Appendix G: Water Quality Management Plan

Conceptual WQ 13-xxxx

Water Quality Management Plan(WQMP) County of Orange Priority Public Project/ Santa Ana Region



For:

John Wayne Airport Jet Fuel Pipeline& Storage Facilities 18601Airport Way Santa Ana, CA 92707

ENCROACHMENT PERMIT NUMBER: 2013-00033

Prepared for: Wickland Pipeline, LLC 8950 Cal Center Drive, Suite 125 Sacramento, CA 95826

Prepared by: Civil Works Engineers, Inc. 3151 Airway Avenue, Suite T-1 Costa Mesa, CA 92626 714-966-9060 <u>MMarston@CivilWorksEngineers.com</u>



August 2013

This Water Quality Management Plan (WQMP) has been prepared for <u>County of</u> <u>Orange/JWA</u>through Wickland Pipelines, Inc by Civil Works Engineers. The WQMP is intended to comply with the requirements of the Countyof Orange NPDES Stormwater Program requiring the preparation of the plan.

The County of Orange/JWA through Wickland Pipelines, Inc is responsible for the implementation of the provisions of this plan, including the ongoing operation and maintenance of all best management practices (BMPs), and will ensure that this plan is amended as appropriate to reflect up-to-date conditions on the site consistent with the current Orange County Drainage Area Management Plan (DAMP) and the intent of the non-point source NPDES Permit for Waste Discharge Requirements for the County of Orange, Orange County Flood Control District and the incorporated Cities of Orange County within the Santa Ana Region.An appropriate number of approved and signed copies of this document shall be available on the subject site in perpetuity.

Authorized Co	unty Agency/Department Representative:	
Agency	JOHN WAYNE AIRPORT	
Name		
Title		
Address	3160 Airway Avenue, Costa Mesa, CA 92626	
Email		
Telephone #		
I understand my responsibility to implement the applicable provisions of this WQMP including the ongoing operation and maintenance of the best management practices (BMPs) described herein.		
Authorized Representative Signature	Date	

This Water Quality Management Plan (WQMP) has been prepared for <u>City of Tustin</u> through Wickland Pipelines, Inc by Civil Works Engineers. The WQMP is intended to comply with the requirements of the County of Orange NPDES Stormwater Program requiring the preparation of the plan.

The City of Costa Mesa through Wickland Pipelines, Inc is responsible for the implementation of the provisions of this plan, including the ongoing operation and maintenance of all best management practices (BMPs), and will ensure that this plan is amended as appropriate to reflect up-to-date conditions on the site consistent with the current Orange County Drainage Area Management Plan (DAMP) and the intent of the non-point source NPDES Permit for Waste Discharge Requirements for the County of Orange, Orange County Flood Control District and the incorporated Cities of Orange County within the Santa Ana Region.An appropriate number of approved and signed copies of this document shall be available on the subject site in perpetuity.

Authorized Co	unty Agency/Department Representative:		
Agency	CITY OF TUSTIN		
Name			
Title			
Address	300 Centennial Way, Tustin, CA 92780		
Email			
Telephone #			
I understand my responsibility to implement the applicable provisions of this WQMP including the ongoing operation and maintenance of the best management practices (BMPs) described herein.			
Authorized Representative Signature		Date	

This Water Quality Management Plan (WQMP) has been prepared for <u>City of Irvine</u> through Wickland Pipelines, Inc by Civil Works Engineers. The WQMP is intended to comply with the requirements of the County of Orange NPDES Stormwater Program requiring the preparation of the plan.

The City of Irvine through Wickland Pipelines, Inc is responsible for the implementation of the provisions of this plan, including the ongoing operation and maintenance of all best management practices (BMPs), and will ensure that this plan is amended as appropriate to reflect up-to-date conditions on the site consistent with the current Orange County Drainage Area Management Plan (DAMP) and the intent of the non-point source NPDES Permit for Waste Discharge Requirements for the County of Orange, Orange County Flood Control District and the incorporated Cities of Orange County within the Santa Ana Region.An appropriate number of approved and signed copies of this document shall be available on the subject site in perpetuity.

Authorized Co	Authorized County Agency/Department Representative:			
Agency	CITY OF IRVINE			
Name	Mark Carroll	Mark Carroll		
Title	City Engineer			
Address	1 Civic Center Plaza, PO Box 19575, Irvine, CA 92623-9575			
Email	Mcarroll@ci.irvine.ca.us			
Telephone #	949-724-6410			
I understand my responsibility to implement the applicable provisions of this WQMP including the ongoing operation and maintenance of the best management practices (BMPs) described herein.				
Authorized Representative Signature		Date		

County Agency/Department Responsible for Operation and Maintenance of BMPs: (Concurrence from Manager, OC Public Works O&M, Facilities Operations, or other)

The undersigned will be responsible for the ongoing operation and maintenance of the applicableBMPs contained in this WQMP on behalf of the County of Orange. The undersigned has reviewed this WQMP and concurs with the selected BMPs. Concurrence:

Name			
Title			
Address			
Email			
Telephone #			
Signature			
Date			
OC Public Work	OC Public Works/Operations & Maintenance (or other party responsible for operation and maintenance of BMPs)		

Preparer (En	Preparer (Engineer):				
Title	Principal PE Registration # 38798				
Company	Civil Works Engineers				
Address	3151 Airway Avenue, Suite T-1, Costa Mesa, CA 92626				
Email	MMarston@CivilWorksEngineers.com				
Telephone #	714-966-9060				
I hereby certify that this Water Quality Management Plan is in compliance with, and meets the requirements set forth in, Order No. R8-2009-0030, of the Santa Ana Regional Water Quality Control Board.					
Preparer Signature		Date			
Place Stamp Here	$\begin{array}{c} & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & $				

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Section I Discretionary Permit(s) and Water Quality Conditions

Project Infomation		
Name of Project	John Wayne Airport Jet Fuel Pipeline& Storage Facilities	
Grading or Building Permit Number		
Location of Project	Cities of Tustin & Irvine and John Wayne Airport, Orange County, CA	
	Water Quality Conditions	
	PPWQ-01 Water Quality Management Plan (WQMP)	
	Prior to the approval of final design plans, a Water Quality Management Plan (WQMP) shall be prepared and submitted for review and approval by OC Planning. The WQMP shall meet all of the requirements set forth in the Santa Ana Region NPDES Permit, Model WQMP and Technical Guidance Document.	
Water Quality Conditions	Prior to approval of final design plans, the project proponent (County Agency/Department or project manager) shall demonstrate compliance under California's <u>General Permit for Stormwater Discharges Associated with</u> <u>Construction Activity</u> by providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board and a copy of the subsequent notification of the issuance of a Waste Discharge Identification (WDID) Number or other proof of filing in a manner meeting the satisfaction of the OC Planning/Building and/or Grading Plan Check. Projects subject to this requirement shall prepare and implement a Stormwater Pollution Prevention Plan (SWPPP). A copy of the current SWPPP shall be kept at the project site and be available for review on request.	
	PPWQ-05 Erosion and Sediment Control Plan (ESCP) Prior to approval of final design plans, an Erosion and Sediment Control Plan (ESCP) shall be submitted for review and approval by OC Planning/Building and/or Grading Plan Check. The ESCP shall demonstrate compliance with local and state water quality regulations for grading and construction activities. The ESCP shall identify how all construction materials, wastes, grading or demolition debris, and stockpiles of soil, aggregates, soil amendments, etc. shall be properly covered, stored, and secured to prevent transport into local drainages or coastal waters by wind, rain, tracking, tidal	

era ma th rea PI Pr de Pla	 osion or dispersion. The ESCP shall also describe how all BMPs will be aintained during construction of any future public right-of-ways. A copy of e current ESCP shall be kept at the project site and be available for review on quest. <u>PWQ-07 Drainage Facilities</u> tor to issuance of grading or building permits, drainage studies that emonstrate the following shall be submitted to and approved by OC anning/Building and/or Grading Plan Check: 1. All surface runoff and subsurface drainage directed to the nearest acceptable drainage facility, via sump pumps if necessary, as determined by the Manager, Building and Grading Plan Check. 2. Drainage facilities discharging onto adjacent property shall be designed to imitate the manner in which runoff is currently produced from the site and in a manner meeting the satisfaction of the OC Planning/Building and/or Grading Plan Check. Alternatively, the project applicant may obtain a drainage acceptance and maintenance agreement, suitable for recordation, from the owner of said adjacent property. All drainage facilities must be consistent with the County of Orange Grading Ordinance and Drainage Manual. 	
Watershed-Based Plan Conditions		
Provide applicable conditions from watershed - based plans including WIHMPs and TMDLS.	Newport Bay has TMDL's for sediment, metals, nutrients, toxicity, and pesticides.	

Section II Project Description

II.1 Project Description

Description of Proposed Project			
	The project will involve construction of an underground fuel pipeline and above ground tanks within three distinctly different locations – see Narrative Project Description below.		
	As such, according to OC Public Works National Pollutant Discharge Elimination System (NPDES) Program, the overall project is classified in thePriority Project Category.The Priority Category location falls in the following categories:		
Development Category (Verbatim from WQMP):	'New development projects that create 10,000 square feet or more of impervious surface. This category includes commercial, industrial, residential housing subdivisions, mixed-use, and public projects on private or public property that falls under the planning and building authority or the Permittees.'		
	'Streets, roads, highways and freeways. This category includes any paved surface that is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles, and other vehicles.'		
	'All significant redevelopment projects, where significant redevelopment is defined as the addition of replacement of 5,000 or more square feet of impervious surface on an already developed site.'		
1	Number of Dwelling Units: 0 SIC Code: 4613		
Narrative Project	Wickland Pipelines, LLC, (Wickland) is proposing to constructfuel tank facilities and a California Public Utilities Commission (CPUC) regulated common carrier jet fuel pipeline connecting John Wayne Airport (JWA) to an existing fuel pipeline in the City of Tustin. Wickland will construct, own and operate the new connecting pipeline up to the first connection at the fuel tank facilities. SNA Fuels will construct, own and operate the new tank farm facilities within JWA boundary.		
Description:	The project has three distinctly different locations and types of improvements. See Attachment A for map.		
	Location #1 – Approximately 1,500 square feet of site improvements in the rear parking lot of 14741 Franklin Avenue, near the intersection of Edinger Avenue and Tustin Ranch Road, in the City of Tustin. This site is adjacent to an existing fuel pipeline easement and will provide the		

	connection point for the new fuel pipeline. Site improvements will include construction of above ground electrical cabinets, associated piping and valves, concrete paving and fencing substantially within the existing asphalt concrete paved parking lot.				
	Location #2 – Approximately 5-miles of 12-inch diameter underground fuel pipeline installation in City of Tustin and Irvine street right of way, JWA surface parking lot and minimally on private / industrial zoned property. This includes approximately 12,450 linear feet of 24-inch wide (24,900 square feet) trenching within City of Tustin street right of way; 8,345 linear feet of 24-inch wide (16,690 square feet) trenching within City of Irvine street right of way; and 800 linear feet of 24-inch wide (1,600 square feet) trenching within JWA surface parking lots.				
	Location #3 – Approximately 57,000 square foot site development on the west side of the existing John Wayne Airport property, south of the existing fuel tanks and north of the airport fire station. Site improvements will include construction of two above ground fuel storage tanks, associated piping, concrete paving, lined secondary containment area and drainage systems.				
	Pervious Impervious				
Project Area	Area (sqft)	Percentage	Area (sqft)	Percentage	
	Loc #1 = 300	Loc #1 = 20%	Loc #1 = 1,200	Loc #1 = 80%	
Pre-Project Conditions	Loc #2 = 0	Loc #2 = 0%	Loc #2 = 5 miles	Loc #2 = 100%	
	Loc #3 = 50,000	Loc #3 = 88%	Loc #3 = 7,000	Loc #3 = 12%	
	Loc #1 = 0	Loc #1 = 0%	Loc #1 = 1,500	Loc #1 = 100%	
Post-Project Conditions	Loc #2 = 0	Loc #2 = 0%	Loc $#2 = 5$ miles	Loc #2 = 100%	
	Loc #3 = 0	Loc #3 = 0%	Loc #3 = 57,000	Loc #3 = 100%	
	Location #1: Added = 300 sqft, Replaced = 1,200 sqft				
Added or Replaced Impervious Surfaces	Location #2 = Added = 0 sqft; Replaced = 43,190 sqft				
	Location #3 = Added = 50,000 sqft; Replaced = 7,000 sqft				
Drainage Patterns/Connections	Location #1 – Existing drainage patterns will remain. The site will sheet flow into the surface parking lot. The parking lot drains via surface flow easterly to Franklin Avenue.				
	<u>Location #2</u> – Existing street drainage patterns will remain. The construction will involve a combination of constructing a $24''$ wide				

trench or horizontal directional drilling for the pipeline installation. The trenched area will be restored to City standards, maintaining the existing conditions.
Location #3-The overall existing drainage patterns will remain. The runoff currently sheet flows to an inlet within the project area. The inlet connects to the airport's underground storm drain system. This system directs runoff from the airport through an oil and water separator before exiting the airport boundaries and connecting to an Orange County Flood Control Channel adjacent to the 405 Freeway.
The project will modify the existing drainage inlet location. The project will construct a containment area surrounding the tanks that will temporarily detain/pond storm water runoff until manually released by staff. The storm water system can operate to detain flows as necessary to control release levels into the storm drain system. The runoff will only be released after visualinspection of the runoff for contaminants. Runoff from the containment area will enter new inlets that will be reconnected to the existing underground storm drain system.

II.2 Potential Stormwater Pollutants

Pollutants of Concern				
Pollutant	E=Expe be of co N=Not I to be of	ected to oncern Expected concern	Additional Information and Comments	
Suspended-Solid/ Sediment		N		
Nutrients	5	N		
Heavy Metals		Ν		
Pathogens (Bacteria/Virus)		Ν		
Pesticides		N		
Oil and Grease	Е		Pollutant expected due to vehicularuse of public streets, parking lots and tank site.	
Toxic Organic Compounds	Е		Hydrocarbon pollutantdue to potential jet fuel leak from tanks or pipeline.	
Trash and Debris	Е		Pollutant expected due to project located in public street right of way.	

II.3 Hydrologic Conditions of Concern

No – Show map

Yes – Describe applicable hydrologic conditions of concern below.

Streams located downstream of project site are potentially susceptible to erosion, see map in Attachment B.

Location #1 is a very small development on a large site which is substantially paved, therefore there will be only a minor increase in post development runoff. The post development runoff volume for the 2-year frequency storm will not exceed the predevelopment runoff volume by more than 5%.

Location #2 is City street right of way and paved parking lot. This project area is currently paved, and will remain paved. As such, there will be no increase in post development runoff as the runoff volume will equal the predevelopment runoff volume.

Location #3 is located within the John Wayne Airport boundary. The project site is a very small area of the overall airport property area, however, the development will increase the impervious area within the project boundary. The project site is approximately 57,000 square feet. Predevelopment site conditions provide 7,000 square feet of impervious area. Post development site conditions will provide 57,000 square feet of impervious area. As such the 2-year storm volumes are:

Drainage Area	Pre Development	Post Development	Difference
A1	316 ft ³	1,895 ft ³	>5%
A2	639 ft ³	5,597 ft ³	>5%

Calculations are included in Attachment C.

As the difference in 2-year storm volumes are greater than 5%, implementation of hydromodification controls is required. The project will address this control by retaining the storm runoff on-site and slowly releasing the runoff after the storm event passes. Storm water will be captured within a containment area surrounding the project site. The containment area will include four foot high walls and an 80-mil HDPE liner covered by gravel. The containment area will be connected to catch basins and an underground storm drain system, however, the storm drain pipes will include valves that will be closed to capture the storm water. The valves will only be opened by staff after the storm event passes and the site has passed inspection procedures.

II.4 Post Development Drainage Characteristics

Location #1

The existing site drainage patterns will not be modified. The project site is substantially located within an existing paved surface parking lot. The parking lot drains easterly via surface flow to the public street, Franklin Avenue. Grading for the new concrete paving will follow the existing parking lot grades.

Location #2

The existing site drainage patterns will not be modified. The project site will be existing public street right of way and a small portion of existing office and industrial surface parking lots. At this location, the improvements consist of trenching or horizontal directional drilling for installation of the 12" diameter fuel pipe. After installation, the site will be restored to existing conditions. All existing drainage patterns and facilities will remain in place.

Location #3

The existing site drainage patterns will be modified. Presently, the project site is mostly unpaved inan unused area of the airport. The area drains to a grate inlet within the unpaved area. The inlet connects to an existing underground storm drain pipe that flows to an existing airport 50,000 gallon oil and water separator/clarifier. The existing drainage system then exits the airport and connects to the County facility F01S01 adjacent to the 405 Freeway.Facility F01S01 connects to Facility F01 (Santa Ana Delhi Channel) which outlets to the Upper Newport Bay.

The project will construct a containment wall surrounding the tanks and a liner under the tank facilities that will temporary pond storm water runoff until manually released by JWA/SNA Fuel staff. The project will alsograde the project site, remove the existing grate inlet and construct new inlets within the new containment area adjacent to the new fuel tanks. These inlets will connect to a new underground storm drain system that will flow and connect to a new oil and water separator/clarifier. This new separator/clarifier will then connect to the existing storm drain system and flow to the existing 50,000 gallon oil and water separator/clarifier before exiting the airport property. During final design of the new fuel tanks, a licensed engineer will complete a study to determine, using established and reasonable design criteria, an adequately sized oil and water separator/clarifier to process storm water released from the new fuel tank containment area.

The storm water system will operate to detain flows as necessary to control release levels into the storm drain system. The runoff will only be released after the storm event has passed and visual inspection of the runoff for contaminants. Runoff from the containment area will enter new inlets that will be reconnected to the existing underground storm drain system. Delaying the release of runoff into the existing storm drain system will not impact the operation or capacity of the existing pipe system or 8,000 or 50,000 gallon separators/clarifiers.

Section III Site Description

III.1 Physical Setting

Planning Area/ Community Name	Location #1 – City of Tustin Location #2 – Public Streets, City of Tustin & City of Irvine Location #3 – John Wayne Airport, County of Orange
Location/Address	Location #1 - 14741 Franklin Avenue, Tustin Location #2 - Public Streets, City of Tustin & City of Irvine Location #3 – 390 Paularino Avenue, Costa Mesa
Land Use	Location #1 –Industrial Building Location #2 – Public Streets & Industrial Building Parking Lot Location #3 - Airport Facilities
Zoning	Location #1 – Planned Community Industrial Location #2 – Public Streets Location #3 - Airport
Acreage	Location #1 –0.03 Ac within 2.2 Ac property Location #2 –n/a – 5 mile pipeline Location #3 –1.3 Ac development within346 Ac JWA boundary
Predominant Soil Type	Location #1 –Type B Location #2 – Varies (Type B and C) Location #3 - Type D

III.2 Site Characteristics

	Location #1 - 24 Hour, 85 th Percentile Rainfall = 0.71 inches
Precipitation Zone	Location #2 - 24 Hour, 85 th Percentile Rainfall = 0.72 inches
	Location #3 - 24 Hour, 85 th Percentile Rainfall = 0.73 inches
	Location #1 - The 1,500 square foot development will maintain the existing site conditions.
	<u>Location #2</u> – The installation of the fuel pipeline will maintain the existing site and street conditions.
Topography	<u>Location #3</u> – The proposed improvements will make minor changes to the existing site conditions. The existing site sheet flows to an inlet on the east side of the site at a slope of approximately 2%. The proposed improvements will slope towards the center of the project site at an approximate 1% slope.

	 Location #1 - Existing drainage patterns will remain. The project site is located substantially within an existing paved surface parking lot. The parking lot drains easterly via surface flow to the public street, Franklin Avenue. Location #2 - Existing drainage patterns will remain. The project site will be existing public street right of way and a small portion of existing office and industrial surface parking lots. At this location, the improvements consist of trenching for installation of the 12" diameter fuel pipe. After installation, the site will be restored to existing conditions. All existing drainage patterns and facilities will remain in place
Drainage Patterns/Connections	Location #3 - The existing site drainage patterns will be modified. The project will grade the project site, remove the existing site grate inlet and construct new inlets within the new containment area adjacent to the new fuel tanks. These inlets will connect to a new underground storm drain system that will connect to a new oil and water separator/clarifier. This new separator/clarifier will then connect to the existing storm drain system and flow to the existing 50,000 gallon oil and water separator/clarifier before exiting the airport property. The existing drainage system exiting the airport connects to County facility F01S01 adjacent to the 405 Freeway. Facility F01S01 connects to the Santa Ana Delhi Channel and outlets to Upper Newport Bay.
	Location #1 – Unknown (small site footprint)
Soil Type Coology and	Location #2 - Variable conditions (Public streets)
Infiltration Properties	<u>Location #3</u> - Natural soils consist predominately of sandy silt, silt, and clay with interbedded layers of sand and silty sand. The on-site soils may have some expansion potential.
Hydrogeologic (Groundwater) Conditions	Location #1 - Historical groundwater information shown on Watershed Exhibit Figure XVI-2d of Appendix XVI of the County Technical Guidance Document indicates the groundwater at the site is located at a depth of 5 to 10-feet below existing ground.
	Location #2 - Historical groundwater information shown on Watershed Exhibit Figure XVI-2d of Appendix XVI of the County Technical Guidance Documentindicates the groundwater at the site is located at a depth of 5 to 10-feet below existing ground.
	Location #3 - Historical groundwater information shown on Watershed Exhibit Figure XVI-2d of Appendix XVI of the County Technical Guidance Documentindicates the groundwater at the site is located at a depth greater than 20-feet below existing ground, however, groundwater has been encountered at depths of 15 to 20 feet below existing ground.

Geotechnical Conditions (relevant to infiltration)	Infiltration is not known to create any geotechnical issues or hazards, however, the area has clay soil properties which could be expansive if subjected to infiltration. Infiltration under the tank farm facilities is not expected due to installation of the liner that will capture any runoff and/or leaks.			
Off-Site Drainage	Location #1 - There is no off-site run-on at the project site. Location #2 - Not Applicable - Public streets Location #3 - There is no off-site run-on at the project site.			
Utility and Infrastructure	 Location #1 - There are multiple underground utilities within the vicinity of the project site. The proposed fuel pipeline will be routed to avoid conflict with the existing utilities. Location #2 - There are multiple underground and overhead utilities within the project site. The proposed fuel pipeline will be routed to 			
Information	<u>Location #3</u> - A 30" high pressure gas main exists on the westerly portion of the site. The high pressure gas main includes an easement which will restrict the improvements within that portion of the site.Work within the easement shall be coordinated with The Gas Co.			

III.3 Watershed Description

	Location #1 – Flow from the site enters the adjacent public street catch basins in Franklin Avenue and connects to County facility F10. Facility F10 connects to County facility F06, which then connects to County facility F05 whichoutletsinto Upper Newport Bay. Newport Bay connects directly to the Pacific Ocean.
Receiving Waters	<u>Location #2</u> -Runoff from the public streets will enter various City storm drain catch basins and underground systems. These systems connect to various County drainage facilities which then outletinto the Upper Newport Bay which connects directly to the Pacific Ocean.
	Location #3 - Flow from the site enters County facility F01S01, whichdrains to Santa Ana Delhi Channel (County facility F01) before outletinginto Upper Newport Bay which connects directly to the Pacific Ocean. See Attachment A-3 'Loc#3 Area Drainage' Exhibit.
	Upper Newport Bay: Pesticides, Metals, Nutrients, Toxicity and Sediment.
303(d) Listed Impairments	Lower Newport Bay: Pesticides, Metals, Pathogens, Nutrients, Organics, Toxicity.
	San Diego Creek: Pesticides, Metals, Pathogens, Nutrients and Sediment.

Applicable TMDLs	Pesticides and Metals. (Bacteria Indicators/Pathogens, Nutrients and Turbidity/Siltation are in the implementation phase)
Pollutants of Concern for the Project	Oil and grease, Toxic Organic Compounds (jet fuel) and Trash and debris.
Environmentally Sensitive and Special Biological Significant Areas	Upper Newport Bay, Lower Newport Bay and San Diego Creek

Section IV Best Management Practices (BMPs)

IV. 1 Project Performance Criteria

(NOC Permit Area only) Is t for the project area that inclu- criteria or if there are oppor on regional or sub-regional	there an approved WIHMP or equivalent udes more stringent LID feasibility tunities identified for implementing LID basis?	YES 🗌	NO 🔀
If yes, describe WIHMP feasibility criteria or regional/sub-regional LID opportunities.		2	

If HCOC exists, list applicable hydromodification control performance criteria (Section 7.II-2.4.2.2 in MWQMP)	Location #3 requires hydromodification control. As such, storm water will be captured and detained within a containment area surrounding the project site. The containment area will include four foot high walls and a 80-mil HDPE liner covered by gravel. The containment area will be connected to catch basins and an underground storm drain system, however, the storm drain pipes will include valves that will be closed to captured the storm water. The valves will only be opened by staff after the storm event passes and the site has passed inspection procedures.
Listapplicable LID performance criteria (Section 7.II-2.4.3 from MWQMP)	Retain on-site (infiltrate, harvest and use, or evapotranspire) stormwater runoff as feasible up to the Design Capture Volume. Use of LID devices are not expected to be possible for the project.At Locations #1 and #2 (street right of way) there are no available areas or site conditions available for infiltration, harvesting or evapotranspiration. At Location #3, the airport will not allow evapotranspiration as standing water encourages birds and wildlife that will create hazardous conditions for aircraft and human life. Infiltration is not available on airport property due to soil conditions and infiltration of jet fuel could contaminant groundwater.

List applicable treatment control BMP performance criteria (Section 7.II-3.2.2 from MWQMP)	Treatment control BMPs shall be used to treat the Design Capture Volume as it is not feasible to meet LID performance criteria through retention and/or biotreatment.
Calculate LID design storm capture volume for Project.	City of Tustin Jurisdiction = 79ft ³ (Location #1) = 1,307 ft ³ (Location #2) City of Irvine Jurisdiction = 876ft ³ (Location #2) County of Orange (JWA) Jurisdiction = 84 ft ³ (Location #2) = 2,993 ft ³ (Location #3)

IV.2. SITE DESIGN AND DRAINAGE PLAN

Location #1 – The existing property site design will be maintained. The existing property is approximately 96,000 sqft in area, with the proposed project site only 1,500 sqft in area. The proposed improvements will be constructed substantially within an existing surface parking lot. The improvements will include a motor operated valve for the 12-inch pipeline located on an equipment skid with the following equipment: block valves, flow meter, meter prover, pig launcher, and pressure and temperature transmitters. The flow meter, temperature transmitters, and pressure transmitters will serve the dual purpose of custody transfer and leak detection. There will be an electrical, switchgear and control system enclosure to secure the equipment. A small, rectangular drain down tank will be installed to allow for draining of equipment during maintenance activities. No fuel will be stored in the tank following the completion of maintenance work. The equipment skid will be located in a secure, fenced-in area.

Location #2 – The existing site design will be maintained. The proposed improvements involve underground fuel pipeline installation in private surface parking lots and public streets. After the pipeline is installed and the trench restored to previous condition, the sites and streets will function per the existing design and condition.

<u>Location #3</u>-The project site will be improved with grading and the following equipment and facilities: a motor operated block valves, pressure control valve, flow meter, pig receiver, receiving manifold valve, and pressure and temperature transmitters on an equipment skid.

The motor operated valves will be open when jet fuel is received from the pipeline. The pressure control valve ensures that a minimum pressure is constantly maintained on the pipeline. The flow meter will be used for leak detection. The receiving manifold valve is used to direct fuel to the desired tank, and for isolation between the pipeline and tank farm systems. A small, rectangular drain down tank will be installed to allow for draining of equipment during maintenance activities. No fuel will be stored in the tank following the completion of maintenance work.

Two above ground storage tanks will be installed on the site. The tanks will each have a

workingstorage volume of approximately 1.5 million gallons, enough storage to supply airport needs for one week. The storage tanks will be of a cone roof design with internal floating roofs and double bottoms with leak detection. The tank will have cathodic protection installed and will be installed over a layer of sand and an 80mil HDPE liner. The sand and liner layers will be sloped toward the center of the tank to a sump. Any leaks from the bottom of the tank will drain through the sand until reaching the liner and then drain toward the center to be collected in the sump. Four sloping two inch diameter HDPE drainpipe will connect the sump to four vertical four inch diameter standpipe located outside of the tank's perimeter. Any leaking product collected in the sump will drain to the standpipes and be apparent through visual inspection. All tanks will be equipped with automated foam protection systems and state of the art instrumentation, control, and alarm systems. The control system will provide an emergency shutdown signal that shall be hardwired to a fire-safe valve provided with emergency power. The storage tanks will be located within a lined six-foot tall secondary containment wall. This wall and liner will be separate from the existing tank'ssix-foot tall secondary containment wall and liner and will provide the required containment plus freeboard for only the new tanks.

The site will include two grate inlets. The site will be graded to drain to these inlets. These inlets will connect to a new oil and water separator and then connect to the existing underground storm drain system. The existing storm drain system will also flow through the existing 50,000 gallon oil and water separator/clarifier.Manual gate valves will be installed on the new storm drain piping outside of the containment area. The valves will remain in the closed position until manually opened by SNA Fuel staff. When the valves are closed, leaking fuel and/or storm water will be contained on site within the containment area.

After a rain event, runoff from the containment area will be visually inspected for jet fuel contamination. If the area is visually considered 'clean' (no visible sheen of product), SNA Fuel staff will manage a controlled release of the storm water runoff.

If the water is considered contaminated, the product will be pumped or absorbed from the containment area and storm drain pipes into an on-site tank or transported off-site to an appropriate facility for treatment in accordance with airport rules and regulations, and the general industrial stormwater NPDES permit. Any remaining clean water will proceed to flow through the new oil and water separator/clarifier.

If the foam protection system is activated, the product will be spread within the containment area. This product is expected to be removed or absorbed from the containment area and transported off-site to an appropriate facility for treatment at an appropriate off-site hazardous materials handling facility. The containment area will then be decontaminated and cleaned.

IV.3 LID BMP SELECTION AND PROJECT CONFORMANCE ANALYSIS IV.3.1 Hydrologic Source Controls

Name	Location #1	Location #2	Location #3
Localized on-lot infiltration			
Impervious area dispersion (e.g. roof top disconnection)			
Street trees (canopy interception)			
Residential rain barrels (not actively managed)			
Green roofs/Brown roofs			
Blue roofs			
Impervious area reduction (e.g. permeable pavers, site design)			
Other: On-Site Retention			
Other:			

Location #3 –Storm water will be captured within a containment area surrounding the project site. The containment area will include four foot high walls and an 80-mil HDPE liner covered by gravel. The containment area will be connected to catch basins and an underground storm drain system, however, the storm drain pipes will include valves that will be closed to captured the storm water. The valves will only be opened by staff after the storm event passes and the site has passed inspection procedures.

IV.3.2 Infiltration BMPs

Name	Location #1	Location #2	Location #3
Bioretention without underdrains			
Rain gardens			
Porous landscaping			
Infiltration planters			
Retention swales			
Infiltration trenches			
Infiltration basins			
Drywells			
Subsurface infiltration galleries			
French drains			

Permeable asphalt		
Permeable concrete		
Permeable concrete pavers		
Other:		

Location #1 –Due to the very small area of improvement, the site improvements do not include any type of pavement, planters or drainage devices that would promote infiltration. Site is also located in an area of high selenium contamination. As such, infiltration is not recommended.

Location #2 – Since the improvements will be mostly located within existing street right of way, there are no existing areas available to construct suitable infiltration devices such as swales, trenches or basins. Use of permeable concrete and/or asphalt concrete on the existing arterial roadways is not acceptable to the cities.

<u>Location #3</u> – Due to the type of improvement proposed, construction of planters, landscaping, etc is not proposed. The airport and project site is located on clay soils and also covered under the requirements of the NPDES General Permit for discharges of storm water associated with industrial activities which typically does not permit infiltration as a type of treatment device. Also, as the potential pollutant is jet fuel, any infiltration could potentially contaminant groundwater.

IV.3.3	Evapotranspiration,	Rainwate	er Harve	sting	BMPs	

Name	Location #1	Location #2	Location #3
All HSCs; See Section IV.3.1			
Surface-based infiltration BMPs			
Biotreatment BMPs			
Above-ground cisterns and basins			
Underground detention			
Other: Containment Area	\square		\boxtimes

Location #1 – Due to the very small area of improvement, the site improvements do not include any type of rainwater harvesting devices. However, site runoff will be contained by a curb to contain any possible fuel leakage during pipeline operation. Rain water falling on the site will also be contained by the curb and not released until deemed unpolluted. It is expected runoff from small storm events will evaporate and a portion of the runoff from larger storm events will also evaporate prior to release. <u>Location #2</u> – Since the improvements will be mostly located within existing street right of way, evapotranspiration, rainwater harvesting devices are not considered feasible or practical.

Location #3 – Due to the type of improvement proposed, construction of rainwater harvesting devices not proposed. However, site runoff will be collected within the containment walls to contain any possible fuel leakage. Runoff will be contained and not released to the storm drain system until deemed unpolluted. It is expected runoff from small storm events will evaporate and a portion of the runoff from larger storm events will also evaporate prior to release.

The size and proposed use of the site does not promote the construction of above ground detention areas to allow evapotranspiration. Also, above ground detention areas can be attractive to wildlife and therefore a potential hazard to aircraft. JWA will not allow construction of an above ground stormwater detention area. However, the storm water system will operate to detain flows as necessary to control release levels into the storm drain system and therefore allow a minimal amount of runoff to evaporate.

Rainwater harvesting is also not considered feasible or practical. The tank will have a coned roof and typically, due to limited rain fall during the year, harvesting would be used to supplement site irrigation needs. Since the site will not construct landscaping or irrigation systems, capture of rainwater will not have a practical application.

Name	Location #1	Location #2	Location #3
Bioretention with underdrains			
Stormwater planter boxes with underdrains			
Rain gardens with underdrains			
Constructed wetlands			
Vegetated swales			
Vegetated filter strips			
Proprietary vegetated biotreatment systems		\boxtimes	
Wet extended detention basin			
Dry extended detention basins			
Other:			
Other:			

IV.3.4Biotreatment BMPs

<u>Location #1</u> – Due to the very small area of improvement, the site improvements do not include any type of biotreatment device.

Location #2 – The project will coordinate with the cities of Tustin and Irvine to treat the equivalent area of pavement created by the street trench repair. As such, the project may include use of biotreatment devices. It is expected the treatment device(s) will be located adjacent to existing storm drain systems (such as a street catch basin) and could include Americast's 'Filterra' Systems, Contech's 'UrbanGreenBioFilter' or BioClean's 'Modular Wetland' system. The actual device and location will be determined and approved by each City during the final design and permitting phase of this project.

Location #3 – Due to the type of improvement proposed, the project site does not include any landscape improvements, plus with the potential jet fuel pollutant, construction of a detention basin is not applicable. Also, grass or vegetated swales can be attractive to wildlife and therefore a potential hazard to aircraft. JWA will not allow construction of swales. Therefore use of biotreatment devices is not proposed.

Hydromodification Control BMPs			
BMP Name	BMP Description		
Location #3 – On site detention	Stormwater will be captured within the four-foot high containment wall surrounding the proposed tanks. The containment area will be lined with 80- mil HPDE and covered with gravel to protect the liner. The liner will be graded to direct runoff to proposed inlets within the containment area. The proposed inlets will be connected to an underground storm drain pipe system. The storm drain pipes will have valves installed on the pipes at a location adjacent to, but outside the containment wall. The valves will be closed to prevent runoff from leaving the project site.		
	After a rain event, runoff from the containment area will be visually inspected for jet fuel contamination. If the area is visually considered 'clean' (no visible sheen or product), SNA Fuel staff will manage a controlled release of the storm water runoff.		
	If the water is considered contaminated, the product will be pumped or absorbed from the containment		

IV.3.5 Hydromodification Control BMPs

area and storm drain pipes into an on-site tank or
transported off-site to an appropriate facility for
treatment. Any remaining clean water will proceed to
flow through the oil and water separator/clarifiers.

IV.3.6 Regional/Sub-Regional LID BMPs

Regional/Sub-Regional LID BMPs

There are no known regional projects at this time, however, this project may be willing to contribute its fair share to any available projects as a substitute for implementing any site or equivalent BMP devices.

Treatment Control BMPs			
BMP Location	BMP Description		
Location #1	Pipeline Leak Detection Device/ProceduresThe system will utilize above ground visual inspection, supervisory control and data acquisition (SCADA) leak detection monitoring software and internal pipeline inspection using remote devices.Above ground visual inspection will be completed by Wickland staff on a regular basis as part of the typical equipment inspection maintenance schedule.The SCADA monitoring will be in place at all times and occurring continuously whether the pipeline is delivering fuel or idle. This system provides for emergency valve shutdown.Internal pipeline inspection will involve remote devices called "pigs". The pipeline will contain a pig launcher and pig receiver. This equipment is used to insert, launch, and remove the pigs and used for a variety of purposes, ranging from line cleaning to investigating the condition of the pipeline along the pipeline's entire length. The most sophisticated pigs are called "smart pigs." A smart pig is an internal inspection device used to measure and analyze conditions along the pipeline's inner and outer walls. As it travels through the pipe, the smart pig electronically reads and records the slightest change in wall thickness, pinpointing problems before they become leaks.Internal inspection will be completed during the first 90		

IV.3.7 Treatment Control BMPs

	 days, third year, sixth year of operation and every fifth year thereafter in accordance with Federal regulations. The pipeline will be coated with fusion bond epoxy (FBE) or similar pipe coating. The entire portion of the underground pipeline would have cathodic protection, which would include both FBE coating and a sacrificial magnesium anode system. Cathodic protection is a technique used to control the corrosion of a metal surface. See AttachmentE – 'Leak Prevention, Detection, and Response Addendum' for additional information.
Location #1	 <u>Stormwater Runoff Inspection</u> Stormwater will be captured within the containment curb surrounding the proposed equipment. A valve will be installed in the containment curb which will remain closed to prevent runoff leaving the site. After a rain event, runoff from the containment area will be visually inspected for jet fuel contamination. If the area is considered 'clean' (no visible sheen or product),SNA Fuel staff will manage a controlled release of the storm water runoff. If the water is considered contaminated, the runoff will be pumped from the containment area into a tanker truck and transported off-site to an appropriate facility for treatment.
Location #2	Proprietary Treatment Devices The project will coordinate with the cities of Tustin and Irvine to treat the equivalent area of pavement created by the street trench repair. As such, the project may include use of proprietary treatment devices. It is expected the treatment device(s) will be located adjacent to existing storm drain systems (such as a street catch basin) and could include Americast's 'Filterra' Systems, Contech's 'UrbanGreenBioFilter' or BioClean's 'Modular Wetland' system. The actual device and location will be determined and approved by each City during the final design and permitting phase of this project.
Location #2	<u>Pipeline Leak Detection Device/Procedures</u> The system will utilize supervisory control and data acquisition (SCADA) leak detection monitoring software and internal pipeline inspection using remote devices.

	The SCADA monitoring will be in place at all times and
	or idle. This system provides for emergency valve shutdown.
	The pipeline will contain a pig launcher and pig receiver. This equipment is used to insert, launch, and remove devices called "pigs" used for a variety of purposes, ranging from line cleaning to investigating the condition of the pipeline along the pipeline's entire length. The most sophisticated pigs are called "smart pigs." A smart pig is an internal inspection device used to measure and analyze conditions along the pipeline's inner and outer walls. As it travels through the pipe, the smart pig electronically reads and records the slightest change in wall thickness, pinpointing problems before they become leaks. Internal inspection will be completed during the first 90 days, third year, sixth year of operation and every fifth year thereafter in accordance with Federal regulations.
	The pipeline will be coated with fusion bond epoxy (FBE) or similar pipe coating.
	The entire portion of the underground pipeline would have cathodic protection, which would include both FBE coating and a sacrificial magnesium anode system. Cathodic protection is a technique used to control the corrosion of a metal surface.
	See AttachmentE – 'Leak Prevention, Detection, and Response Addendum' for additional information.
	Storage Tank System Leak Detection Device/Procedures The system will utilize above ground visual inspection and leak containment well and monitoring station.
()	Above ground visual inspection will be completed by Operations staff on a regular basis as part of the typical equipment inspection maintenance schedule.
Location #3	An 80-mil HPDE liner will be installed under each tank to capture and contain any potential tank leaks. The linerwill connectto four monitoring standpipe stationsby 2-inch pipes to provide sampling access. The monitoring station will be inspected on a regular schedule by Operations staff.
	As a further safeguard to prevent undetected leaks, a redundant leak detection system will be installed outside the containment area consisting of four groundwater monitoring wells. These wells will be maintained by the JWA and monitored annually

	by JWAfor presence of total petroleum hydrocarbons calibrated to diesel and volatile organic compounds.
Location #3	<u>FloGard Plus by Kristar (or approved equal)</u> Catch basin insert filter that provides solids filtration through a filter screen and hydrocarbon capture by a hydrophobic absorbent material.Filter conforms to the dimensions of the inlet. See AttachmentD for additional information.
	Stormwater Runoff Inspection Stormwater will be captured within the four-foot high containment wall surrounding the proposed tanks. The containment area will be lined with 80-mil HPDE and covered with gravel to protect the liner. The liner will be graded to direct runoff to proposed inlets within the containment area. The proposed inlets will be connected to an underground storm drain pipe system. The storm drain pipes will have valves installed on the pipes at a location adjacent to, but outside the containment wall. The valves will be closed to prevent runoff from leaving the project site.
Location #3	After a rain event, runoff from the containment area will be visually inspected for jet fuel contamination. If the area is visually considered 'clean' (no visible sheen of product), SNA Fuel staff will manage a controlled release of the storm water runoff.
	If the water is considered contaminated, the product will be pumped or absorbed from the containment area and storm drain pipes into anon-site tank or transported off-site to an appropriate facility for treatment. This process will be completed in compliance with Title 22 Division 4.5 CCR requirements. Any remaining clean water will proceed to flow through the oil and water separator/clarifiers.
Location #3	<u>Oil/Water Separator/Clarifier</u> A new oil and water separator/clarifier device will be installed to serve the new tank site. After passing through the new device, the drainage system connects to the on-site airport drainage system and will also flow through the main 50,000 gallon airport oil and water separator/clarifier.

Non-Structural Source Control BMPs				
			ck One	If not applicable state brief
Identifier	Name	Included	Not Applicable	reason
N1	Education for Property Owners, Tenants and Occupants	\boxtimes		
N2	Activity Restrictions	\boxtimes		
N3	Common Area Landscape Management			Landscaping is not proposed by project
N4	BMP Maintenance			
N5	Title 22 CCR Compliance (How development will comply)			
N6	Local Industrial Permit Compliance			
N7	Spill Contingency Plan			
N8	Underground Storage Tank Compliance			No underground storage tanks will be installed
N9	Hazardous Materials Disclosure Compliance			
N10	Uniform Fire Code Implementation			
N11	Common Area Litter Control			
N12	Employee Training			
N13	Housekeeping of Loading Docks			No loading docks
N14	Common Area Catch Basin Inspection	\boxtimes		
N15	Street Sweeping Private Streets and Parking Lots			
N16	Retail Gasoline Outlets			No retail gasoline outlets

IV.3.8 Non-structural Source Control BMPs

Structural Source Control BMPs						
		Chec	k One	If not applicable state brief		
Identifier	Name	Included	Not Applicable	reason		
S1	Provide storm drain system stenciling and signage	\boxtimes				
S2	Design and construct outdoor material storage areas to reduce pollution introduction			Outdoor storage is not anticipated		
S3	Design and construct trash and waste storage areas to reduce pollution introduction			Not present on project		
S4	Use efficient irrigation systems & landscape design, water conservation, smart controllers, and source control			Not present on project		
S5	Protect slopes and channels and provide energy dissipation			Not present on project		
	Incorporate requirements applicable to individual priority project categories (from SDRWQCB NPDES Permit)	-		Project not located in SDRWQCB		
S6	Dock areas			Not present on project		
S7	Maintenance bays			Not present on project		
S8	Vehicle wash areas			Not present on project		
S9	Outdoor processing areas			Not present on project		
S10	Equipment wash areas			Not present on project		
S11	Fueling areas			Not present on project		
S12	Hillside landscaping			Not present on project		
S13	Wash water control for food preparation areas			Not present on project		
S14	Community car wash racks			Not present on project		
			<u>.</u>			

IV.3.9 Structural Source Control BMPs

Municipal Model Maintenance Procedures						
		Cheo	k One	If not applicable, state brief		
Identifier	Name	Included	Not Applicable	reason		
Fixed Facility Model Maintenance Procedures						
FF1	Bay/Harbor Activities		\boxtimes	Not a bay or harbor		
FF2	Building Maintenance and Repair		\boxtimes	Not applicable to site use		
FF3	Equipment Maintenance and Repair	\boxtimes				
FF4	Fueling	\boxtimes				
FF5	Landscape Maintenance		\boxtimes	Not applicable to site use		
FF6	Material Loading and Unloading		\boxtimes	Not applicable to site use		
FF7	Material Storage, Handling, and Disposal	\boxtimes				
FF8	Minor Construction			Not applicable to site use		
FF9	Parking Lot Maintenance	\boxtimes				
FF10	Spill Prevention and Control	\boxtimes				
FF11	Vehicle and Equipment Cleaning		\boxtimes	Not applicable to site use		
FF12	Vehicle and Equipment Storage		\boxtimes	Not applicable to site use		
FF13	Waste Handling and Disposal	\boxtimes				

IV.3.10 MunicipalModel Maintenance Procedures

Drainage Facility Model Maintenance Procedure						
DF1	Drainage Facility Operation and Maintenance	\boxtimes				
Field Program Model Maintenance Procedures						
FP1	Lake Management		\square	Not applicable to site use		
FP2	Landscape Maintenance		\boxtimes	Not applicable to site use		
FP3	Roads, Streets, and Highways Operation and Maintenance	\boxtimes				
FP4	Sidewalk, Plaza, and Fountain Maintenance and Cleaning		\boxtimes	Not applicable to site use		
FP5	Solid Waste Handling			Not applicable to site use		
FP6	Water and Sewer Utility Operation and Maintenance			Not applicable to site use		
FP7	Fire Department Activities			Not applicable to site use		

IV.4 ALTERNATIVE COMPLIANCE PLAN (IF APPLICABLE)

IV.4.1 Water Quality Credits

Description of Proposed Project

Project Types that Qualify for Water Quality Credits (Select all that apply):

, , , ,					
Redevelopment	development, meaning		Higher density development projects which		
projects that reduce the redevelopment, ex-		expansion, or reuse of real		include two distinct categories (credits can only	
overall impervious	nay be complicated by the		be taken for one category): those with more than		
footprint of the project	presence or poter	ntial presence of hazardous		seven units per acre of development (lower credit	
site.	substances, pollu	tants or contamina	nts, and	allowance); vertical density developments, for	
	which have the p	otential to contribu	te to	example, those with a Floor to Area Ratio (FAR)	
	adverse ground o	or surface WQ if not		of 2 or those having more than 18 units per acre	
	redeveloped.			(greater credit allowance).	
Mixed use development, s	such as a	Transit-oriente	d developmei	nts, such as a mixed	Redevelopment
combination of residential, c	ommercial,	use residential or	commercial a	rea designed to	projects in an established
industrial, office, institutiona	l, or other land	maximize access t	o public trans	sportation; similar to	historic district, historic
uses which incorporate desig	n principles	above criterion, b	ut where the c	levelopment center is	preservation area, or
that can demonstrate environ	nmental benefits	within one half m	ile of a mass t	ransit center (e.g. bus,	similar significant city
that would not be realized th	rough single	rail, light rail or co	ommuter trair	n station). Such	area including core City
use projects (e.g. reduced vel	hicle trip traffic	projects would not be able to take credit for both			Center areas (to be
with the potential to reduce	sources of water	categories, but may have greater credit assigned		defined through	
or air pollution).		categories, but may have greater creat assigned		0	mapping).
Developments with		Developments	Live-wor variety of de	k developments, a evelopments designed	In-fill projects, the conversion of empty lots
dedication of undeveloped	Dovelonmente	in historic	to support r	esidential and	and other underused
portions to parks,	in a city contor	districts or	vocational n	eeds together -	spaces into more
preservation areas and	area	historic	similar to cr	iteria to mixed use	beneficially used spaces,
other pervious uses.	ureu.	preservation	developmer	nt; would not be able	such as residential or
		areas.	to take credi	it for both categories.	commercial areas.
Calculation of Water Quality Credits (if applicable)			<u>.</u>		

IV.4.2 Alternative Compliance Plan Information

Not Applicable

Section V Inspection/Maintenance Responsibility for BMPs

BMP Inspection/Maintenance					
BMP	Responsible Department / Party(s)	Inspection/ Maintenance Activities Required	Minimum Frequency of Activities		
N1	Wickland staff	Public Awareness Campaign	Semi and Annual announcements, pipeline safety notices, etc		
N2	SNA Fuel staff	n/a	n/a		
N4	City of Irvine & Tustin (Location #2) SNA Fuel staff (Location #3)	BMPInspection	Prior to, during and after rainy season per manufacturers recommendations. JWA will also implement the Airport's State General Industrial Permit requirements		
N5	SNA Fuel staff	Facility Maintenance	Foam protection system will be maintained as required based on quarterly inspection and/or use of device.		
N5	SNA Fuel staff	Clarifier Inspection and Maintenance	Inspected weekly and maintained in accordance with manufacturer's recommendations.		
N6	SNA Fuel staff	Local Industrial Permit Compliance	Annual Review		
N7	SNA Fuel staff	Spill Contingency Plan	Annual Review and Training		
N10	SNA Fuel staff	Uniform Fire Code Implementation	n/a		

N11	Wickland staff (Location #1) SNA Fuel staff (Location #3)	Litter Control At least twice mont	
N12	Wickland staff (Location #1) SNA Fuel staff (Location #3)	Training	Annually
N14	SNA Fuel staff	Catch Basin Debris Maintenance	At least twice monthly during the rainy season and once monthly during the dry season
N14	SNA Fuel staff	Clarifier Maintenance	Inspected weekly and maintained in accordance with manufacturer's recommendations
N15	SNA Fuel staff	Site Sweeping	At least twice monthly during the rainy season and once monthly during the dry season
S1	Wickland staff (Location #1) SNA Fuel staff (Location #3)	Facility Maintenance	At least onceprior to rainy season
FF3	Wickland staff	Pipeline & Facility Inspection	Pipeline shall be monitored electronically continuously, and visually inspected weekly. The facilities shall be inspected on a daily basis.
FF3	SNA Fuel staff	Facility Maintenance	Tank farm liner will be cleaned and inspected as needed as site conditions dictate. Any maintenance will be performed within five days of discovery.
FF3	SNA Fuel staff	Facility Maintenance	Foam protection system will be inspected quarterly by a third-party inspection group. Inspection records will be audited quarterly by the local fire department.
FF4	SNA Fuel staff	Spill Prevention and Control	Annual Review

FF7	SNA Fuel staff	Hazardous Material Handling	n/a
FF9	JWA Staff	Parking Lot Sweeping and Maintenance	At least twice monthly during the rainy season and once monthly during the dry season
FF10	SNA Fuel staff	Spill Prevention and Control	Annual Review and Training
FF10	SNA Fuel staff	Facility Maintenance	Leak detection wells will be inspected twice daily and cleaned and maintained immediately as needed.
FF10	SNA Fuel staff	Facility Maintenance	Groundwater monitoring wells will be inspected annually (as part of annual testing procedures) and cleaned and maintained immediately as needed.
FF13	SNA Fuel staff	Waste Collection and Spill/Leak Control	n/a
DF1	SNA Fuel staff	Drainage Facility Operation and Maintenance	At least twice monthly during the rainy season and once monthly during the dry season
FP3	City of Tustin and City of Irvine	Public Street Sweeping	At least twice monthly during the rainy season and once monthly during the dry season

Section VI Site Plan and Drainage Plan

VI.1 BMP Exhibit (Site Plan)

See exhibits in Attachment D.

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Section VII Municipal Model Maintenance Procedures

Education Materials						
Residential Material (http://www.ocwatersheds.com)	Check If Applicable	Business Material (http://www.ocwatersheds.com)	Check If Applicable			
The Ocean Begins at Your Front Door		Tips for the Automotive Industry				
Tips for Car Wash Fund-raisers		Tips for Using Concrete and Mortar				
Tips for the Home Mechanic		Tips for the Food Service Industry				
Homeowners Guide for Sustainable Water Use		Proper Maintenance Practices for Your Business				
Household Tips			Check If			
Proper Disposal of Household Hazardous Waste		Other Material	Attached			
Recycle at Your Local Used Oil Collection Center (North County)						
Recycle at Your Local Used Oil Collection Center (Central County)						
Recycle at Your Local Used Oil Collection Center (South County)						
Tips for Maintaining a Septic Tank System						
Responsible Pest Control						
Sewer Spill						
Tips for the Home Improvement Projects						
Tips for Horse Care						
Tips for Landscaping and Gardening						
Tips for Pet Care						
Tips for Pool Maintenance						
Tips for Residential Pool, Landscape and Hardscape Drains						
Tips for Projects Using Paint						