parking, and access during the construction phase. The plan shall be designed to achieve an average ridership (AVR) of 1.5 or greater by encouraging ridesharing thereby reducing overall traffic in the vicinity of the project. The plan shall also require construction workers to use transportation routes that avoid the Norwalk Boulevard/Florence Avenue intersection.

TABLE 5-4
 CUMULATIVE PROJECTS
 LOS ANALYSIS AND VOLUME TO CAPACITY RATIO

	Baseline				Year 2020 Cumulative Projects			
	A.M. LOS	A.M. Peak Hour V/C	P.M. LOS	P.M. Peak Hour V/C	A.M. LOS	A.M. Peak Hour V/C	P.M. LOS	P.M. Peak Hour V/C
Bloomfield Avenue and Florence Avenue	D	0.899	F	1.031	E	0.947	F	1.087
Bloomfield Avenue and Lakeland Road	B	0.601	A	0.575	B	0.625	B	0.627
Norwalk Boulevard and Florence Avenue	E	0.912	F	1.252	E	0.963	F	1.312
Norwalk Boulevard and Lakeland Road	A	0.577	B	0.526	B	0.634	A	0.564

Notes:

V/C = volume to capacity ratio
 LOS = level of service
 Year 2020 LOS based on traffic growth of 1% per year

- 5-5 CENCO will implement a construction work schedule that avoids peak hour traffic to the extent feasible, e.g., 6:30 a.m. to 3:30 p.m. Workers leaving the Refinery by 3:30 p.m. would avoid peak p.m. traffic conditions, thus avoiding significant traffic impacts.
- 5-6 CENCO will coordinate construction truck delivery schedules to avoid peak hour traffic wherever possible.
- 5-7 The addition of another eastbound lane on Florence Avenue would increase the capacity of this street and minimize the operational traffic impacts associated with growth and cumulative projects. The City has included the widening of Florence Avenue from four to six lanes as a mitigation measure in the General Plan. Table 5-5 shows the LOS and volume to capacity ratios before and after the additional lane on Florence Avenue for the projected year 2020.
- 5-8 The addition of another eastbound lane on Florence Avenue would reduce the traffic impacts at Bloomfield Avenue/Florence Avenue to less than the significant. The cumulative traffic impacts at Florence Avenue/Norwalk Boulevard would remain significant.

TABLE 5-5

MITIGATION MEASURES
LOS ANALYSIS AND VOLUME TO CAPACITY RATIO

	Cumulative Impacts				Mitigation Measures			
	A.M. LOS	A.M. Peak Hour V/C	P.M. LOS	P.M. Peak Hour V/C	A.M. LOS	A.M. Peak Hour V/C	P.M. LOS	P.M. Peak Hour V/C
Bloomfield Avenue and Florence Avenue	E	0.947	F	1.087	C	0.787	D	0.859
Norwalk Boulevard and Florence Avenue	E	0.963	F	1.312	C	0.787	F	1.082

Notes:

V/C = volume to capacity ratio

LOS = level of service

Year 2020 LOS based on traffic growth of 1% per year

Level of Significance

The cumulative impacts during the construction phase will be mitigated to less than significant by requiring a construction schedule from 6:30 a.m. to 3:30 p.m. This will eliminate worker trips during peak traffic hours.

The cumulative operational impacts are considered to be less than significant per CEQA Guidelines Section 15130(a)(1). The proposed project will have little to no impact on transportation/circulation during the operational phase. Pursuant to CEQA Guidelines Section 15130(a)(4), the contribution of the proposed project would be considered de minimus and thus not significant because environmental conditions would essentially be the same whether or not the proposed project is implemented.

Significant cumulative impacts on traffic and circulation were identified for general population growth to the year 2020 and the cumulative projects. These impacts would be reduced with addition of another eastbound lane on Florence Avenue; however, the p.m. peak hour traffic impacts at the intersection of Norwalk Boulevard/Florence Avenue would remain significant due to regional growth. *The proposed project does not contribute to those significant impacts; therefore, CENCO is not responsible for these mitigation measures.*

Cumulative Hazard Impacts

The cumulative Refinery projects include modifications that will alter the hazards at the CENCO Refinery. The City of Santa Fe Springs recently approved modifications to the Alkylation Unit that will allow the use of a modified HF catalyst. The modifications to the